

An Examination of the Vocational Readiness Among Transition-age Hispanic Youth with  
Disabilities: An Exploratory Study

By

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## DEDICATION

I dedicate this dissertation to my family, for all their hard work, sacrifice, and support throughout my entire life.

Mi tesis, y sobre todo mi doctorado, se lo dedico a mi familia por todo el apoyo que me han brindado en mis estudios, en especial durante mi tiempo en Madison. Yo sé que el mudarme tan lejos y sola causo un poco de preocupaciones, pero vaya quien fuera a creer las varias bendiciones que esta experiencia me ha brindado al igual que nosotros como familia. No creo poder encontrar las palabras para agradecer todo el esfuerzo y sacrificio que ustedes, mis padres, hicieron para que mi hermana y yo pudiéramos obtener nuestra educación en los Estados Unidos. Se que el sacrificio y esfuerzo de mi abuela también tuvo un parte critica de que mi hermana y yo hayamos tenido la oportunidad de estudiar en los Estados Unidos. Se que en el trayecto de mis estudios experimentamos varios retos, pero de una manera u otra siempre hubo forma de superar dichos retos. A mi hermana también le quiero dar las gracias por todo el apoyo que me ha dado, el cual ha incluido tomarse su rol de hermana mayor un poco más serio y en veces haber actuado como una segunda mama jaja. Gracias por todo el apoyo y consejos que me has dado en el trayecto de mi vida.

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## ABSTRACT

Transition-age Hispanic youth with disabilities have been noted to underutilize vocational rehabilitation (VR) services (Castruita Rios et al., in press), and have lower successful employment outcomes than compared to their White peers (e.g., Sima et al., 2015). The inclusion criteria of participants for this study consisted of the following criteria: (a) identified as Hispanic; (b) was between the ages of 18 and 22; and (c) either currently receiving pre-employment transition services (pre-ETS) at the time of the survey or had previously received pre-ETS services prior to applying for adult services. The purpose of this exploratory mixed-methods study was to evaluate the effect of four level of independent variables (sociodemographic; contextual factors; self-determination theory and social cognitive theory factors; and pre-ETS services related factors) on the engagement in VR services among transition-age Hispanic youths. In addition, this study examined participants' experiences in receiving pre-employment transition services. A descriptive, bivariate correlation, regression, and thematic analyses were utilized to investigate the research questions in this study. A total of 149 participants were recruited, majority identifying as White (62.4%), female (49%) and male (48.3%), had a primary disability of amputation or missing limbs (22.1%), had a secondary disability of anxiety disorder (18.1%), English was their native language (67.8%), lived in an urban area (82.6%), had a high school diploma or equivalent (47%), received Supplemental Security Income benefits (41.6%), lived with family (94%), identified as a third-and-higher generation American (47.7%), reported having their disability for an average of 7.6 years ( $SD = 5.04$ ), and had a mean age of 20.12 years old ( $SD = 1.13$ ). Findings of the stepwise regression model revealed that the final model explained 87.6% of the variance and indicated that living with family, perceived stigma of others, and vocational outcome expectancy were significant predictors of engagement in VR

services. In addition, independent regression analyses of each level of independent variables and VR engagement demonstrated additional insight as to factors impacting the engagement in VR services among transition-age Hispanic youths. Moreover, results of the mediation analysis suggested that the quality and usefulness of pre-ETS services were statistically significantly associated with VR engagement while controlling for relatedness (working alliance). However, usefulness of pre-ETS services was the only mediator having a significant indirect effect on the relationship between relatedness and VR engagement. Additionally, thematic analyses revealed eight themes: (a) *Building and Strengthening Life and Work Skills*; (b) *My Choice or Yours?*; (c) *Opportunities for You, You, and Everyone!*; (d) *Teamwork Makes the Dream Work*; (e) *Flexibility in Service Provision*; (f) *Employment Here I Come!*; (g) *Relationship Building*; and (h) *Increasing Resources, Accessibility, and Length of Program*. Transition-age Hispanic youth shared how receiving pre-ETS services contributed positively to development of their life and work skills, perceptions of employment, and opportunities to engage in trainings (e.g., assistive technology in the workplace). In addition, participants shared their concerns surrounding VR counselors' understanding of their culture as well as a desire for more resources and longer VR program. Furthermore, the overall findings of this study provide insight on the current service delivery for this population along with areas that could be strengthened. Given the limited research surrounding transition-age Hispanic youth with disabilities, this study provides critical information that can help inform new strategies to enhance the employment outcomes for this group.



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## Chapter One: Introduction

Employment is a basic human right, regardless of race, gender, or ability/disability status (United Nations, 1948). All individuals should have the opportunity to also choose the career they want to pursue and have the needed support in place to be successful. There are several general benefits of being employed such as having an income, improvements on overall health, lower stress and social isolation (Ali et al., 2013; Thompson & Dahling, 2019). Furthermore, employment not only benefits the individual but also their families and communities due to the “ripple effect” of full inclusion in the workforce. In other words, when an individual is employed, benefits such as having an income and overall good health promotes greater capacity support and engage with their respective family and their community (Dean et al., 2018; Goodman, 2015; van der Noordt et al, 2014).

Employment has similar benefits for people with disabilities. However, they are likely to receive additional benefits beyond those described above. Employment among people with disabilities has been associated with better physical and psychological health outcomes (e.g., experiencing less symptoms), higher quality of life, social inclusion, lower risk of homelessness and poverty, increase self-confidence, bigger social networks, and a higher sense of belongingness (Buciuniene & Kazluskaite, 2010; Dunstan et al., 2017; Dutta et al., 2008; Elbogen et al., 2021; Kuiper et al., 2016; Owen et al., 2015; Thompson & Dahling, 2019).

Employment among transition-age youth with disabilities (youth between the ages of 14 and 25) has been an area of new interest due to the passing of the Workforce Innovation and Opportunity Act (WIOA) of 2014. The WIOA of 2014 mandates that state-federal vocational rehabilitation agencies allocate 15% of their funding to services for transition-age youth with disabilities. The aim of this policy and effort is to help support transition-age youth with

disabilities in their transition from high school to the workforce through the provision of pre-employment transition services (pre-ETS). Policies and supports such as these are critical in supporting transition-age youth with disabilities attainment of competitive integrated employment that may then result in multiple unique benefits.

Transition-age youth with disabilities have additional unique benefits from employment, particularly due to the developmental stage they are in. Furthermore, employment can play a critical role in the development of this group as they are transitioning to adult life. The developmental stage of emerging adulthood is made up of five features including identity exploration, instability, self-focus, feeling in between, and possibilities (Arnett, 2000). Thus, considering transition-age youth are undergoing a stage of identity exploration and discovery of career interests, employment may aid in such exploration (Arnett, 2000). Moreover, employment among transition-age youth with disabilities has demonstrated to contribute to transition-age youths' engagement in their discovery process with lesser challenges thus providing them with an opportunity to explore and determine a career of their interest (Nevala et al., 2019). Additionally, employment contributes to transition-age youth with disabilities sense of purpose and belongingness (Nevala et al., 2019; Koletsi et al., 2009; Leufstadius et al., 2009).

Despite the numerous benefits of employment, transition-age youth with disabilities are less likely to be in the workforce. According to the U.S. Department of Labor in 2021, 24.3% of youth with disabilities between the ages of 16 and 19 were employed, compared to 36.8% of youth without disabilities. Additionally, for youth with disabilities between the ages of 20 and 24 years old the employment rate was 46.7% compared to 72% of youth without disabilities. In addition, transition-age youth with disabilities from traditionally underrepresented racial/ethnic

groups (e.g., Latinx, African American) have been noted to experience further disparities in transition-related activities such as employment (e.g., Eilenberg et al., 2019).

Transition-age Hispanic youth with disabilities have been observed to experience low employment outcomes compared to White non-Hispanic transition-age youth with disabilities (Sima et al., 2015). Additionally, transition-age Hispanic youth with disabilities have also been noted to underutilize vocational rehabilitation services (Castruita Rios et al., in press). The literature has suggested that factors such as family involvement in the rehabilitation process (Awsumb et al., 2020) enhances employment outcomes among transition-age Hispanic youth with disabilities. However, several unique challenges among this group have been identified such as acculturation patterns, environmental and social experiences (e.g., lower expectations, stigma), and dual-minority status (Quiñones-Mayo, 2000; Velcoff et al., 2010). As a result, transition-age Hispanic youth with disabilities may encounter additional barriers that limit them from obtaining work and experiencing the various benefits of employment.

Although there is limited research examining factors associated with Hispanic individuals, particularly transition-age youth with disabilities, several factors influencing engagement in vocational rehabilitation services have been identified thus far. Factors such as, but not limited to, (a) having a poor understanding and knowledge about disability-related services; (b) lack of culturally appropriate rehabilitation services; (c) cultural mistrust; (d) having low expectations of job placement; and (e) systemic racism and discrimination (Breeding et al., 2005; Hernandez et al., 2006; Hirano et al., 2018; Mueller Reed et al., 2005; Shapiro et al., 2004; Velcoff et al., 2010) have been associated with a lower likelihood of Hispanic individuals engaging in vocational rehabilitation services. However, these studies were focused on Hispanic

adults with disabilities, resulting in limited understanding surrounding transition-age Hispanic youth with disabilities.

Although it has been six years since the passing of the Workforce Innovation and Opportunity Act (WIOA) of 2014, service providers and researchers are still implementing the new changes (e.g., service provision for transition-age youth with disabilities) as well as understanding the effects this has had on service delivery and rehabilitation outcomes. Furthermore, research examining factors influencing transition-age Hispanic youth engagement in vocational rehabilitation services can inform strategies to enhance engagement and potentially vocational rehabilitation outcomes among this population and to some extent to transition-age youth with disabilities in general.

Engagement has been described as an important construct due to its influence on therapeutic outcomes (Castro-Blanco et al., 2020; Danzl et al., 2012; Ellfers, 2013; Lequerica & Kortee, 2010; Staudt et al., 2012). Southwick and Schultz (2019) suggested that vocational rehabilitation outcomes were based on the level of engagement among consumers participating in vocational rehabilitation programs. Furthermore, the literature has suggested that variables such as working alliance, vocational self-efficacy, internal motivation, and vocational rehabilitation outcome expectancy were associated with higher levels of engagement in vocational rehabilitation services (Dutta et al., 2017).

### **Statement of the Problem**

Transition-age Hispanic youth with disabilities are less likely to utilize adult vocational rehabilitation services than their same age peers with disabilities. As a result, these individuals are less likely to attain competitive employment relative to their peers with or without disabilities (U. S. Department of Labor, 2022). This is critical considering that Hispanics are the largest



minority group in the United States (Velasco-Mondragon et al., 2016), and by 2060 are expected to make up 27.5% of the population (Vespa et al., 2020). Transition-age Hispanic youth with disabilities are less likely to use pre-ETS, and in considering those services, little is known regarding the targeted development of this programming for cultural representativeness of this population.

According to the Rehabilitation Service Administration (RSA-911) dataset, in 2021 the national application rate to adult vocational rehabilitation services of transition-age youth with disabilities who are receiving pre-ETS is 41.7%. Among Hispanic transition-age youth with disabilities receiving pre-ETS, although White Hispanic transition-age youth with disabilities have the highest application rate (43.9%), non-White Hispanic transition-age youth with disabilities have the lowest application rate (33%). Labor force participation among transition-age Hispanic youth with disabilities is the lowest, along with African American youth, compared to same age peers with disabilities from other racial/ethnic groups (Sima et al., 2015).

Pre-ETS were created as a way to guarantee that state vocational rehabilitation agencies would allocate resources and serve transition-age youth with disabilities (Taylor et al., 2022). There is a total of five pre-ETS services including counseling on enrollment opportunities, instruction in self-advocacy, job exploration counseling, work based learning experiences, and work readiness training. Counseling on enrollment opportunities services provides transition-age youth with disabilities information and guidance on postsecondary education and training opportunities (e.g., career options). Instruction in self-advocacy services is comprised of training and experiences centered on increasing transition-age youth's self-advocacy skills through development of self, knowledge of rights and responsibilities, and communication skills. Job exploration counseling services offer transition-age youth with disabilities opportunities to learn

about careers, job-related skills, and discovery of personal career interests. Work based learning experiences services are an educational approach that uses real work experiences with the aim of providing youth with skills and knowledge whereby they can connect school experiences with real work activities (e.g., job shadowing, internships). Lastly, work readiness training services offer transition-age youth with disabilities opportunities to learn about skills and behaviors that are critical for a job (e.g., understanding employer expectations).

Pre-ETS was intended to improve transition outcomes from school to adulthood of youth with disabilities by providing opportunities for youth to engage in activities that can enhance their work-related skills (National Technical Assistance Center on Transition, n.d.). Moreover, pre-ETS can be perceived as the first step towards transition-age youth becoming employed. The ideal is that after transition-age youth with disabilities receive pre-ETS they will continue services via adult vocational rehabilitation services with the end result of obtaining competitive employment. However, pre-ETS, in and of itself, are unlikely to lead to employment absent provision of adult vocational rehabilitation services (Castruita Rios et al., in press). Furthermore, transition-age youth with disabilities that are not participating in the labor force are susceptible to experience several negative consequences including, but not limited to, worse health outcomes (Dean et al., 2018; Dunstan et al., 2017; Dutta et al., 2008; Fryers, 2006), lower quality of life (Eggleton et al., 1999; Dutta et al., 2008), lower self-confidence (Blessing & Jamieson, 1999; Buciuniene & Kazlauskaite, 2010; Irvine & Lupart, 2008; Owen et al., 2015), lower sense of purpose and belongingness (Koletsi et al., 2009; Leufstadius et al., 2009; Nevala et al., 2019), loneliness and social exclusion (Dunstan et al., 2017; Kuiper et al., 2016), poverty (Kuiper et al., 2016; Thompson & Dahling, 2019), and homelessness (Elbogen et al., 2021). Considering Hispanic individuals in the United States already experience challenges such as poverty

(Velasco-Mondragon et al., 2016), are 52% lower in median household income compared to non-Hispanic Whites (DeNavas-Walt et al., 2013), and have historically lower access to health services (National Center for Health Statistics, 2014, as cited in Velasco-Mondragon, 2016) lack of employment would further put transition-age Hispanic youth at risk of worse overall outcomes.

Engagement in vocational rehabilitation services has been described as an important construct that can impact vocational rehabilitation outcomes (Wagner et al., 2011; Southwick & Schultz, 2019). Moreover, active engagement of consumers has been depicted as a determinant of a successful closure from the vocational rehabilitation program (i.e., exit with employment), regardless of the consumer's background (Southwick & Schultz, 2019). Moreover, factors associated with engagement in vocational rehabilitation services include working alliance, vocational self-efficacy, internal motivation, and vocational rehabilitation outcome expectancy (Dutta et al., 2017).

Despite the literature surrounding the provision of pre-ETS and employment outcomes among transition-age youth with disabilities, there remains limited research on what factors contribute to the engagement in adult vocational rehabilitation services. Furthermore, this study aims to examine the components that influence transition-age Hispanic youth with disabilities engagement in adult vocational rehabilitation services.

### **Models and Theoretical Framework**

The theoretical framework for this study is driven by the following two models: Integrated Self-Determined Work Motivation Model (Tansey et al., 2017) and The Fourfold Model of Acculturation (Berry, 1998).

The Integrated Self-Determined Work Motivation Model (Tansey et al., 2017) provides a framework that encompasses factors contributing to an individual's engagement with vocational rehabilitation services. Considering the nature of this study is to further comprehend the variables that enhance and/or hinder transition-age Hispanic youth with disabilities engagement with vocational rehabilitation services, this framework fits adequately with the purpose of this study. Furthermore, although there are other models that depict the process of an individual's engagement, the Integrated Self-Determined Work Motivation Model (Tansey et al., 2017) is currently the only model describing factors influencing one's engagement in vocational rehabilitation services.

The Fourfold Acculturation Model (Berry, 1998) was selected for this study due to our sample being centered around individuals of Hispanic heritage along with the impact acculturation can have in various aspects among individuals of traditionally underrepresented racial/ethnic groups. Acculturation has not been quite explored within the context of vocational rehabilitation engagement, thus calling for further examination of the influence this construct may have among specifically transition-age Hispanic youth with disabilities. By analyzing the role, the construct of acculturation has on vocational rehabilitation engagement, it can help comprehend the association it has with transition-age Hispanic youth with disabilities engaging in vocational rehabilitation services.

### ***Integrated Self-Determined Work Motivation Model***

The Integrated Self-Determined Work Motivation Model (Tansey et al., 2017) integrates the following three models: (a) self-determination theory (Ryan & Deci, 2000); (b) social-cognitive theory (Bandura, 2004), and the stages of change theory (Prochaska & DiClemente, 1983). The aim of this model is to provide a process to comprehend the motivation of people

with disabilities to engage in vocational rehabilitation services and return to work. As mentioned earlier, this model aligns with the purpose of this study considering the mutual focus on understanding the process and factors influencing an individual's choice to engage in vocational rehabilitation services. The model suggests that functional disability, autonomy, relatedness, and competence have an association with outcome expectancy and vocational rehabilitation engagement, and ultimately employment. This model can help inform the factors influencing transition-age Hispanic youth with disabilities engagement in vocational rehabilitation services. However, this model may be limited in its application for these same youth as it does not incorporate the potential effects of acculturation and related stigma, both self and environmental, that those cultural effects may promote in engaging in VR services.

### ***The Fourfold Model of Acculturation***

Berry's (1998) Fourfold Model of Acculturation argues that there are four general patterns of acculturation: integration, assimilation, separation, and marginalization. Integration is also referred to as "biculturalism" meaning that cultural aspects of the native and new cultures are combined. Assimilation is described as the replacement of an individual's native cultural aspects with those of the new culture. Separation is depicted as an individual's preserving their native culture and rejecting the new culture. Lastly, marginalization refers to an individual rejecting both native and new cultures.

A lower identification with the U.S. culture has been suggested to be associated with more challenges in obtaining employment (Velcoff et al., 2010). This can suggest that the same association could also be observed between acculturation level and vocational rehabilitation engagement. Considering the purpose of this study and the integrated self-determined work motivation model (Tansey et al., 2017), this study aims to determine if acculturation patterns are

a factor contributing to transition-age Hispanic youths with disabilities engagement in vocational rehabilitation services.

### **Purpose of Study**

The purpose of this study was to identify factors that influence the engagement in vocational rehabilitation services among transition-age Hispanic youth with disabilities. Findings of this study can provide insight into the current service delivery for this population along with areas that could be strengthened. Given the limited research surrounding transition-age Hispanic youth with disabilities, this study provides meaningful and crucial information that can result in new strategies to ultimately enhance employment outcomes for this group.

### **Research Questions**

1. What is the relationship between sociodemographic, contextual factors, self-determination theory and social cognitive theory factors, and pre-ETS services related factors and VR engagement of transition-age Hispanic youth with disabilities?
  - a. What is the relationship between sociodemographic variables and VR engagement of transition-age Hispanic youth with disabilities?
  - b. What is the relationship between contextual factors and VR engagement of transition-age Hispanic youth with disabilities?
  - c. What is the relationship between self-determination theory and social cognitive theory factors and VR engagement of transition-age Hispanic youth with disabilities?
  - d. What is the relationship between the number of pre-ETS services received and the ratings of quality, relevance, and usefulness of pre-ETS and VR engagement of transition-age Hispanic youth with disabilities?

2. Do perceptions of quality, relevance, and usefulness of pre-ETS services mediate the relationship between working alliance and VR engagement of transition-age Hispanic youth with disabilities?
3. What are the experiences of transition-age Hispanic youth with disabilities with pre-ETS services?
  - a. How is the delivery of pre-ETS services as experienced by transition-age Hispanic youth with disabilities?
  - b. How has receiving pre-ETS services been supportive to transition-age Hispanic youth with disabilities in their journey to obtain employment?
4. What are some ways pre-ETS services can be improved for transition-age Hispanic youth with disabilities?

### **Operational Definitions**

#### **Hispanic**

For purpose of this study the term “Hispanic” was used as a proxy to refer to both Hispanic and Latinx individuals. The term Hispanic refers to individuals whose native language is Spanish (e.g., individuals from Mexico, Spain, Puerto Rico, El Salvador). Whereas the term Latinx refers to individuals who are from a country in Latin America (e.g., Brazil, Honduras, Mexico). Although there may be individuals that may identify with both labels, it may not be the case for all participants.

#### **Potentially Eligible Student**

According to WIOA of 2014, an individual is a potentially eligible (PE) student if they meet these four components: (a) is in high school or post-secondary education training program; (b) is 14 to 21 years old; (c) has an Individualized Education Plan (IEP), 504 Plan, or a

documented disability; and (d) has not been determined eligible or ineligible for Division of Vocational Rehabilitation (DVR).

### **Pre-employment Transition Services**

Pre-employment transition services (pre-ETS) consist of five different services including: job exploration counseling, workplace readiness training, work-based learning experiences, counseling on postsecondary enrollment, and instruction in self-advocacy. As a result of WIOA of 2014, pre-ETS were established, and state vocational rehabilitation agencies are mandated to allocate 15% of their funding to provide such services to potential eligible students.

### **Transition-age Youth**

Transition-age youth is a term that typically represents youth between the ages of 14 and 25. The age range for this group can vary by state law and policies within each respective agency, such as state vocational rehabilitation agencies. However, for purposes of this study, the sample will be focused on those between the ages of 18 through 22.



## **Chapter Two: Literature Review**

This chapter describes a study that examines the relationships between four categories of independent variables (sociodemographic characteristics; contextual factors; self-determination theory and social cognitive theory factors; and number, type, quality, relevance, and usefulness of pre-employment transition services) and vocational rehabilitation engagement among transition-age Hispanic youth with disabilities.

In this chapter an overview of the literature of various topics is discussed including: (a) employment of people with disabilities; (b) the Workforce Innovation and Opportunity Act of 2014 and participation of transition-age youth with disabilities in vocational rehabilitation services; (c) engagement of transition-age youth with disabilities in vocational rehabilitation services; (d) theoretical framework; and (e) discussion of variables.

### **Employment of People with Disabilities**

Employment without discrimination is a social determinant of health and critical in individuals' social inclusion as well as lower the risk of poverty among individuals with disabilities (Shier et al., 2009; Barnes & Mercer, 2005; Milner & Kelly, 2009; Kirsh et al., 2009;). However, despite legislations such as the Americans with Disabilities Act (ADA) of 1990 and the Rehabilitation Act Amendments of 1998 the employment gap as well as the ongoing need for accessible employment experiences for people with disabilities (Lindsay et al., 2011). People with disabilities experience disparities in the workforce (e.g., lower employment rates and wages, fewer hours worked) than compared to those without a disability. This is critical for people with disabilities considering the multiple benefits employment has been noted to be associated with, yet they are not able to benefit from due to existing disparities they encounter in obtaining employment. Benefits of employment include, but are not limited to, higher quality of

life, better physical and psychological health, longer life expectancy, contributes to a daily routine, income, enhances meaning of life, and increases social relationships (Eggleton et al., 1999; Dean et al., 2018; Fryers, 2006; Laditka & Laditka, 2016). The literature has identified numerous barriers to employment for people with disabilities such as individual's health and functional capacity (Van Campen & Cardol, 2009), employer's characteristics (e.g., attitudes, commitment to hire and provide accommodations; Baker et al., 2018; Iwanaga et al., 2021; Peck & Kirkbride, 2001), discrimination and prejudice (Brostrand, 2006; Chan et al., 2009; Livneh et al., 2014; Yaghmaian et al., 2019), and lack of accessible transportation (Hernandez et al., 2007).

### **Transition-age Youth with Disabilities**

Transition-age youth with disabilities experience similar benefits and challenges to those in the disability community. Employment for transition-age youth with disabilities, specifically, contributes to their development of sense of purpose and reduces any challenges during such discovery process (Nevala et al., 2019). Having a job also provides transition-age youth with disabilities opportunities to socialize with others (e.g., customers, supervisors, co-workers) leading to opportunities to build relationships and grow their social network (Auerbach & Richardson, 2005; Mahoney et al., 2005; Test et al., 2000). Researchers have also indicated that employment can enhance youths' sense of belongingness (Koletsi et al., 2009; Leufstadius et al., 2009).

Moreover, transition-age youth with disabilities experience unique benefits of employment, primarily due to the developmental stage they are in, that is emerging adulthood. Arnett (2000) described emerging adulthood as the developmental stage of individuals between the ages of 18 and 25, consisting of five features: identity exploration, instability, self-focus, feeling in between, and possibilities. Researchers have suggested that employment during

emerging adulthood contributes to transition-age youths' psychological well-being and higher quality of life (Galambos et al., 2006; Stodden & Mruzek, 2010). Considering that transition-age youth are undergoing a stage of identity exploration and discovery of career interests, employment aids in such exploration process (Arnett, 2000). Lechner and colleagues (2016) emphasized that employment plays a key role in youth's development with activities such as career exploration, preparation for an occupation, and establishment of career being critical. Furthermore, employment provides transition-age youth with disabilities the opportunity to gain early-on employment experiences that help promote skill development (Lindsay, 2011). This is critical considering skill development has been suggested to be a key component in ensuring a successful transition to adulthood for transition-age youth with disabilities, primarily because of the unequal participation in social, leisure, and vocational opportunities during high school when compared to those without disabilities (Whitehead et al., 2009, as cited in Lindsay, 2011).

Despite the various benefits of employment among transition-age youth with disabilities, they too experience employment disparities (e.g., lower workforce participation) that prevents them from benefiting from the mentioned benefits; thus, further negatively impacting their well-being and psychosocial outcomes. These disparities are even more evident among transition-age youth from racial/ethnic minority groups (Ji et al., 2015; Sanford et al., 2011). In 2021, transition-age youth with disabilities were twice less likely to obtain employment than compared to those without disabilities (U.S. Department of Labor, 2022). The literature has demonstrated that transition-age youth with disabilities experience various challenges in the overall process of obtaining employment.

First, transition-age youth with disabilities experience physical and emotional changes that may impact various aspects of their life (Langi et al., 2017). Transition-age youths' health

challenges can also impact their involvement in the workforce (Honeycutt et al., 2015). In addition, transition-age youth with disabilities have limited to no work experience when compared to adults with disabilities thus impacting their likelihood of obtaining employment (Langi et al., 2017; Pastore, 2015). Ose and Jensen (2017) stated how transition-age youth with disabilities may lack motivation, self-confidence, and have unrealistic expectations about work that may negatively impact their employment outcomes. This observed “vocational disadvantage” has been suggested to be attributed to the difference in educational preparation transition-age youth with disabilities received than compared to their peers without disabilities (Honeycutt et al., 2015). External barriers, such as workplace discrimination, inaccessible transportation, and lack of appropriate work supports, may also hinder the opportunities for transition-age youth with disabilities to obtain employment (Honeycutt et al., 2015; Lindsay, 2011). For example, Cmar and Steverson (2021) indicated that employer discrimination and transportation issues were challenges transition-age youth with visual impairments experienced during their job search process. Moreover, Pandey and Agarwal (2013) described various challenges transition-age youth with disabilities face during the “transition process” from adolescence to adulthood. For instance, families and youth with disabilities have disclosed the limited accessibility to comprehensive and up-to-date career information. Other challenges included youth experiencing limitations in the three following areas: (a) opportunities to live independently, (b) develop social relationships, and (c) supported employment services in some geographical locations (Pandey & Agarwal, 2013).

### ***Transition-age Hispanic Youth with Disabilities***

Transition-age Hispanic youth with disabilities have lower successful employment outcomes than White youth (35% vs 40.4%, respectively; Sima et al., 2015). Similarly, Castruita

Rios and colleagues (in press) observed that only 35% of transition-age Hispanic youth that were part of the vocational rehabilitation program exited with employment. Although Hispanic individuals are the largest racial/ethnic minority group in the United States, they have historically experienced disparities in multiple areas such as income, health, and employment (Velasco-Mondragon et al., 2016). This is critical due to the interrelationship between these three components, where if one of the components is impacted the others are as well.

Income inequalities among Hispanic individuals have resulted in having twice the risk of living below the poverty line, with those belonging to the youngest (i.e., children) and oldest (i.e., 65 and older) groups experiencing the highest poverty (Dominguez et al., 2015; Krogstad, 2014; Velasco-Mondragon et al., 2016). In addition, in 2014 the median household income of Hispanic individuals was 52% below than compared to non-Hispanic Whites (DeNavas-Walt & Proctor, 2015). As for healthcare access, it has been reported that Hispanic individuals have lower access to health care and underutilize preventive care when compared to other racial/ethnic groups (National Center for Health Statistics, 2014, as cited by Velasco-Mondragon et al., 2016). Moreover, prior to the passing of the Affordable Care Act in 2014, it was estimated that about 30% of Hispanic individuals did not have any type of health insurance than compared to non-Hispanic Whites (National Center for Health Statistics, 2014, as cited by Velasco-Mondragon et al., 2016). According to the National Center for Health Statistics in 2020 it was estimated that about 30.2% of Hispanic individuals were uninsured compared to 10.3% of non-Hispanic individuals. Thus, the percentage of uninsured Hispanic individuals in the U. S. has not changed much in the approximately last 8 years. Moreover, participation in the workforce among Hispanic individuals has been observed to be typically in low-skilled occupations (e.g., farm work, construction, food preparation), this is primarily true for those that are immigrants and

have low levels of education (Passel & Cohn, 2015). Thus, Hispanics continue to experience disparities in the mentioned three areas, which is detrimental to their overall wellbeing, quality of life, and youths' achieving successful transition outcomes.

Furthermore, transition-age Hispanic youth with disabilities encounter additional barriers to employment as a result of cultural and value differences than compared to those of the United States. Despite the limited research examining influential factors of employment and employment outcomes of specifically on transition-age Hispanic youth with disabilities, the existent literature has provided some insight as to factors impacting Hispanic individuals access to employment opportunities. Identified barriers to employment in the literature have included acculturation patterns (Velcoff et al., 2010), dual-minority status (Quiñones-Mayo et al., 2000), language barriers, and systemic barriers (Torres Stone et al., 2015).

For example, a study examining the effects of acculturation patterns in Hispanic consumers vocational rehabilitation experiences and employment discovered that individuals with lower identification with the United States culture experienced more difficulties in obtaining employment (Velcoff et al., 2010). Transition-age Hispanic youth with disabilities also experience a dual-minority status, indicating how they are part of two underrepresented groups (e.g., race/ethnicity, disability status) and/or could also have more than one disability (Quiñones-Mayo et al., 2000). This can complicate youth's self-perception, primarily in terms of which of their identities they may identify with most, and in cases where they may have more than one disability it can result in associating with different limitations and barriers.

Torres Stone and colleagues (2015) studied the experiences of transition-age Hispanic and non-Hispanic youth with serious mental health conditions in receiving vocational services, job searching, and maintaining a job. Hispanic participants shared experiencing some barriers in

relation to language barriers, political tensions, and systemic barriers that have impacted their engagement in services and employment (Torres Stone et al., 2015). Language barriers have also been discussed in other studies as a unique challenge to employment transition-age Hispanic youth face. For instance, youth and parents/caregivers have shared there exists a limited availability of documentation in Spanish and in plain language (Breeding et al., 2005). Parents have also disclosed that they have limited involvement in planning transition services for their child due to language and cultural issues (Jivanjee & Kruzich, 2010). Furthermore, legal barriers and stigmatizing attitudes are other unique challenges experienced by transition-age Hispanic youth (Breeding et al., 2005; DiCerbo, 2000). Youth's citizenship status can serve as a legal barrier given that it may prevent them from obtaining their driver's license as well as their ability in obtaining a social security number which can further limit their accessibility to services (Breeding et al., 2005). In situations youth's parents are undocumented it can also prevent them from seeking services due to fear of their parents being deported, thus resulting in trust issues that can impact the transition service delivery as well as access and engagement in vocational rehabilitation services (Povenmire-Kirk et al., 2010). Additionally, political climate can impact cultural perceptions towards racial/ethnic minorities and immigrants that can then further influence the way professionals relate to and engage with families (Garcia & Kleifgen, 2010; Harry, 2008)

Additionally, knowledge and respect of the Hispanic cultural values have been observed to be an important factor for transition-age Hispanic youth who are receiving vocational rehabilitation services. The literature has highlighted four Hispanic cultural values: personal dignity, *familismo* (familism), personal dialogue styles, and *la palabra* (personal and professional commitments (Breeding et al., 2005). Personal dignity can be defined as an

individual's integrity, self-respect, and feelings of self-worth (Swensen, 1994, as cited in Breeding et al., 2005). In situations where transition-age Hispanic VR consumers may experience too many challenges and delays in service delivery, it may be perceived as an "insult" and disrespect thus compromising such value (Rivera & Cespedes; Roessler & Rubin, 1998, as cited in Breeding et al., 2005). *Familismo* refers to the importance of family loyalty, closeness, and support (Calzada et al., 2012; Cauce et al., 2002; Guilamo-Ramos et al., 2007; Sabogal et al., 1987). This value can become compromised due to the nature of VR service delivery, that typically involves only the vocational rehabilitation counselor and the transition-age youth without inclusion of family members (Breeding et al., 2005). The value of personal dialogue styles is used to describe how within the Hispanic culture, it is common for individuals to have "narrow" personal spaces where the "rule of interaction" is for communication to take place at a close range (e.g., important to face each other when conversing, eye contact, etc.; Breeding et al., 2005). *La palabra*, or personal and professional commitments, describes the subscribed belief that an individual's word is binding (Rivera & Cespedes, 1983; Roessler & Rubin, 1998). Examples of this include verbal agreements, which at times may be common when making negotiations and may be the preferred method for some individuals (Breeding et al., 2005). Additionally, transition-age Hispanic youth have shared that characteristics such as having staff members who spoke Spanish and/or were knowledgeable of the Latinx culture were important to them (Torres Stone et al., 2015).

Lastly, Castruita Rios and colleagues (in press) explored the factors influencing attainment of competitive integrated employment at exit of vocational rehabilitation program among transition-age Hispanic youth with disabilities. Findings of this study identified both positive and negative predictors (e.g., sociodemographic characteristics, public support received,



barriers) of employment. For sociodemographic characteristics, transition-age Hispanic youth that were male and older and had a mental health disability had a greater likelihood of exiting the vocational rehabilitation program with employment (Castruita Rios et al., in press). Observed facilitators of employment included English learners, received Exhaust Temporary Assistance for Needy Families, and identifying as migrant and seasonal farmworkers or dependents (Castruita Rios et al., in press). Whereas, identified barriers to employment for transition-age Hispanic youth with disabilities included having an ex-offender status, identifying as foster care youth, long-term unemployment, receiving public supports (e.g., Medicaid, Medicare, Supplemental Security Income) and having a significant disability.

### **Workforce Innovation and Opportunity Act**

The establishment of the Workforce Innovation and Opportunity Act (WIOA) of 2014 called for a focus in supporting and enhancing transition-to-adulthood outcomes (e.g., employment, postsecondary education) among transition-age youth with disabilities (Sung et al., 2022). The WIOA mandated all state vocational rehabilitation agencies to allocate 15% of their fundings for pre-employment transition services towards transition-age youth with disabilities, specifically to those that are eligible or potentially eligible for vocational rehabilitation services (U.S. Department of Labor, n.d.-a). The creation of pre-employment transition services was an approach to ensure that state vocational rehabilitation agencies would assign resources and services for transition-age youth with disabilities (Taylor et al., 2022). There are five pre-employment transition services that include job exploration counseling, instruction in self-advocacy, work-based learning experiences, work readiness training, and counseling on enrollment opportunities (U.S. Department of Labor, n.d.-a).

In addition, the WIOA legislation clearly states that the intended outcome of vocational rehabilitation services is competitive integrated employment (Roux et al., 2018). Competitive integrated employment refers to employment whereby the employee is (1) paid at or above the minimum wage; (2) receives the same level of benefits than employees without disabilities; (3) works in a setting that permits interaction with other employees without disabilities; and (4) offers opportunities for advancement (U.S. Department of Labor, n.d.-b). This legislation also requires states to identify unserved and underserved groups by vocational rehabilitation agencies, along with developing goals and strategies to fulfill the needs of the given identified groups (34 CFR § 361.29, as cited in Roux et al., 2018). The WIOA also called for a growth of collaborations between state vocational rehabilitation agencies, schools, and community agencies. Specifically, the purpose of enhancing these collaborations is to improve the delivery of services as well as for state vocational rehabilitation agencies to support transition-age youth via provision of advanced trainings in technical professions and science, technology, engineering, and mathematics (STEM) fields (Association of University Centers on Disabilities, 2014; Sung et al., 2022). Lastly, WIOA introduced critical changes to Title IV of the Rehabilitation Act calling for an allocation of no less than 10% of funds for youth to support youth with the most significant disabilities to obtain competitive integrated employment (Association of University Centers on Disabilities, 2014).

### **Transition-age Youth with Disabilities Participation in Vocational Rehabilitation Services**

State vocational rehabilitation agencies play a significant role in supporting transition-age youth with disabilities throughout the job search and application as well as the attainment and maintenance of employment (Honeycutt et al., 2015; Roux et al., 2018, 2019). However, there exists a noticeable state difference in vocational rehabilitation services for transition-age youth

with disabilities, whereby differences in service delivery can possibly impact employment outcomes (Burgess & Cimera, 2014; Roux et al., 2018; Taylor et al., 2022). Research associated with the participation of transition-age youth with disabilities in vocational rehabilitation services has provided insight on application rates, utilization of services, number of services provided to youth, effectiveness of services, length in vocational rehabilitation program along with racial/ethnic and disability type disparities. Racial differences were observed in the areas of application to services, eligibility rates, service rates, and employment rates, where White vocational rehabilitation consumers rather higher than Hispanic consumers in all of the mentioned areas (Yin et al., 2021). Moreover, transition-age youth that remain in the vocational rehabilitation system for a shorter time were associated with attainment of competitive integrated employment (Kaya et al., 2021).

Honeycutt and colleagues (2015) examined the application, service, and employment rate of transition-age youth with disabilities in the United States between the years of 2004 and 2006. Findings demonstrated that on average 8% of transition-age youth with disabilities applied to vocational rehabilitation services, 56% of applicants received services, and 56% of those receiving services exited with employment at the end of the program (Honeycutt et al., 2015). Similar employment rates (57.63%) were observed at the completion of the vocational rehabilitation program among transition-age youth from a Midwestern state (Awsumb et al., 2016). However, more recent data suggests that only a few of transition-age youth with disabilities, from a public urban high school, who received vocational rehabilitation services obtained employment at exit (Awsumb et al., 2020). Additionally, it was observed that more than half of the transition-age youth that were eligible for services did not receive any services (Awsumb et al., 2020). As for the effect of number of services received on employment

outcomes, research indicates mixed findings. While some suggest that the fewer services transition-age youth with disabilities receive the better employment outcomes (Awsumb et al., 2016), others suggest the contrary with more services enhancing employment outcomes (Kaya et al., 2021). A possible explanation could be disability type, given among transition-age youth with specific learning disabilities more services promoted employment (Kaya et al., 2021), while among transition-age youth with disabilities in general fewer services led to better employment outcomes (Awsumb et al., 2016). At last, length of transition-age youth in vocational rehabilitation system has been observed to influence employment outcomes, primarily among those with specific learning disabilities, with a shorter time in the system being associated with obtaining competitive integrated employment (Kaya et al., 2021).

Researchers have attributed these rates (e.g., application, services, employment) to individual level and system level factors. For individual level factors, stakeholders described that at times transition-age youth with disabilities do not following up with counselors as well as some youth may have limited supports (e.g., family; Awsumb et al., 2020). As for system level factors, the lack of a set standard practice for the process of moving a referral to plan has resulted in a discrepancy as to how stakeholders (e.g., schools, vocational rehabilitation counselors, Division of Rehabilitation Services administrators) handle this process. Additionally, the literature has suggested the limited competence and knowledge vocational rehabilitation counselors have in serving transition-age youth with disabilities, primarily in the best practices in providing age-appropriate vocational services which further impacts the effectiveness of service delivery (Awsumb et al., 2020; Oertle et al., 2007, 2013; Plotner et al., 2012, 2014).

Furthermore, transition-age youth with disabilities participation in vocational rehabilitation services has been observed to promote employment outcomes among various

groups of transition-age youth with disabilities. For example, Jun and colleagues (2015) observed that transition-age youth with disabilities that participated in school transition programs and vocational rehabilitation services had better employment outcomes than those who did not. Kaya and colleagues (2021) also demonstrated that youth with specific learning disabilities had a significantly better likelihood of finding employment than those that did not receive services. Additional studies have also demonstrated the effectiveness of vocational rehabilitation services in enhancing employment outcomes among transition-age youth with disabilities, where job-related services (e.g., job search assistance and job placement services) were consistently reported as a positive predictor of employment (e.g., Awsumb et al., 2020; Cimera et al., 2015; Glynn & Schaller, 2017; Kaya, 2018; Kaya et al., 2016, 2021; Rumrill et al., 2016).

### ***Transition-age Hispanic Youth with Disabilities***

Among transition-age Hispanic youth with disabilities, specifically those receiving pre-employment transition services, it has been observed that although White Hispanics application rate to adult vocational rehabilitation services is the best (43.9%), non-White Hispanics have the worst application rate (33%) when compared to the national standard (41.7%; Castruita Rios et al., in press). Although it has stated that Hispanic vocational rehabilitation consumers experience racial disparities (Shaewitz & Yin, 2021; Yin et al., 2021), there remains limited research about the potential factors contributing for these discrepancies in application to vocational rehabilitation services. Moreover, an underutilization, or low rate of participation, of vocational rehabilitation services has also been observed among transition-age Hispanic youth (Castruita Rios et al., in press) as well as Hispanic individuals (Ibarra, 2000).

The literature has suggested mixed findings on the impact vocational rehabilitation services have had on employment outcomes among transition-age Hispanic youth with

disabilities when compared to White youth. Researchers examining employment outcomes of transition-age Hispanic youth with disabilities receiving vocational rehabilitation services have observed that those with autism spectrum disorder (ASD) and specific learning disability were less likely to obtain employment compared to Whites (Kaya et al., 2016, 2021). Conversely, transition-age Hispanic youth with disabilities have also been observed to have better employment outcomes than Whites (Awsumb et al., 2020). Better employment outcomes have also been observed among transition-age Hispanic youth with attention deficit hyperactive disorder (ADHD) or visual impairments and blindness have been found to have better employment outcomes than White youth (Cimera et al., 2015; Glynn & Schaller, 2017). Additionally, Awsumb and colleagues (2016) demonstrated that transition-age Hispanic youth with disabilities had 50% better odds of obtaining competitive integrated employment at exit of vocational rehabilitation program. However, it was observed that transition-age Hispanic youth with ADHD had lower weekly earnings than White youth (Glynn & Schaller, 2017). Lastly, family engagement and support has been identified as a key facilitator of employment outcomes for transition-age Hispanic youth with disabilities (Awsumb et al., 2020). Furthermore, rehabilitation services such as work based learning experiences, information and referral services, instruction in self-advocacy, job placement assistance, job search assistance, and transportation have been observed to be significantly associated with the obtainment of competitive integrated employment among transition-age Hispanic youth with disabilities, with short-term job supports and maintenance being the strongest positive predictors (Castruita Rios et al., in press). On the other hand, rehabilitation services such as job exploration counseling, job readiness training, and vocational rehabilitation counseling and guidance have been demonstrated to be significantly negatively associated with attainment of competitive integrated

employment, where assessment was the strongest negative predictor (Castruita Rios et al., in press).

### **Engaging Transition-age Youth with Disabilities in Vocational Rehabilitation Services**

Engagement has been described as being multi-dimensional and has been observed to be an important component that impacts outcomes in various therapeutic settings (Castro-Blanco et al., 2010; Danzl et al., 2012; Ellfers, 2013; Lequerica & Kortee, 2010; Staudt et al., 2012; Southwick & Schultz, 2019). Moreover, vocational rehabilitation engagement is a term used to describe an individual's engagement in vocational rehabilitation services. Specifically, this is portrayed as engagement in three facets: cognitive (e.g., understanding of program activities), affective (e.g., good rapport with counselor), and behavior (e.g., meeting and following up with counselor; Dutta et al., 2017).

Engagement of consumers in the vocational rehabilitation process, has been suggested by researchers to be critical, particularly in the impact it can have on their rehabilitation outcomes (i.e., attainment of competitive integrated employment; Thomas et al., 1996; Timmons et al., 2002; Wagner et al., 2011). Various studies have demonstrated that engagement does indeed play a critical role in vocational rehabilitation consumers' attaining successful employment outcomes. For example, Dutta and colleagues (2017) observed that engagement of individuals with disabilities in vocational rehabilitation services enhanced better employment outcomes. In addition, it has also been noted that regardless of individuals' background, the level of engagement of consumers can predict rehabilitation outcomes (Southwick & Schultz, 2019). Specifically, vocational rehabilitation engagement has been observed to be significantly associated with job-related factors (e.g., job placement, plan development, and employment outcomes, Bose et al., 1998; Rucker et al., 2003). In addition, factors such as working alliance,

vocational self-efficacy, intrinsic motivation, and vocational rehabilitation outcome expectancy have been noted to be a significant predictor of vocational rehabilitation engagement among consumers (Dutta et al., 2017). Although these studies have focused on vocational rehabilitation consumers in general, and not specifically on transition-age youth, findings can still inform the importance of the role engagement can play in successful employment outcomes.

Nevertheless, Sanford and colleagues (2011) specifically examined the engagement of transition-age youth with disabilities in regard to three areas and/or the combination of the following: employment, postsecondary education, and job training. When focused explicitly only on engagement in employment, it was observed that about 25.7% of youth were working, with youth with an intellectual disability or emotional disturbance being more likely to be engaged in paid employment than youth with other disability types (Sanford et al., 2011). Additionally, differences in education level among transition-age youth demonstrated to play a role on their engagement in employment only versus employment and postsecondary education. Findings noted that youth who did not graduate from high school were more likely to only engage in employment only, whereas those with a high school diploma were more likely to engage in employment and pursue a postsecondary education (Sanford et al., 2011). In addition, family annual income was another observed predictor of transition-age youth's engagement in employment. Transition-age youth whose annual family income was less than \$25,000 were less likely to obtain employment and postsecondary education than compared to those with an annual family income over \$50,000 (Sanford et al., 2011). Income levels influence on transition-age youths' engagement has also been noted by Wagner and colleagues (2012), where youth from low-income families were observed to have lower levels of engagement in their transition planning.



## **Engaging Transition-age Hispanic Youth with Disabilities in Vocational Rehabilitation Services**

Transition-age Hispanic youth with disabilities underutilize vocational rehabilitation services (Castruita Rios et al., in press). This aligns with earlier literature, which observed that Latino individuals with disabilities accessed vocational rehabilitation services at lower rates (Santiago et al., 1996) and were also accepted for services at a lower rate (Dziekan & Okocha, 1993). The literature has suggested various factors contributing to Hispanic consumers low engagement in disability-related services, such as vocational rehabilitation services. Factors such as (a) having a limited understanding on rehabilitation services and processes; (b) systemic racism and discrimination; (c) cultural mistrust; (d) lack of culturally appropriate rehabilitation services; (e) having low expectations of job placement; (f) language barriers; (g) technology; and (h) fear losing financial benefits have been observed to negatively impact engagement of Hispanic individuals in vocational rehabilitation services (Breeding et al., 2005; Hernandez et al., 2006; Hirano et al., 2018; Mueller Reed et al., 2005; Shapiro et al., 2004; Velcoff et al., 2010). Nonetheless, these studies were focused on Hispanic individuals thus limiting the comprehensiveness of this findings as it relates to transition-age Hispanic youth with disabilities.

Although there is limited research examining the factors influencing engagement of particularly transition-age Hispanic youth with disabilities, there are some studies that have provided some insight in regard to this topic. Language barriers and systemic barriers have also been observed to be a barrier to engagement among transition-age Hispanic youth with disabilities (Torres Stone et al., 2015). Researchers have also suggested that there are occasions where consumers perceptions and understanding of disability may conflict with disability terminology and state-federal criteria that has been established for service eligibility (Rivera &

Cespedes, 1983; Roessler & Rubin, 1998, as cited in Breeding et al., 2005). For example, a group of Hispanic immigrant mothers of children with ASD showcased notions about ASD, whereby mothers' believed disability was temporary, and it could be "cured" (Ijalba, 2016). This is a critical component to be aware of because conflicting views on youth's disability could impact the relationship between consumers and service providers as well as the overall participation in the vocational rehabilitation program. In addition, political tensions and immigration policy have also been addressed as potential barriers to engagement in vocational rehabilitation services among transition-age Hispanic individuals (Castruita Rios et al., in press; Torres Stone et al., 2015).

Although family support and involvement during the rehabilitation process has been noted to be a positive influence on rehabilitation outcomes among Hispanic individuals, including transition-age youth with disabilities (Awsumb et al., 2020; Velcoff et al., 2010), it has been observed that parents are not always actively involved in transition planning processes nor are satisfied with their involvement (Wagner et al., 2012; Wagner et al., 2014, as cited in Hirano et al., 2018). Barriers contributing to the parents' limited involvement have been discussed in terms of three categories of barriers: family, school, and adult services systems. Family barriers addressed in the literature have included items such as parents not having sufficient support, feeling overwhelmed in meeting their child's daily needs, and having low self-efficacy (Hirano et al., 2018). School barriers encompass instances where school staff has acted in a racist and discriminatory way towards parents, prevented families from becoming empowered, assumed low expectations of advocacy and involvement, developed a poor transition program (e.g., written poorly, late planning, not aligned with students' strengths and family values) and provided services being rooted in Western values without accounting for cultural differences as it

relates specifically with Latino cultural values (Hirano et al., 2018; Povenmire-Kirk et al., 2010; Shapiro et al., 2004). Lastly, adult service systems have been identified by parents of youth with disabilities as a barrier to postschool outcomes (e.g., employment). Parents have shared that challenges they have experienced with adult service systems are within the areas of difficulty in navigating the system, staff being unwelcoming to families, and vocational rehabilitation counselors not being responsive to individual strengths and needs for their child (Hirano et al., 2018; Povenmire-Kirk et al., 2010). Similar findings were observed in a study examining Latino individuals with disabilities experiences in vocational rehabilitation services, where participants shared that vocational rehabilitation counselors were unresponsive, held the power in the vocational rehabilitation relationship, were placed in a job that did not meet their interests and skill-set, and experienced prejudiced attitudes from vocational rehabilitation counselors (Hernandez et al., 2006).

Although these identified barriers from parents of youth with disabilities, are in context of transition-age youth in general or Hispanic individuals, and not specifically to transition-age Hispanic youth with disabilities, these findings remain relevant and important. For instance, parents disclosed that the vocational rehabilitation system is difficult to navigate and added how counselors were unresponsive. This can have detrimental consequences primarily for transition-age Hispanic youth with disabilities, because of the cultural values of personal dignity and *la palabra* (personal and professional commitments becoming compromised). For example, if a counselor agreed they would follow up with the client with more details, and stated the consumer would be receiving a specific service, yet failed to do fulfill given tasks, it would compromise these cultural values. This then can have further consequences such as it negatively impacting the working alliance between the transition-age Hispanic youth and the counselor. In addition,

comments surrounding services being embedded in Western values highlight the ongoing discussion in literature calling for the need of culturally responsive services (Castruita Rios et al., in press). Lastly, parents also disclosed that transition programs were written poorly which is concerning due to the literature demonstrating the impact goals written in transition programs (e.g., IEP) have on accomplishing successful postschool outcomes (Park & Bouck, 2018). Furthermore, considering the Latino cultural value of *familismo* (familism), awareness and understanding of the barrier's parents of transition-age Hispanic youth with disabilities encounter as it relates to participation in transition planning is important to consider, given it may impact transition-age Hispanic youth's engagement in vocational rehabilitation services.

### **Theoretical Framework**

#### **Integrated Self-Determined Work Motivation Model**

The Integrated Self-Determined Work Motivation Model is a framework to comprehend the relationships between functioning levels, self-determination and self-efficacy factors, vocational rehabilitation engagement, and readiness for employment among people with disabilities (Tansey et al., 2017). A couple of studies have utilized this model as their framework within a sample of individuals with disabilities. Umucu and colleagues (2016) suggested that this model could be utilized to evaluate self-determined work motivation as well as vocational recovery among individuals with mental health conditions. Moreover, Iwanaga and colleagues (2018) utilized this framework to examine the relationship between working alliance and vocational rehabilitation outcomes. Another study utilized constructs from the Integrated Self-Determined Work Motivation Model (e.g., autonomous motivation, vocational competence, and outcome expectancy) to evaluate whether the constructs mediated the relationship between working alliance and engagement of transition-age African American youth with disabilities in

transition vocation rehabilitation services (Dutta et al., 2020). Furthermore, Dutta and colleagues (2020) called for further qualitative research to be conducted utilizing this framework to continue understanding how the constructs on the model help predict vocational rehabilitation engagement among transition-age youth of various racial/ethnic backgrounds. Nonetheless, the utilization of this model among transition-age Hispanic youth with disabilities or even Hispanic individuals is limited. Furthermore, considering the Integrated Self-Determined Work Motivation Model is a combination of three theories (i.e., self-determination theory; social cognitive theory; and stages of change), studies addressing these theories were examined as they have been utilized to understand vocational rehabilitation engagement and its application among youth and Hispanic individuals.

### ***Self-Determination Theory***

The self-determination theory provides a framework for understanding human motivation, where it claims three psychological needs (autonomy, competence, and relatedness) must be met for an individual to become internally motivated (Deci & Ryan, 2002, 2012). Among people with disabilities, self-determination has been noted to be associated with employment, social integration, community access, higher quality of life, and financial independence (Lachapelle et al., 2005; Shogren et al., 2015; Wehmeyer & Palmer, 2003; Nota et al., 2007). Wehmeyer and Bolding (2001) suggested that self-determination was essential particularly for children, adolescents, and adults with intellectual disabilities. For instance, among youth and young adults with physical, developmental, and intellectual disabilities higher levels of self-determination have been positively related with employment, independent living, and financial outcomes (Carter et al., 2010; Shogren et al., 2015; Wehmeyer & Palmer, 2003).

This framework has been utilized on several studies among individuals with disabilities in context of engagement in health-promoting behaviors (Brooks et al., 2018), academic achievement (Erickson et al., 2015), and engagement in school (Eisenman, 2007) and tasks (Cannella et al., 2005). Brooks and colleagues (2018) study demonstrated that all the self-determination theory factors were significantly associated with physical activity and exercise participation among individuals with chronic pain and a related disability. Among youth with intellectual disabilities, it was observed that higher levels of self-determination predicted better academic achievements (Erickson et al., 2015). Similarly, among youth with and without disabilities, self-determination has also proven to enhance engagement in school along with their likelihood of completing school (Eisenman, 2007). Moreover, Canella and colleagues (2005) discovered that when individuals are given autonomy to make decisions, individuals are more likely to engage more, which has been supported by other studies (e.g., Carter, 2001; Gwadz et al., 2022; Kern et al., 2001). In context of vocational rehabilitation services, this could indicate that by providing consumers with opportunities to have an active role in determining goals and tasks, it could result in an increase of engagement in services. Furthermore, self-determination interventions have been advocated by researchers as a method to encourage individuals with disabilities to assume an active role, be self-motivated, and engaged in the various aspects of their services, such as vocational rehabilitation (Corrigan et al., 2012; Dutta et al., 2017).

Among Hispanic individuals, self-determination theory has been utilized as a framework in academic settings and engagement in physical activity. A study examining the experiences of first-generation Latina students attending a predominantly white institution demonstrated that the self-determination of participants was strengthened by their optimistic perspective towards achievement of their goals (Gutierrez-Serrano et al., 2022). In regard to engagement in physical

activity, internal motivation predicted positive attitudes and higher levels of engagement in physical activity among minority youth (67.3% Hispanic) at risk for overweight (Vierling et al., 2007). Similarly, a physical activity course designed based on self-determination theory, increased college students' (67.6% Hispanic) exercise motivation (Barton-Weston et al., 2021). Given self-determination theory is an acknowledged theoretical foundation of motivational interviewing (Vansteenskiste et al., 2012), literature on motivational interviewing and Hispanic individuals was also examined. The literature implies that culturally adapted motivational interviewing among Hispanic individuals has decreased heavy drinking habits (Lee et al., 2013); increased engagement and satisfaction in treatment for alcohol use problems (Lee et al., 2011); improved healthy behaviors among children with obesity (Early & Cheffer, 2019); and increased individuals' adherence to antidepressant medication (Interian et al., 2010).

### ***Social Cognitive Theory***

The social cognitive theory provides a framework to better understand how people obtain and sustain particular behavioral patterns and is comprised of five components including the following: knowledge, self-efficacy, outcome expectancy, goals, and facilitators and impediments (Bandura, 2004). Research implementing this theory among children and youth has been in context of physical health and engagement in activities. Social cognitive theory was utilized to predict and modify elementary students' physical activity behavior, and findings demonstrated that self-efficacy promoted levels of physical activity among non-Hispanic students (Harmon et al., 2014). Moreover, studies implementing the "Youth Fit 4 Life" program (based on the social cognitive theory) among overweight children revealed significant improvements in self-efficacy and body mass index measures (Annessi et al., 2010, 2017). In addition, application of the social cognitive theory among students who had taken an

entrepreneurship or business course demonstrated that higher levels of self-efficacy enhanced students' engagement in entrepreneurial activities (Praswati et al., 2022). Furthermore, application of this theory among Hispanic individuals has demonstrated to promote perseverance. Torres and Solberg (2001) utilized this theory to evaluate Latinx college students' persistence intentions, where participants college self-efficacy promoted stronger persistence intentions. This can have implications for vocational rehabilitation engagement, suggesting that higher levels of self-efficacy result in greater persistence to participate and complete the vocational rehabilitation program.

### ***Stages of Change Theory***

The stages of change theory (Prochaska & DiClemente, 1983; Prochaska et al., 1992) has been utilized to better understand the intentional behavior change of people with disabilities (Chou et al., 2004, 2009; Iwanaga et al., 2019, 2020; Strauser, 2013), including transition-age youth with disabilities (Schlegelmilch et al., 2021). This framework has also been extensively applied in vocational rehabilitation research (e.g., Bezyak et al., 2011; Chan et al., 2004; da Silva Cardoso et al., 2003; Gervery, 2010; Iwanaga et al., 2019, 2020; Strauser, 2013). Iwanaga and colleagues (2019) utilized this framework to analyze the relationship between working alliance and stages of change of employment among vocational rehabilitation consumers. Findings suggested that internal motivation, outcome expectancy, and vocational rehabilitation engagement enhanced an individual's progression through the model resulting in the obtainment of employment (Iwanaga et al., 2019). Researchers have also advocated for the utilization of the stages of change theory as an effort to promote individual's motivation to change and attain the desired behavior change and outcomes, such as obtaining employment (Levesque et al., 1999; Norcross et al., 2010; Schlegelmilch et al., 2021). Furthermore, Iwanaga and colleagues (2020)



demonstrated the applicability of the stages of change model to the phases of service delivery that guide vocational rehabilitation programs.

Application of this theory among Hispanic individuals has suggested improvements in healthy lifestyles among low-income families (Mier et al., 2011; Taylor et al., 2000; Yan et al., 2009) and predictions of alcohol and drug use among HIV-positive youth (Naar-King et al., 2006). Through the application of health-related interventions based on the stages of change model, a walking program significantly improved the walking habits and lowered the depressive symptoms and stress levels among low-income Mexican American women who were overweight (Mier et al., 2011). Also, a nutrition education program improved low-income Hispanic mother's nutrition knowledge, skills, and behaviors (Taylor et al., 2000). Additionally, a community-based fitness program improved older adults (46% Hispanic) strength, flexibility, and balance.

### **The Fourfold Model of Acculturation**

The Fourfold Model of Acculturation Model (Berry, 1998) proposes that there are four patterns of acculturation (integration, assimilation, separation, and marginalization). Although the utilization of this model in the rehabilitation research is limited, some researchers have suggested that acculturation patterns play a role in Latinx individual's experiences in vocational rehabilitation services and employment outcomes (e.g., Velcoff et al., 2010). Moreover, Hispanic/Latinx individuals with lower acculturation levels have been suggested to seek less often vocational rehabilitation services due to various factors associated with acculturative stress, such as cultural mistrust (i.e., experiencing prejudice and discrimination from providers), limited English proficiency and availability of services and information in Spanish, legal status, and loss of family ties (Hernandez et al., 2006; Mueller Reed et al., 2005; Smart & Smart, 1994; Velcoff et al., 2010). Cultural differences also impact the way individuals perceive stigma (Mascayano et

al., 2016) and the way they conceptualize disability (Rivera & Cespedes, 1983; Roessler & Rubin, 1998). Moreover, individuals with lower acculturation level to the U.S. may perceive a greater stigma to seek services resulting in a lower rate of participating and engaging in such services (e.g., vocational rehabilitation). Montenegro and colleagues (2016) observed the impact stigma can have on accessing services, noting that Hispanic/Latinx individuals are less likely to utilize services due to stigma. Moreover, those with lower acculturation level to the U.S. may also have different perceptions towards disability that may impact their relationship with providers along with interest in engaging in services. Researchers have discussed how culture critically influences the way parents/caregivers understand and experience their child having a disability (Bernier et al., 2010; Ravindran & Myers, 2012). Hence, in some cultures parents/caregivers of youth with disability as well as youth may not necessarily consider the “youth” to have a disability, but rather perceive it more as them being “special” or “learn differently”, which at times may conflict with the language of some agencies and service providers utilize. Lastly, it is important to acknowledge that individuals with lower acculturation levels to the U.S. may be unfamiliar and have limited knowledge on some of the systems within the U.S. (e.g., vocational rehabilitation services). This is primarily due to programs such as vocational rehabilitation not existing in Latin American countries along with the policies surrounding equality and community integration of individuals with disabilities being quite different than they are in the U.S. Thus, although acculturation effects on vocational rehabilitation engagement have been an understudied area in the literature, there is some evidence in the literature that suggests it can be a critical factor.

## **Discussion of Variables**

### **Sociodemographic Variables**

## ***Gender***

Gender differences have been observed in regard to employment outcomes, weekly earnings, and engagement in vocational rehabilitation services. Several studies have demonstrated that females have worse vocational rehabilitation outcomes than compared to males (e.g., Awsumb et al., 2020; Boeltzig et al., 2009; Lawer et al., 2009; Migliore et al., 2012; Poppen et al., 2017; Schaller & Yang, 2005; Sung et al., 2015; Wehman et al., 2015). Similar findings have been observed on female Hispanic consumers, where some researchers have suggested gender differences can be accounted to the “triple whammy” Hispanic women with disabilities encounter due to the three layers (i.e., racism, sexism, and ableism) of oppression and discrimination they encounter (Silen, 1971; Quiñones-Mayo et al., 2000). Among transition-age Hispanic youth, it was also observed that males had better employment earning outcomes than females (Castruita Rios et al., in press). Although these studies have focused primarily on employment and earning outcomes, findings have implications towards the engagement in vocational rehabilitation services. Given that vocational rehabilitation services aim to support and enhance employment outcomes. Moreover, among Hispanic consumers it has been suggested that traditional values such as “machismo” (male superiority) can potentially explain the observed gender differences in outcomes among Hispanic consumers, primarily because of the limited independence females are granted which can consequently impact their capacity and motivation to utilize vocational rehabilitation services (Gallegos-Castillo, 2006; Quiñones-Mayo et al., 2000; Wells, 1969).

## ***Age***

Age has been noted to be associated with transition outcomes in various studies. For example, age at application has been observed to significantly predict vocational rehabilitation

outcomes. Research has demonstrated that an earlier age at application predicts employment outcomes, hourly earnings and hours worked per week among transition-age youth with disabilities (Cimera et al., 2015; Jun et al., 2015; Migliore et al., 2012), while it also predicts exiting the vocational rehabilitation program with employment among transition-age Hispanic youth with disabilities (Castruita Rios et al., in press). However, there have been mixed findings on whether younger or older youth consumers have better transition outcomes (e.g., employment, postsecondary). Among transition-age youth with visual impairments, blindness, and autism it has been noted that older transition-age youth have better employment outcomes (Cimera et al., 2015; Lawer et al., 2009; Schaller & Yang, 2005). On the contrary, when examining age and postsecondary education outcomes it has been noted that transition-age youth with autism who were younger are more likely to achieve their postsecondary education goals than compared to older peers (Migliore et al., 2012). Moreover, considering the overall findings in relation to age and transition outcomes among transition-age youth, various researchers have called for youth to begin services at an earlier age to better support and strengthen their attainment of transition-related goals (Chappel & Somers, 2010; Cimera et al., 2013).

### ***Race***

Several studies have examined the racial differences in employment outcomes among transition-age youth with disabilities (e.g., Dutta et al., 2020; Yin et al., 2021). The literature has suggested that White transition-age youth with disabilities have better employment outcomes than compared to those of other racial groups (Dutta et al., 2016; Kaya et al., 2018, 2021; Sima et al., 2015). Additionally, non-White families of transition-age youth have revealed a lower satisfaction with their involvement in transition planning (Wagner et al., 2014, as cited in Hirano et al., 2018). This is concerning considering family support has been suggested to support

successful post-school outcomes of students with disabilities (Francis et al., 2018; Wagner et al., 2014).

### ***Disability Type***

Characteristics such as disability type have been associated with worse employment outcomes across several studies (Chan et al., 2006; Johnstone, Vessell et al., 2003; Marini et al., 2008). However, there have been studies that have noted how transition-age youth from a particular disability type may perform better than other groups in terms of employment outcomes. Among transition-age youth with disabilities, it has been noted that those with ASD had lower employment outcomes (Kaya et al., 2016); whereas those with visual impairments and blindness, and ADHD had better employment outcomes when compared to White youth (Cimera et al., 2015; Glynn & Schaller, 2017). Additionally, Castruita Rios and colleagues (in press) observed that transition-age Hispanic youth with a mental health condition had better employment outcomes at exit than compared to those with a physical or sensory and communication disability.

### ***Years with Disability***

Literature examining the relationship between years with disability and employment outcomes is limited. However, there are some studies investigating the impact of acquiring a disability and employment outcomes. For example, individuals who were unemployed prior to their traumatic brain injury were significantly more likely to be unemployed a year after attainment of their injury (Andelic et al., 2012). A different study revealed that among individuals with spinal cord injury, about 40% of individuals were employed after 1-year post-injury, and as time post-injury increased so did employment rate of participants (Young & Murphy, 2009).

### ***English Learner***

The term “English learner” refers to individuals who speak a language other than English at home and receive various language instructional services in public schools, such as English as a second language (ESL), bilingual education, or language immersion programs (Trainor et al., 2016). Moreover, an individual classified as “English learner” may be someone who is considered bilingual and has proficiency in a domain (e.g., speaking) but struggle in other domains (e.g., writing, reading, listening; Linqanti & Cook, 2013). It is estimated that about 18% of Hispanic individuals in the U. S. speak English less than “very well” (Pew Hispanic Center, 2006, as cited by Velcoff et al., 2010). Additionally, among students who receive special education services about 9% of them are also identified as “English learners” (National Center on Educational Outcomes, 2011). Furthermore, Franco and colleagues (1998) noted that among Hispanic immigrants, English proficiency was positively associated to socioeconomic status. Similarly, Aud and colleagues (2011) observed that about two-thirds of students that were English learners had a family income at or near the threshold of poverty. Research surrounding English proficiency and Literature surrounding English learners and vocational rehabilitation engagement has demonstrated mixed findings, with some suggesting that having a limited English proficiency has critical negative impacts on employment outcomes and engagement with providers (Kucharczyk et al., 2022; Trainor et al., 2016), while others suggesting English learner have better employment outcomes (Castruita Rios et al., in press). Hernandez and colleagues (2006) noted that limited English proficiency was a barrier to employment due to the challenges experienced during interviews and completing all the essential job functions. Similarly, English learners may struggle to communicate with their provider (e.g., vocational rehabilitation counselor) which can impact their active engagement in the transition process and workforce

participation (Francis et al., 2020; Quiñones-Mayo et al., 2000). Considering materials and interpreters are not always available at vocational rehabilitation agencies, this barrier is heightened and further expanding the gap in Hispanic consumers receiving adequate and comprehensive services (Francis et al., 2020; Povenmire-Kirk et al., 2010).

### ***Community Area***

The literature has suggested that individuals living in rural communities experience substantial barriers in regard to the accessibility and opportunity to engage in vocational rehabilitation services. Ipsen and Goe (2016) highlighted the various challenges vocational rehabilitation agencies encounter such as pressure to provide effective services while experiencing budget constraints, growing caseloads, as well as increasing operation costs. Thus, considering these ongoing challenges vocational rehabilitation agencies undergo, it can further impact the consumers living in rural communities due to, for instance, limited ability for transportation support for the counselor and consumer (Francis et al., 2020; Ipsen & Goe, 2016; Metzler & Giordana, 2007; Riemer-Reiss, 2000).

### ***Level of Education***

The effect of education level on employment outcome has been investigated by various studies. Across various studies, higher levels of education were associated with better employment outcomes among transition-age youth (Kaya et al., 2021), including those with traumatic brain injury (Rumrill et al., 2016), autism spectrum disorder (Kaya et al., 2016), attention-deficit/hyperactivity disorder (ADHD; Glynn & Schaller, 2017), and intellectual disabilities (Kaya et al., 2018). In addition, Dutta and colleagues (2020) study noted how African American transition-age youth are at a higher risk of dropping out of high school than compared to White peers. Thus, implying how transition-age youth from traditionally underrepresented

groups may be more prevalent of attaining a lower education level than compared to those who are White and consequently possibly experiencing lower attainment of employment.

### *Socioeconomic Status*

Lower annual household income has been associated with lower likelihood of young adults with disabilities being employed at the time of the interview (Newman et al., 2011).

Additionally, transition-age youth with disabilities that receive supplemental security income and come from low-income households have been observed to have a lower likelihood of graduating high school (Iwanaga et al., 2021). This is concerning due to the long-term consequences it can have such as negatively impacting their transition outcomes, such as employment. Supporting the mentioned literature about the relationship between income and transition-age youth outcomes, Wehman and colleagues (2015) noted that youth from high socioeconomic households had better employment outcomes.

Among Hispanic individuals in the U. S., they have historically experienced income disparities that consequently impact their overall wellbeing and participation in the workforce (Velasco-Mondragon et al., 2016). A study examining the experiences of Latina caregivers observed that their household income was near the federal poverty limit thus impacting their capability to provide essential (e.g., food, shelter) and desired (e.g., internet, TV, new clothes) items for their families (Francis et al., 2020). Additionally, Hispanic households with low socioeconomic status experienced more hardships in engaging in the transition planning process due to limited knowledge on the U. S. education system and awareness of their rights, ability to take time off work, or affording childcare and transportation (Francis et al., 2020; Wagner et al., 2012). Furthermore, households with a low socioeconomic status are negatively associated with



Hispanic parent's involvement in transition planning, which can further impact transition-age youth's transition outcomes and engagement (Povenmire-Kirk et al., 2010).

### ***Disability Benefits***

Transition-age youth with disabilities who receive disability benefits, whether Supplement Security Income (SSI) or Social Security Disability Insurance (SSDI) have been noted to experience a lower likelihood of employment at exit of vocational rehabilitation program (Castruita Rios et al., in press; Ipsen, 2006; Kregel, 2012; Luecking & Wittenburg, 2009; Marini et al., 2008; Matrone & Leahy, 2005; McCormick et al., 2011; Weathers & Hemmeter, 2011). Moreover, young adults who receive SSI benefits are about 3 times less likely to be employed than compared to their peers between the ages of 20-24 (Luecking & Wittenburg, 2007; Rangarajan et al., 2009). In addition, despite data surrounding the relationship between vocational rehabilitation services and employment outcomes, individuals who receive SSI benefits underutilize these services (Schlegelmilch et al., 2019). Fear of losing benefits has been documented as a critical reason as to why transition-age youth who receive SSI benefits may opt to not seek employment thus consequently vocational rehabilitation services (Castruita Rios et al., in press; Schlegelmilch et al., 2019).

### ***Living with Family***

Living with family can result in more emotional support and closeness to family (Harrigan, 1992). Among the Hispanic community, family is greatly valued (i.e., *familismo*) and traditionally children live with parents until marriage. Moreover, the literature has suggested that family involvement and/or support promotes successful transition outcomes among transition-age youth, include those of Hispanic heritage (e.g., employment; Awsumb et al., 2020; Bryan & Henry, 2012; Burke & Hodapp, 2014; Francis et al., 2018). However, there have been research

studies that have observed the opposite trend. For example, Fung and colleagues (2008) observed that among individuals with schizophrenia, those that lived with others (e.g., relatives) had a poorer attendance to their psychosocial treatment. Similarly, Chang and colleagues (2013) study revealed that Latino families with a closer family bond were less likely to utilize mental health services.

### ***Generational Status***

Generational status is closely related to acculturation level to the U.S, or for that matter Hispanic culture as well. Research has suggested that Latinx individuals who recently immigrated to the U.S. are less acculturated to the U.S. (Rogler et al., 1991, as cited in Kim et al., 2016), and how the longer they live in the U.S. the weaker their acculturation to their native country becomes while their acculturation to the U.S. becomes stronger (Obuah, 2020). Moreover, among Latinos who recently immigrated to the U.S. (i.e., first-generation American) it was observed that they had fewer no shows and a higher rate of completion for community mental health treatment (Kim et al., 2016). Thus, implying that first-generation Americans are more likely to engage in treatment services. Considering the earlier mention about the relationship between generational status and acculturation levels, research has also demonstrated that individuals with a higher association to U.S. cultural patterns are more likely to seek professional help (Obuah, 2020; Velcoff et al., 2010).

### **Contextual Factors**

#### ***Acculturation Patterns***

Acculturation has been described as the “process to a new society” (Lara et al., 2005). The literature has suggested that acculturation patterns can impact individual’s engagement in services in multiple ways. Among Latinx individuals with disabilities, it was observed that

individuals that identified less with the dominant U. S. culture experienced more challenges in obtaining a job and achieving vocational rehabilitation outcomes (Velcoff et al., 2010). Similarly, researchers have noted that levels of acculturation can impact individual's career choice and career expectations (Flores & O'Brien, 2002; Leong & Chou, 1994; McWhirter et al., 1998; Tang et al., 1999). Moreover, "cultural clashes" between transition-age Hispanic youth and providers has been reported in various studies. Povenmire-Kirk and colleagues (2010) noted that staff displayed biased attitudes and assumptions towards transition-age Hispanic youth compromising the rapport between parties and the overall transition process. Similarly, cultural factors and background have been noted to be a challenge in the transition process for Hispanic individuals with disabilities (Franquiz & del Carmen Salazar, 2004). Researchers have also emphasized the saliency of transition-related professionals to be knowledgeable of the Hispanic culture to strengthen the relationship and quality of services for transition-age Hispanic youth consumers (Francis et al., 2020; Torres Stone et al., 2015). Considering the limited research surrounding the effects of acculturation among Hispanic consumers, Achola and Greene (2016) called for additional research being conducted on this area to further comprehend this phenomenon.

### ***Social Support***

Social support has been noted to be positively associated with physical and mental health, coping, adjustment, pain, and life satisfaction among people with disabilities (Cohen & Wills, 1985; Gottlieb, 1978; Leavy, 1983; Muller et al., 2012). Among individuals with severe mental illness, social support is critical for the individual's health and wellbeing (Chronister et al., 2021). Social support can come from various sources such as family, friends, service providers, or other community members (Leavy, 1983; Vorhies et al., 2012), where for those with severe

mental illness family support is the primary source (Chronister et al., 2021). Moreover, research has noted that social support impacts the community integration of individuals with a serious mental health condition (Davidson, Haglund, et al., 2001; Davidson, Stayner, et al., 2001; Wong & Solomon, 2002). For youth with disabilities, having a social support system has been noted to be positively associated with successful employment outcomes, and having a social support at the workplace enhances their employment success along with their self-esteem (Vorhies et al., 2012).

Social support among Hispanic individuals is critical primarily due to its collectivistic culture, whereby “familismo” is among their cultural values. Research has demonstrated that family members play a key role during the rehabilitation process of Hispanic individuals with disabilities (Velcoff et al., 2010), and can serve as a central source of support for individuals that are coping with a disability (Zea et al., 1997). Family members can also have an important role in an individual’s motivation to work which can impact their employment outcomes (Awsumb et al., 2020; Velcoff et al., 2010; Zea et al., 1997). As noted by Francis and colleagues (2020), close family relationships among Hispanic individuals goes beyond immediate family members where extended family members and trusted community members (e.g., close family friends) are also perceived as family. Thus, considering the diversity in family dynamics among the Hispanic culture, these findings can also be cautiously interpreted as close individuals having the same effect on the rehabilitation process and outcomes of Hispanic consumers. Nonetheless, although the literature has suggested positive impacts of family support among rehabilitation outcomes of Hispanic vocational rehabilitation consumers, it has also been noted that family support among Hispanic individuals can negatively impact individual’s independence and involvement in

some transition-related activities (e.g., engagement in employment, living independently) due to family's overprotectiveness (Zea et al., 1997).

### *Stigma*

**Self-Stigma.** Self-stigma refers to an individual's self-esteem and self-worth that is influenced by the individual's self-labeling themselves as someone that is socially unacceptable (Vogel et al., 2006). Moreover, self-stigma can be described as the internalization of public and societal biases (Corrigan & Watson, 2002). Research surrounding self-stigma and individuals with disabilities has noted it negatively impacts self-esteem, self-efficacy, quality of life, and self-disrespect (Corrigan et al., 2006, 2013, 2016). Additionally, it has been noted that stigma influences an individual's willingness to seek counseling services (Abdullah & Brown, 2011). Moreover, mixed findings have been observed between self-stigma and seeking services, with some studies suggesting a positive relationship (Joyce, 2012) whereas others a negative relationship (Pederson & Vogel, 2007). Watts and colleagues (2019) study revealed that self-stigma was negatively associated with vocational expectations among students in collegiate recovery programs. This finding can have implications to the impact self-stigma can have on engagement in services, considering the positive association between vocational expectations and vocational rehabilitation engagement (e.g., Dutta et al., 2017; Tansey et al., 2017).

Research examining this relationship among Hispanic individuals has noted that higher levels of self-stigma were associated with a lower likelihood of seeking services (Mendoza et al., 2015), which has also been observed among individuals from racial/ethnic minority groups (Cheng et al., 2013; Loya et al., 2010). This is not surprising given there is a high prevalence of public stigma towards individuals with severe mental health conditions as well as self-stigma in Latin America (Schilling et al., 2015). A study examining Latinx college students' attitudes

towards online counseling observed a significant negative, but small, relationship between self-stigma and attitudes towards online counseling (Ballesteros & Hilliard, 2016). Additionally, Schilling and colleagues (2015) developed a psychosocial intervention aimed to reduce self-stigma among Chileans where the intervention demonstrated to reduce self-stigma towards mental health conditions.

**Perceptions of Stigma of Close Individuals.** Perceptions of stigma among individuals with disabilities have been noted to be associated with poor psychosocial health outcomes such as low self-esteem, depression, somatic symptoms, and anxiety (Amtson et al., 1986). Among youth with disabilities perceptions of stigma have been associated with also low self-esteem, depression symptoms, and behavior problems (Austin, 1989). Literature examining the relationship between perceptions of stigma and people with disabilities has suggested it can affect behavior and reduce participation in recreational activities (Bedini, 2000; West, 1984). However, the relationship between perceptions of stigma and psychosocial outcomes has been suggested to be influenced by coping strategies and self-perceptions (Westbrook et al., 1992). Funderburk and colleagues (2007) observed that among children with epilepsy attitudes toward epilepsy mediated the relationship between perceived stigma and mental health outcomes (i.e., self-concept and behavioral problems).

Literature about perceptions of stigma of close individuals and Hispanic individuals has showcased different instances where they have perceived stigma from others. A study examining the experiences of Latina immigrant mothers of children with ASD noted that all participants experienced feelings of stigmatization by others (Ijalba, 2016). The feelings of stigmatization were a result of participants living conditions as well as due to a lack of awareness on autism (Ijalba, 2016). One participant disclosed they would remain in their bedroom with their child all

day to avoid upsetting others due to their child's disruptive behavior, while another participant shared an event where a neighbor called child protective services on them (Ijalba, 2016). Moreover, Latina caregivers of children with disabilities have also disclosed feelings of stigmatization from non-Latinos which have resulted in discriminatory treatment from professionals (e.g., vocational rehabilitation counselors constantly questioning their citizenship status; Francis et al., 2020). As a result of the discriminatory experiences with professionals along with the ongoing immigration policies (e.g., Deferred Action for Childhood Arrivals [DACA]), it has been observed that Hispanic individuals are reaching out to community members rather than professionals for further information regarding transition planning (Francis et al., 2020). This can potentially impact the accurateness of information along with their decision of pursuing and continuing engagement with vocational rehabilitation services. Although these studies have been centered on the experiences of Hispanic caregivers, it can be cautiously predicted that transition-age Hispanic youth may experience similar events.

### ***Counselor-Client Variables***

**Disability Representation.** Literature surrounding counselor-client disability matching (i.e., client with a disability being paired with a counselor with a disability) and its impacts on therapeutic and/or rehabilitation outcomes has been understudied. However, there have been studies that have examined the impacts of peer mentoring among individuals with disabilities. Peer mentorship programs where both mentees and mentors have a disability have showcased to support adjustment to college (Hillier et al., 2019), achievement of personal goals (Ames et al., 2015), accessibility and utilization of community providers (Kolakowsky-Hayner et al., 2012), and engagement in transition-related areas (e.g., health, housing, education; Balcazar et al., 2011). Moreover, a peer mentorship program between individuals who were recently diagnosed

with spinal cord injury (mentees) and individuals with spinal cord injury living independently (mentors) demonstrated to help mentee's adjustment to disability (Veith et al., 2006).

Furthermore, although these studies have been focused more on mentorship relationships, findings of studies can have implications as to the potential influence of vocational rehabilitation consumers being paired with a counselor that has a disability.

**Counselor-Client Language Match.** The literature has suggested that having a common language during sessions between the counselor and client can predict better therapeutic outcomes (Flauskerud, 1990; Flaukserud & Liu, 1991). Although it can be argued English would be the "common language" during sessions, it may not be the case for immigrants and/or consumers of racial/ethnic minority groups who may have limited English proficiency. Even among individuals who are bilingual, having a flexibility on which language to speak during sessions can help prevent misunderstandings in expression about self and symptoms that can then help prevent misdiagnosis and receiving services that do not meet client's needs (Del Castillo, 1970; Flaskerud, 1990; Marcos, 1988; Marcos et al., 1973; Segovia-Price & Cuellar, 1981). Additionally, counselor-client relationships that share a common language can increase self-disclosure, strengthen working alliance, and increase counselor's empathy and effectiveness ratings (Belton, 1984; Dolgin et al., 1987; Leong, 1986; McKinley, 1987). Moreover, throughout the years the literature has highlighted the language barriers some Hispanic consumers, particularly those that are immigrants, encounter due to their limited English proficiency, and have also called for more bilingual vocational rehabilitation counselors along with interpreters (Francis et al., 2020; Mueller Reed et al., 2005). These concerns and needs have been explicitly advocated by not only researchers but also transition-age Hispanic youth with disabilities and their families (Torres Stone et al., 2015). While it has been noted that sometimes children



without a disability or other family members will help with translation during meetings with rehabilitation professionals (Francis et al., 2020), this is not ideal nor ethical considering the jargon terminology involved along with the potential errors in translation, particularly among children. Moreover, having a Spanish-speaking vocational rehabilitation counselor be paired with a Hispanic consumer has demonstrated to be one component that helps cultivate a positive consumer engagement that ultimately result in a successful rehabilitation outcome (Quiñones-Mayo et al., 2000) as well as help them communicate their symptomology accurately (Del Castillo, 1970; Segovia-Price & Cuellar, 1981). Thus, a bilingual vocational rehabilitation counselor can help in various manners such as ensuring the validity of psychological and vocational test and its interpretations (Quiñones-Mayo et al., 2000), which can help increase the engagement of Hispanic consumers (Mehan, 1991). However, it is important to note that although some vocational rehabilitation agencies may have bilingual counselors, Spanish can be spoken in various ways due to the country and regional dialect differences (Mueller Reed et al., 2005), which can still create some challenges.

**Counselor-Client Gender Match.** Though research has suggested that typically clients do not prefer either a male or female therapist (Liddon et al., 2018), it has also been noted that female clients in psychotherapy do prefer female therapists (Fenton et al., 1987; Pikus & Heavey, 1996). Moreover, the literature has suggested mixed findings in regard to the impact counselor-client gender match has on therapeutic outcomes (Bohart & Wade, 2013; Bowman et al., 2001; Clarkin & Levy, 2004). Cottone and colleagues (2002) observed that among adults with anxiety disorders a pairing of male client-female therapist led to less anxiety symptoms than compared to a female client-female therapist pairing. Moreover, there are other studies that have argued that counselor-client gender matching promotes better outcomes (Pertab et al., 2013; Wu

& Windle, 1980, however there have been limitations in findings. Limitations have consisted in that the observed improvement in outcomes have been only for a particular group (e.g., Asian men paired with male counselor was the only significant relationship; Wu & Windle, 1980) or the observed finding was too small (Pertlab et al., 2013). Contrary, other researchers have argued that counselor-client gender match had worse effects on therapeutic outcomes (Vail, 1976). Literature examining the effects of counselor-client gender matching among Hispanic individuals is limited.

**Counselor-Client Ethnicity Match.** Although the literature has noted clients prefer a counselor of their same ethnicity (Cabral & Smith, 2011; Swift et al., 2015), research surrounding the effects on therapeutic outcomes has suggested mixed findings. Several researchers have argued that matching clients with counselors of their same background leads to significant effects in counseling outcomes (e.g., strengthen working alliance, greater number of counseling sessions attended, reduced premature termination, and promoted higher functioning; Chao et al., 2012; Flicker et al., 2008; Fujino et al., 1994; Kim & Kang, 2018). However, there have been other researchers that have argued the contrary and claim that counselor-client ethnicity matching does not influence therapeutic outcomes (Cabral & Smith, 2011; Maramba & Nagayam Hall, 2002; Shin et al., 2005). Similarly, studies have also demonstrated that matching has no effect in the therapeutic process and outcome (Flaskerud, 1990; Jones & Zoppel, 1982; Murphy et al., 2004; Ortega & Rosenheck, 2002). Research examining counselor-client ethnicity matching within vocational rehabilitation settings has observed similar findings, with most studies suggesting that ethnicity matching has no impact on rehabilitation outcomes (e.g., Danek & Lawrence, 1982; Dunham et al., 1998; Whitfield, 2010). However, there is one study that observed mixed findings on the effects matching had on rehabilitation outcomes among

consumers from different races/ethnicities, where Hispanic clients specifically had the same outcomes regardless of whether they were paired with a counselor of their same ethnicity background (Bellini, 2003). Another study observed that among Hispanic youth with substance use problems, those that were paired with a counselor of their same ethnic background had better outcomes (i.e., reduced their substance use; Flicker, 2008). Furthermore, research among Hispanic individuals has highlighted individual's preference for working with a counselor that understands their culture, and speaking Spanish was among one of the factors (Shapiro et al., 2004; Swift et al., 2015). Hispanic consumers have also specifically mentioned their preference for a counselor whose communication style involve ensuring safety and a close and caring relationship (Harry 1992; Cazden et al., 1985). Moreover, Blue-Banning and colleagues (2000) described various characteristics Latino parents value in their interactions with service providers, which included: opportunity for collaborations, trusted group of individuals, flexibility in the transition planning process, and individualized plans tailored to youth's strengths, all of which reflect cultural values.

### ***Self-Determination Theory and Social Cognitive Theory Factors***

**Internal Motivation.** Internal motivation is a key factor that influences one's level of motivation, whereby willingness, readiness, and desire to change are critical qualities one may possess in order to attain the desired outcome (Mabin & Randall, 2014). Research has noted that internal motivation has a strong effect on treatment engagement and compliance (Edmunds et al., 2006; Manthey et al., 2015; Ng et al., 2012). For example, vocational rehabilitation counselors that received motivational interviewing demonstrated to increase their client's level of engagement in services along with their working alliance (Torres et al., 2019). Dutta and colleagues (2017) also concluded that internal motivation was positively associated with

vocational rehabilitation engagement. Similarly, Iwanaga and colleagues (2018) observed that internal motivation to work positively predicted vocational rehabilitation engagement.

Among Hispanic individuals, there is a paucity in research between the relationship of internal motivation and engagement in rehabilitation related services (Brocato, 2013). However, there are various studies that have examined the relationship of internal motivation in academic settings among Hispanic students. A study examining Latino middle school students observed that intrinsic motivation was positively associated with grade point average (Niehaus et al., 2012). Another study observed higher intrinsic motivation among younger first-generation Hispanic students and compared to non-Hispanic students (Próspero et al., 2012). Additionally, it was suggested that strong family ties, a positive home environment, and persistence among Hispanic students were positively associated with intrinsic motivation which then enhances academic achievement (Próspero et al., 2012). Although these studies were focused more on the relationship between internal motivation and academic success, findings of the mentioned studies can help inform the effect internal motivation can have on vocational rehabilitation engagement among transition-age Hispanic youth with disabilities.

**Vocational Self-efficacy.** Vocational self-efficacy refers to the belief in one's ability to execute a behavior that is expected to attain a certain outcome, such as employment (Bandura, 1997). The association between vocational self-efficacy and vocational rehabilitation engagement has been documented in various studies. Among adults with disabilities, it has been observed that higher levels of self-efficacy are associated with a better preparedness to engage in vocational rehabilitation services (Dutta et al., 2017; Iwanaga et al., 2019; Tansey et al., 2017). Among college students with disabilities, vocational self-efficacy has been positively associated with vocational outcome expectancy and goal persistence (Chao et al., 2022; Dutta et al., 2021),

which can be implied it also promotes VR engagement. This implication is based on Tansey and colleagues (2017) finding regarding the association between vocational self-efficacy and vocational expected outcomes that then promote vocational rehabilitation engagement along with readiness for employment. Moreover, vocational self-efficacy has also been noted to be associated with readiness for employment among vocational rehabilitation consumers (Iwanaga et al., 2020).

Research relating to vocational self-efficacy and Hispanic individuals has been primarily focused on factors impacting self-efficacy. Miranda and Umhoefer (1998) discovered that acculturation and English proficiency were positively associated with vocational self-efficacy among Latinx career counseling clients. In addition, a study examining factors affecting vocational self-efficacy among Hispanic women demonstrated that higher levels of vocational self-efficacy resulted in Hispanic women in considering a broader range of careers (Rivera et al., 2007). Moreover, among Latinx college students, a stronger availability of family support has predicted higher levels of self-efficacy that then promotes stronger persistence intentions (Torres & Solberg, 2001). Despite the latter study being focused on college students, the association between college self-efficacy and persistence, can suggest that Latinx vocational rehabilitation consumers with higher self-efficacy can have higher persistence in completing and engaging in the vocational rehabilitation program.

**Working Alliance.** Working alliance is the relationship between consumer and counselor that is based on rapport and a shared commitment to the goals and tasks of counseling (Bordin, 1979; Chan et al., 1997; Ipsen & Goe, 2016). Additionally, working alliance has been described as the most important “common factor” that all forms and approaches of counseling or therapy share, and it significantly contribute to positive outcomes (Chan et al., 2015; Horvath et al.,

2011; Manthey et al., 2015; Wampold, 2001). The literature has noted that working alliance is positively associated with vocational rehabilitation engagement. Specifically, this relationship has been observed in samples focused on vocational rehabilitation consumers (e.g., Dutta et al., 2017; Iwanaga et al., 2019) as well as transition-age African American youth who are receiving vocational rehabilitation services (Dutta et al., 2020).

Research surrounding working alliance and engagement in services among Hispanic individuals has demonstrated that factors such as education level and language proficiency (in English) impact Hispanic's perceptions toward their ability to develop a working alliance with their counselor in therapy (Robichaud-Fuentes, 2013). Additionally, various studies have highlighted the importance for counselors to have cultural awareness of the Hispanic culture. For example, counselor's background and language skills, family inclusion in services, and level of professionalism have been identified as factors impacting working alliance. D'Angelo and colleagues (2009) study identified that matching bicultural and bilingual practitioners with low-income Latino families showcased high working alliance scores. Moreover, family inclusion and engagement in services along with avoidance of the medical model have demonstrated to enhance the engagement of Hispanic clients in mental health services (Alverson et al., 2007). This notion was also supported by Atdjian and Vega (2005) which also advocated for the inclusion of families and sensitivity to personal narratives when working with Hispanic clients. In regard to sensitivity to personal narratives, Bamatter and colleagues (2010) suggested that among Hispanic clients in a substance use program, counselors with less formality in the sessions led to a weaker working alliance. Furthermore, the inclusion of social and cultural factors in policies and services has been recommended for providers in community-based

organizations working with Hispanic clients as an effort to promote and strengthen the working alliance between the counselor and client (Robichaud-Fuentes, 2013).

**Vocational Outcome Expectancy.** Vocational rehabilitation outcome expectancy can be described as one's personal beliefs that focus on the possible and imagined outcomes of one's actions (Bandura, 1997, 2004). The literature has supported the positive association between outcome expectancy and engagement in services. Vong and colleagues (2011) observed that higher levels of outcome expectancy were associated with better pain rehabilitation treatment outcomes. Within vocational rehabilitation specifically, the literature has suggested that higher levels of vocational rehabilitation outcome expectancy are associated with higher levels of vocational rehabilitation engagement among consumers (Dutta et al., 2017; Tansey et al., 2017). Moreover, outcome expectancy mediated the relationship between working alliance and stages of change for employment among vocational rehabilitation consumers with chronic illness and disability, thus suggesting that outcome expectancy plays an important role in consumers engagement in services that lead to obtaining employment (Iwanaga et al., 2019). The relationships between vocational outcome expectancy and Hispanic individuals are understudied. Current literature has examined only the relationship between outcome expectancy and Hispanic individuals in context of alcohol expectancies (Des Rosiers et al., 2013; Weinstein et al., 2014) and academic expectancies (40% and 14% of sample were Hispanic; Byars-Winston & Rogers, 2019; Trinidad, 2019).

### ***Pre-Employment Transition Services Related Factors***

Research surrounding pre-employment transition services (pre-ETS) is limited, primarily as it relates to how the number of services provided among transition-age youth with disabilities along with the quality, relevance, and usefulness of pre-ETS services impact the engagement in

VR services among transition-age. Thus, an examination of the literature was conducted in relation to vocational rehabilitation services in the mentioned areas, along with providers perspectives on pre-ETS services was conducted as an effort to make predictions for pre-ETS services quality, relevance, and usefulness.

**Number.** Transition-age youth with disabilities can receive one or more pre-ETS services within a year (Honeycutt et al., 2019). Although an annual report (e.g., Honeycutt et al., 2019) of the provision of pre-ETS services noted differences in the service delivery across state agencies, students who received services, and agency type (e.g., blind agency) providing services, the report provided limited information on the number of pre-ETS services provided to youth. Similarly, there is limited information on whether the number of pre-ETS services transition-age youth with disabilities receive impact their continuation of vocational rehabilitation services as well as their employment outcomes. However, research surrounding the association between the number of vocational rehabilitation services received and employment outcomes among transition-age youth with disabilities can help inform potential patterns that may be observed among pre-ETS services.

Among transition-age youth with autism and specific learning disabilities, the more services they received the greater likelihood they had of obtaining competitive employment (Kaya et al., 2016, 2021). This finding is supported by other researchers that have also claimed that the number of vocational rehabilitation services received are significantly associated with employment outcomes among transition-age youth with disabilities (Poppen et al., 2017; Rumrill et al., 2017). However, Awsumb and colleagues (2016) study observed the opposite effect in that youth who received more services were about 25% less likely to exit with employment. Thus, there remains some uncertainty as to the clear effects of the number of services, specifically pre-



ETS services, have on transition-age youths' employment outcomes, particularly among Hispanic youth.

**Type.** Honeycutt and colleagues (2019) report on the provision of pre-ETS services by vocational rehabilitation agencies demonstrated differences in the most commonly provided pre-ETS services among combined and general, and blind vocational rehabilitation agencies. The most commonly delivered pre-ETS service among the three types of vocational rehabilitation agencies was workplace readiness training, with 26% of consumers in blind vocational rehabilitation agencies and 24% of consumers from combined and general vocational rehabilitation agencies receiving such service. However, it is important to note that vocational rehabilitation agencies may also have a set order of prioritization in the delivery of pre-ETS services that may be influenced by cost, provider availability, and needs of transition-age youth with disabilities (Honeycutt et al., 2019). Moreover, Miller and colleagues (2018) added how certain state vocational rehabilitation agencies have a set order of delivering pre-ETS services with work-based learning experiences being the last service provided in some states (e.g., Alabama). This aligns with previous research that has noted how provision of services vary by state (Burgess & Cimera, 2014; Roux et al., 2018; as cited in Taylor et al., 2022). Hence, depending on the length of time the youth has been in the program, it may influence the type of pre-ETS services they have received. Furthermore, among transition-age Hispanic youth with disabilities work-based learning experiences demonstrated to be positively associated with employment at exit of vocational rehabilitation program (Castruita Rios et al., in press).

**Quality.** Carter and colleagues (2021) stated that to ensure a good quality of pre-ETS service delivery apart from training, having a strong partnership among providers, including schools, is critical. Moreover, the delivery of pre-ETS services has been reported to vary by state

vocational rehabilitation agencies (Burgess & Cimera, 2014; Honeycutt et al., 2019; Miller et al., 2018; Roux et al., 2018), thus resulting in a potential impact in the overall quality of such services. In addition, Honeycutt and colleagues (2019) report discussed the source (e.g., vocational rehabilitation agency purchase) by which pre-ETS services were delivered. The report noted that across the various types of vocational rehabilitation agencies (e.g., combined, general, and blind agencies), the pre-ETS services of counseling on enrollment opportunities and instruction in self-advocacy were primarily provided by a vocational rehabilitation agency staff (Honeycutt et al., 2019). Contrary, the pre-ETS services of work-based learning experiences were primarily purchased by vocational rehabilitation agencies; while the remaining two pre-ETS services (job exploration counseling and work readiness training) had mixed observations across agency type and source of service provision (Honeycutt et al., 2019). Thus, the observed differences between who provided the pre-ETS services can potentially impact the quality of service delivered.

**Relevance.** Research within vocational rehabilitation services has demonstrated that “not receiving the desired services” was the second highest reason why consumers left the vocational rehabilitation program (Ipsen & Goe, 2016). A study examining the perspective of parents of transition-age youth with disabilities towards pre-ETS services demonstrated that majority of the parents in the study believed their youth would benefit from all five pre-ETS services (Schutz et al., 2021). Thus, parents’ perspectives towards pre-ETS services and the services influence on transition outcomes can potentially impact transition-age youth’s perspectives too.

**Usefulness.** Literature examining the perceived usefulness of pre-ETS services among transition-age youth with disabilities is understudied. Nevertheless, there are some studies that have examined agency-related factors impacting the perceived effectiveness of services along

with overall satisfaction with VR services and outcomes. Timmons and colleagues (2002) conducted interviews with VR consumers to examine their perspectives surrounding the key elements of service delivery. Findings of this study revealed that participants' satisfaction and effectiveness with the received VR services was associated with the agency's culture (e.g., working alliance with agency staff, positive experience with services), consumer-directedness, quality of personnel (e.g., reliable and consistent), coordination of services, and accessibility to resources. Similarly, other identified agency-related factors impacting satisfaction and outcomes of VR services include pace of service delivery, satisfaction with assigned vocational rehabilitation counselor, and number of contacts between counselor and client (Ipsen & Goe, 2016). Considering the findings regarding vocational rehabilitation consumers being unsatisfied with the pace of delivery of services (Ipsen & Goe, 2016), these factors could potentially impact consumers' engagement in pre-ETS services.

### **Chapter Three: Method**

The primary focus of this exploratory mixed-methods study was to examine the relationships between vocational rehabilitation (VR) engagement with: (a) sociodemographic variables; (b) contextual factors; (c) self-determination theory and social cognitive theory factors; and (d) pre-ETS services related factors. The study also explored the experiences and perspectives of transition-age Hispanic youth with disabilities as it relates to receiving pre-ETS services. This chapter addresses the research questions, participants, variables, instruments, procedures, research design, data analyses, and the limitations of the study.

#### **Research Questions**

1. What is the relationship between sociodemographic, contextual factors, self-determination theory and social cognitive theory factors, and pre-ETS services related factors and VR engagement of transition-age Hispanic youth with disabilities?
  - a. What is the relationship between sociodemographic variables and VR engagement of transition-age Hispanic youth with disabilities?
  - b. What is the relationship between contextual factors and VR engagement of transition-age Hispanic youth with disabilities?
  - c. What is the relationship between self-determination theory and social cognitive theory factors and VR engagement of transition-age Hispanic youth with disabilities?
  - d. What is the relationship between the number of pre-ETS services received and the ratings of quality, relevance, and usefulness of pre-ETS services and VR engagement of transition-age Hispanic youth with disabilities?

2. Do perceptions of quality, relevance, and usefulness of pre-ETS services mediate the relationship between working alliance and VR engagement of transition-age Hispanic youth with disabilities?
3. What are the experiences of transition-age Hispanic youth with disabilities with pre-ETS services?
  - a. How is the delivery of pre-ETS services as experienced by transition-age Hispanic youth with disabilities?
  - b. How has receiving pre-ETS services been supportive to transition-age Hispanic youth with disabilities in their journey to obtain employment?
4. What are some ways pre-ETS services can be improved for transition-age Hispanic youth with disabilities?

### **Research Hypotheses**

#### **Research Hypotheses**

The inquiry of transition-age Hispanic youth with disabilities and VR engagement and is complex resulting in the inclusion of many independent variables. The focus of this study was in investigating the interrelationships between sociodemographic variables; contextual factors; self-determination theory and social cognitive theory factors; and pre-ETS services related factors on the VR engagement of transition-age Hispanic youth with disabilities. Thus, six hypotheses were tested:

- H1 Sociodemographic variables, contextual factors, self-determination theory and social cognitive theory factors, and pre-ETS services related factors are significantly associated with the VR engagement of transition-age Hispanic youth with disabilities.

- H1a Sociodemographic variables are significantly associated with the VR engagement of transition-age Hispanic youth with disabilities.
- H1b Contextual factors are significantly associated with the VR engagement of transition-age Hispanic youth with disabilities.
- H1c Self-determination theory and social cognitive theory factors are significantly associated with the VR engagement of transition-age Hispanic youth with disabilities.
- H1d The number of pre-ETS services received and the ratings of the quality, relevance, and usefulness of pre-ETS services are significantly associated with the VR engagement of transition-age Hispanic youth with disabilities.
- H2 Perceptions of quality, relevance, and usefulness of pre-ETS services impact the relationship between working alliance and VR engagement of transition-age Hispanic youth with disabilities.

### **Participants**

The population of interest in this study was transition-age Hispanic youth with disabilities who meet the following inclusion criteria: (a) identified as Hispanic; (b) was between the ages of 18 and 22; and (c) either currently receiving pre-ETS services at the time of the survey or had previously received pre-ETS services prior to applying for adult services. Furthermore, as a result of the inclusion criteria the sample in this study was focused only on those residing in the U.S.

### **Recruitment of Participants**

The sample for this study was collected via a convenience sample from State Vocational Rehabilitation Agencies (SVRAs). The researcher contacted the directors of the selected SVRAs

via email to introduce the project and seek assistance with recruitment (see Appendix A). For some states, the researcher received support from SVRA liaisons associated with The Vocational Rehabilitation Technical Assistance Center for Quality Employment (VRTAC-QE) in getting connected with the respective representatives for some SVRAs. Materials (e.g., cover letter, survey) were both shared with SVRAs to ensure clarity in the purpose and process of this research study. After getting approval from the SVRAs, the researcher sent via email the flyer of the study (see Appendices B.1 and B.2) to the directors of the selected SVRAs and asked to share them with VR counselors who worked with transition-age Hispanic youth. Selection of states that were contacted was based on their Hispanic population as well as by their need in recruiting Hispanic consumers and consequently wanting to learn more about how to enhance recruitment efforts. A total of 5 states were contacted and included: California, Wisconsin, Illinois, Indiana, and Idaho.

Due to the limited responses obtained through SVRAs after a month ( $n = 10$ ), recruitment methods were expanded to recruitment via Prolific (online platform that helps with recruitment of participants for research studies), contacting disability organizations and technical centers, centers of independent living, and school districts along with sharing the flyer in various social media platforms (i.e., LinkedIn, Facebook). Specifically, disability organizations and centers of independent living located in El Paso, TX and California were contacted due to the high rate of Hispanic population in those regions. The author contacted via email the directors and/or coordinators of the organizations and school districts and explained the purpose of the study along with details about the study (i.e., shared flyer). Additionally, the study flyer was shared on the author's LinkedIn profile, a rehabilitation counseling university organization Facebook group, and the social media platform of an author's colleague due to their connections with

California organizations. A total of 149 participants were recruited via the different mentioned efforts: SVRA ( $n = 10$ ), Prolific ( $n = 3$ ), disability organizations ( $n = 14$ ), and social media ( $n = 122$ ). Participants were not asked in the survey about the state they resided in, hence the identification of the states were respondents via Prolific, disability organizations, and social media were not identified. Furthermore, participants had the option of completing the survey in various formats including online or phone call, and had the option of completing it in English or Spanish to ensure they are accessible for all participants, regardless of their language preference.

### **Sample Size**

Prior to the sampling process, a power analysis was conducted to determine the appropriate sample size for this study. Defining an adequate sample size from a population permits inferences from the sample statistics to the statistical population (Cohen, 1988). Furthermore, to determine the sample size needed for this study Cohen's statistical power analysis was utilized. Considering a multiple regression analysis was conducted to answer research questions 1, 1a, 1b, 1c, 1d, and 2, *a priori* power analysis was conducted. For such calculation, 32 predictors were identified, power was set to .80, alpha to .05 and a medium effect size was selected. The rationale for the selected alpha level and power are based on the standard that researchers have set (Cohen, 1992). An examination of similar studies was conducted to estimate the effect size. The search for similar studies was a bit restricted due to the limited research on this topic. However, several studies were identified that had some type of relationship with either the population or variables involved in this study.

Dutta and colleagues (2020) examined the relationship between working alliance and transition-VR engagement among African American high school student with disabilities where they found a large effect size ( $f^2 = .58$ ). Lustig and colleagues (2002) also identified a large



effect size ( $d = .73$ ) among the relationship between VR clients (ages ranging from 15-75 years old) with successful employment outcomes and a stronger working alliance with their VR counselor when compared to unemployed VR clients. Lastly, a study examining the sociodemographic and VR-related factors predicting employment outcomes of transition-age Hispanic youth observed a small effect size ( $R^2 = .058$ ) in such relationship (Castruita Rios et al., in press). Although these studies are not fully equivalent to my study, in terms of population and/or variables studied, their findings serve as a guide towards making an informed choice of the effect size that should be selected for this study.

Considering the effect sizes observed in similar studies a medium effect size was selected ( $f = .15$ ) as suggested by Cohen (1988). After identifying three out of the four parameters needed to conduct a power analysis, G\*power software (Faul et al., 2007) was utilized to determine the needed sample size for this study. After inputting the selected three parameters (power, effect size, and alpha level), specified statistical test (i.e., linear multiple regression: fixed model, R2 increase; f2 statistics) and 32 predictors in our study, the G\*power software indicated a minimum of 193 participants were needed.

### **Variables and Instruments**

This study included 32 independent variables and one dependent variable. An independent variable is a variable that influences the outcome of the study. As mentioned, there were a total of 32 independent variables which were categorized in one out of four categories: sociodemographic, contextual factors, self-determination theory and social cognitive theory factors, and pre-ETS related factors. Sociodemographic variables ( $n = 13$ ) included in this study were comprised of gender, age, race, primary disability, secondary disability, years with disability, English native language, community residing in (e.g., urban, rural), highest level of

education, family's annual income, disability benefits, living with family, and generational status (e.g., first generation American). Contextual factors ( $n = 11$ ) included in this study were acculturation (e.g., U.S. cultural domain, Hispanic cultural domains), perceived social support (e.g., special person, family, friends), self-stigma, perceived stigma of close individuals, and four counselor-client variables. These four counselor-client variables assessed whether participants vocational rehabilitation counselor (a) had a disability, (2) spoke Spanish, (3) were the same gender as them, and (4) were Hispanic. Self-determination theory and social cognitive theory factors ( $n = 4$ ) included in this study were autonomy, competence, relatedness, and outcome expectation. The last category of independent variables was pre-ETS related factors ( $n = 4$ ) and included the number of pre-ETS services received and their ratings on the quality, relevance, and usefulness of pre-ETS services received. For this study there was one dependent variable (i.e., outcome of the study), vocational rehabilitation engagement. Nine instruments were selected to measure nine of the independent variables and the dependent variable, and a survey was developed to measure the remaining independent variables.

### **Instrumentation/Data Sources**

Nine of the independent variables (i.e., social support, self-stigma, perceived stigma, acculturation patterns, working alliance [relatedness], vocational outcome expectancy, vocational self-efficacy [competence], and internal motivation [autonomy]) and the dependent variable (i.e., VR engagement) were measured with a standardized instrument, while the remaining variables were measured via direct questions (e.g., "What pre-ETS services are you currently receiving?") that were incorporated in a survey developed by the researcher. Additionally, for the instruments that a Spanish version was not available, the author translated them.

### ***Multidimensional Scale of Perceived Social Support (MSPSS)***

Social support was measured via the *Multidimensional Scale of Perceived Social Support* (MSPSS; Zimet et al., 1988, 1990). This scale aims to measure the perceived support from three specific sources: family, friends, and significant others. The scale is comprised of 12 items rated on a 7-point Likert-type scale (1 = *very strongly disagree* to 7 = *very strongly agree*). However, for this study, a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*) was utilized. The scale was developed and evaluated on a sample of undergraduate students, where the reported internal consistency reliability Cronbach's coefficient alpha for significant other, family, and friends was .91, .87, and .85, respectively (Zimet et al., 1988). The total internal consistency reliability of scale was .88 (Zimet et al., 1988).

The test-retest reliability was evaluated two to three months after the initial completion of the questionnaire, where the reported Cronbach's alpha for significant other, family, and friends subscales were .72, .85, and .75, respectively (Zimet et al., 1988). The estimated internal reliability of the entire scale was .85 (Zimet et al., 1988). Zimet and colleagues (1990) aimed to expand the initial findings (Zimet et al., 1988), and evaluated the scale on three different groups: pregnant women, adolescents living in Europe with families, and pediatric residents. The internal reliability (Cronbach's alpha) ranged from .81 to .90 for the family subscale; .90 to .94 for the friends subscale; and .83 to .98 for significant other. The internal reliability (Cronbach's alpha) of the overall scale ranged between .84 to .92 (Zimet et al., 1990).

The scale is available in English and Spanish (translated by the SETA study from the University of Miami), with the Spanish version having 13 items. Item 13 in the Spanish version was added to ask respondent who the "special person" (referred to as significant other in English version) is, with options including spouse, boyfriend/girlfriend, friend, professional, or other family member. To ensure consistency in the Spanish and English version of this scale, item 13

was added to the English version. There are two ways this scale can be scored: (a) calculating a total MSPSS score or (b) calculating the mean score for each subscale. For purposes of this study, I am planning on calculating the mean score for each subscale to be able to differentiate any potentially differences in perceived support among the three groups. There is no training needed to administer this measure. In the present study, the Cronbach's alpha for the MSPSS full scale was .88, followed by .74, .69., and .70 for the "special person", family, and friends subscales, respectively.

### ***Self-Stigma of Seeking Help (SSOSH)***

Participants self-stigma was measured via the *Self-Stigma of Seeking Help* (SSOSH; Vogel et al., 2006) scale which assesses the individual's self-stigmatizing views about themselves. The scale consists of 10 items (e.g., "Seeking psychological help would make me less intelligent") and is rated on a 5-point Likert-type disagreement and agreement scale. The literature indicates this scale was originally validated for a sample of college students where a Cronbach's alpha of .91 and an internal consistency of .90 was reported (Vogel et al., 2006). Additionally, Vogel and colleagues (2013) validated this scale for cross cultural groups to evaluate its cultural validity, specifically across samples of six countries (England, Greece, Israel, Taiwan, Turkey, and the United States). As for scoring this scale, five of the items are reverse scored resulting in higher scores indicating a greater stigma relating to seeking psychological help.

Given this scale is designed to assess individual's negative views on seeking *psychological* help, modifications to some of the items may be needed to further capture participants views in content of vocational rehabilitation setting (e.g., "Seeking vocational rehabilitation services would make me less intelligent"). As observed, the changes made to the

items in the original scale (Vogel et al., 2006) would be minimal, given the main change was from “psychological help” to “vocational rehabilitation services”. Furthermore, after the SSOSH scale was adapted for specific use in VR settings, the Cronbach’s alpha was .70.

### ***Perceptions of Stigmatization by Others for Seeking Help (PSOSH)***

Evaluation of the stigma by people close to the participant was evaluated using the *Perceptions of Stigmatization by Others for Seeking Help* (PSOSH; Vogel et al., 2009) scale. More specifically, this measure evaluates the concerns about being stigmatized by those who know the individual is seeking psychological help (Vogel et al., 2009). The scale has the following instructions: “Imagine you had an academic or vocational issue that you could not solve on your own. If you sought counseling services for this issue, to what degree do you believe that the people you interact with would \_\_\_”. The instructions are followed by five items (e.g., “React negatively to you”) and are rated on a 5-point Likert-type scale (1 = *not at all* to 5 = *a great deal*). Due to this study focusing on VR settings, one small adaptation was done to the PSOSH scale’s instructions. The modifications included adding the word “rehabilitation” before “counseling services” so it reads “rehabilitation counseling services”.

The PSOSH scale (Vogel et al., 2009) used “the people you interact with” in the instructions, leaving up to the participant the interpretation of who “the people” are. Because of this, Vogel and colleagues (2009) suggested that future studies who utilized the PSOSH scale be more specific as to who “the people” were, given perceptions of stigma may vary depending on the context of the relationship and closeness (Cheng et al., 2013). For example, in Cheng and colleagues (2013) study, the scale was utilized on a group of racial ethnic minority college students from a large midwestern public university. Researchers revised the instructions and changed “the people” to a more specific group of individuals (e.g., your friends, your family) to

better assess the perceptions from various close individuals. It is important to note that in the study (Cheng et al., 2013) three groups of people were created (e.g., friends, family, and professors or academic departments). Hence, for purposes of this study “professors or academic departments” was changed to “vocational rehabilitation counselors” due to the scale being used specifically for VR settings. Given this change, the scale would then contain a total of 15 items (five items for the three groups of people).

As for psychometric values, the original PSOSH scale reported a 3-week test-retest reliability of .82 and an internal consistency Cronbach’s alpha of .78 (Vogel et al., 2009). Cheng and colleagues (2013), based on modifications on items and a sample of racial and ethnic minority (REM) college students from a large midwestern public university, reported a Cronbach’s alpha of .89, .88, and .92 for stigma from friends items, family items, and professors or academic departments items, respectively. After the mentioned adaptations that were made to the PSOSH scale for purpose of this study, the Cronbach’s alpha was of .97.

Although there are limited studies where this scale has been applied to people with disabilities and/or solely on individuals of Hispanic heritage, considering its application on college students (including those from minority backgrounds), this scale was perceived as appropriate for the sample of this study. Additionally, considering the minor changes that were made to the scale, it can help better capture the perceptions of transition-age youth consumers in VR settings rather than college students.

### ***Bidimensional Acculturation Scale (BAS)***

Acculturation patterns were measured via the *Bidimensional Acculturation Scale* (BAS; Marín & Gamba, 1996). This measure provides acculturation scores based on the degree to which participants identify with the non-Hispanic (i.e., U.S. mainstream) and Hispanic cultural

domains (Marín & Gamba, 1996; Velcoff et al., 2010). The scale is available in English and Spanish and is comprised of 12 items measuring three language-related areas (i.e., total of 24 items): (a) language use (e.g., “How often do you speak in Spanish?” and “How often do you speak in English?”); (b) linguistic proficiency (e.g., “How well do you read in Spanish?” and “How well do you read in English?”); and (3) electronic media (e.g., “How often do you listen to music in Spanish?” and “How often do you listen to music in English?”). Items are rated in a 4-point Likert-type scale (1 = *never* to 4 = *often or very well*). This scale has also been utilized in Latinos with disabilities, particularly in examining whether acculturation patterns along with other related variables influenced Latinos with disabilities experiences with employment and VR (Velcoff et al., 2010). Although there is no training needed to administer this scale, it is critical to allow participants to choose the language which they would like to complete the measurement (English or Spanish).

After completion of measurement, respondents have two scores, one average score of Hispanic cultural domain items (items 4-6, 13-18, and 22-24), and one average score of U.S. cultural domain items (items 1-3, 7-12, and 19-21). Scoring can then range between 1 to 4 for each cultural domain. To define the respondent’s acculturation level both average scores should be added. There are two interpretations to respondents’ acculturation level score: (1) a score of 2.5 is the cutoff score to indicate either a low or high level of adherence to each cultural domain; or (2) scores above 2.5 in both cultural domains can be interpreted as “biculturalism” of the respondent (Marín & Gamba, 1996). For instance, if respondent scored a 3 for U.S. cultural domain and a 2 for Hispanic cultural domain this would indicate that they have a high acculturation to the U.S culture and low acculturation to the Hispanic culture.

The internal consistency of BAS was a Cronbach's alpha of 0.90 and 0.96 for the Hispanic and U.S. mainstream culture domains, respectively (Marín & Gamba, 1996). In addition, Marín & Gamba (1996) reported high internal consistencies among individuals with a national ancestry of Mexican American and Central American. Moreover, the internal consistency for Mexican American individuals were a Cronbach's alpha of 0.93 and 0.97 for Hispanic and Non-Hispanic domains, respectively. As for Central American individuals, a Cronbach's alpha of 0.87 and 0.95 were observed for Hispanic and Non-Hispanic domain, respectively.

BAS subscales and composite scales were validated by correlating them with criteria from previous acculturation scales used by researchers (Cuéllar et al., 1995; Cuéllar et al. 1980; Marin et al., 1987; Szapocznik et al., 1978). More specifically, Marín and Gamba (1996) utilized seven criteria to analyze the correlation between the respondents' scores and the selected seven criteria that consisted of the following: (a) generation status, (b) length of residence in the U.S., (c) amount of formal education, (d) age at arrival in the U.S., (e) proportion of the respondents' life lived in the U.S., (f) ethnic self-identification, and (g) correlation with the acculturation score obtained through the Short Acculturation Scale for Hispanics (SASH; Marín et al., 1987). Furthermore, the BAS demonstrated adequate construct validity by items correlating as expected with related variables and measures (Marín & Gamba, 1996). In the present study, the Cronbach's alpha was .87 and .92 for the U.S. and Hispanic cultural domain, respectively.

### ***Working Alliance Inventory (WAI-S)***

The *Working Alliance Inventory* (WAI-S; Horvath & Greenberg, 1989; Tracey & Kokotovic, 1989) was used to measure participants' working alliance (relatedness) with vocational rehabilitation counselors. The first version of the WAI scale (Horvath & Greenberg,



1989) consisted of 36 items and three subscales indicating three dimensions of working alliance: (a) bonds, (b) goals, and (c) tasks. Items were rated on a 7-point Likert-type disagreement and agreement scale and demonstrated a high internal consistency reliability for the patient form (Cronbach's  $\alpha = .93$ ). The WAI-S was developed by Tracey and Kokotovic (1989) consisting of 12 items (e.g., "[Blank] and I agree on what is important for me to work on") and has a high internal consistency reliability estimate (Cronbach's  $\alpha = .95$ ) for the patient form. Additionally, the subscale alpha coefficients ranged between 0.90 and 0.92 in the WAI-S patient form (Tracey & Kokotovic, 1989). Items were rated on a 7-point Likert-type scale (1 = *never* to 7 = *always*). Dutta and colleagues (2017) utilized this scale among a sample of vocational rehabilitation consumers; however, they made minor modifications to the items to reflect vocational rehabilitation settings (e.g., "[Blank] and I collaborate on setting goals for my *vocational rehabilitation services*"). Considering working alliance scales are typically utilized in therapeutic counseling relationships, and not vocational rehabilitation settings, the version of WAI-S utilized in Dutta et al. (2017) was used for this study. However, for this study, a 5-point Likert-type scale (1 = *never* to 5 = *always*) was utilized. The Cronbach's alpha of WAI-S scale was .93 (Dutta et al., 2017). There is no training needed to administer this scale. Lastly, there is a Spanish version available of the WAI-S client form with an overall Cronbach's alpha of .93 (Andrade-Gonzalez & Fernandez-Liria, 2016). In the present study, the Cronbach's alpha was of .86.

### ***Vocational Outcome Expectancy Scale (VOES)***

Vocational outcome expectancy was assessed via the *Vocational Outcome Expectancy Scale* (VOES; Iwanaga et al., 2017). Development of the scale consisted of a comprehensive review of the social cognitive career theory (SCCT; Lent et al., 1994) and adaptation of items

from the 32-item *Employment Questionnaire* (Larson, 2008) and the 10-item *SCCT Math/Science Outcome Expectations Scale* (Lent et al., 1993). Moreover, Iwanaga and colleagues (2017) selected three positive outcome expectancy items (“do work that I would find satisfying,” “have a job with good pay and benefits,” and “go into a field with high employment demand”) from Lent and colleagues (2005) scale and revised the items by changing the instructions to “completing a science and technology degree” to “completing my vocational rehabilitation program”. Additionally, Iwanaga and colleagues (2017) also modified four negative outcome expectations items (“increase stress,” “increase responsibilities,” “disrupt daily routine,” and “reduce government financial and health benefits”) from Larson’s (2008) survey by changing the format from Yes/No to a 5-point rating scale.

The VOE scale consists of 11-items where respondents are asked to rate their level of agreement with each vocational outcome statement that completed the following sentence, “Completing my vocational rehabilitation program will likely allow me to:”. Examples of a negative outcome was “experience increased responsibilities”, whereas an example of a positive outcome was “have a job with good pay and benefits”. Each item was rated on a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*).

The VOE scale was validated among individuals that were Clubhouse members from eight Clubhouses in Hawaii (Iwanaga et al., 2017). The internal consistency reliability coefficient was reported as a Cronbach’s alpha of 0.79 for both the positive and negative outcome expectancy related to work; thus, indicating good reliability of the items comprising this factor (Iwanaga et al., 2017). The negative outcome expectancies factor of the VOE scale was negatively associated with autonomous motivation to work ( $r = -0.24, p < 0.01$ ). The positive outcome expectancy factor of the VOE scale was positively associated with constructs of the

self-determination theory (SDT) framework such as behavioral engagement ( $r = 0.59, p > .001$ ), cognitive-affective engagement ( $r = 0.53, p > .001$ ), job performance self-efficacy ( $r = 0.47, p > .001$ ), job seeking self-efficacy ( $r = 0.42, p > .001$ ), autonomous motivation to work ( $r = 0.39, p > .001$ ), and relatedness ( $r = 0.30, p > .001$ ). In this present study, the Cronbach's alpha was .73.

### ***Vocational Self-Efficacy Scale (VSES)***

Vocational self-efficacy (competence) of participants was measured via the *Vocational Self-Efficacy Scale* (VSES; Fitzgerald, 2013; Fitzgerald et al., 2016). The VSES was adapted from the *Life Skills Inventory* (LSI; Chan et al., 2003) that evaluated the life essential skills for assertive community living and work. Fitzgerald's (2013) adaptation of the LSI scale to VSES reduced the number of items from 24 to 15 where only items relating to vocational self-efficacy were kept (e.g., "I know how to prepare for a job that is of interest to me"). Items are rated on a 4-point Likert-type scale (1 = *strongly disagree* to 4 = *strongly agree*). This scale has been evaluated in vocational rehabilitation related settings. A study examining the vocational self-efficacy of members of a clubhouse program in Hawaii demonstrated a Cronbach's alpha of 0.94 (Fitzgerald, 2013). Dutta and colleagues (2017) also used the VSES scale among vocational rehabilitation consumers and observed a Cronbach's alpha of .96. However, it is important to note that Dutta and colleagues (2017) study utilized the 24-item version and a 5-point Likert-type scale (1 = *strongly agree* to 5 = *strongly disagree*). In the present study, the Cronbach's alpha was .83.

### ***Vocational Rehabilitation Internal Motivation Scale (VRIMS)***

Participants' internal motivation (autonomy) to engage in vocational rehabilitation services was evaluated through the *Vocational Rehabilitation Internal Motivation Scale* (VRIMS). This scale was developed by researchers in the Rehabilitation Research and Training

Center for Evidence Based Practice in Vocational Rehabilitation (RRTC-EBP VR). The scale consists of seven items, specifically with four items assessing intrinsic motivation to work, and three items evaluating the internal motivation to apply for vocational rehabilitation services. Each item is rated on a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). This scale has been evaluated among individuals with disabilities receiving vocational rehabilitation services, specifically on three studies. In two studies (i.e., Iwanaga et al., 2019; Tansey et al., 2017), an internal consistency reliability coefficient was reported as a Cronbach's alpha of 0.80 was observed. Dutta and colleagues (2017) study also noted an internal consistency reliability coefficient was reported as a Cronbach's alpha of 0.80, however the 3-item version was utilized for this study (i.e., items assessing intrinsic motivation to work). In the present study, the Cronbach's alpha was .56.

### ***Vocational Rehabilitation Engagement Scale (VRES)***

Vocational rehabilitation engagement of participants was measured with the *Vocational Rehabilitation Engagement Scale* (VRES; Dutta et al., 2017). Items in this scale assess engagement in three aspects: cognitive (e.g., "I understand and accept the need for vocational rehabilitation activities"), affective (e.g., "I get along with my rehabilitation counselor"), and behavior (e.g., "I show up for appointments related to my rehabilitation program"). The measure is comprised of 9 items and is rated on a 5-point Likert-type scale (1 = *strongly agree* to 5 = *strongly disagree*). Scoring is computed by adding all the items, with higher scores indicating a higher level of engagement in vocational rehabilitation services.

The internal consistency reliability was reported as a Cronbach's alpha of .94. The convergent validity was analyzed via correlations between vocational rehabilitation engagement and working alliance, vocational self-efficacy, internal motivation, and vocational outcome

expectancy scales. Findings indicated that working alliance ( $r = .67, p < .001$ ), internal motivation ( $r = .53, p < .001$ ), vocational self-efficacy ( $r = .42, p < .01$ ), and vocational rehabilitation outcome expectancy ( $r = .41, p < .01$ ) were significantly associated with vocational rehabilitation engagement. Divergent validity was examined by correlating vocational rehabilitation engagement scores with functional disability, using the *World Health Organization Disability Assessment Schedule-2.0* (WHODAS-2.0) scores; however functional disability was not significantly associated with vocational rehabilitation engagement ( $r = -.03, p = .62$ ). There is no training needed to administer this scale. In the present study, the Cronbach's alpha was of .87.

### ***Development of Survey***

A survey was developed to assess the remaining independent variables. The majority of the remaining variables (e.g., sociodemographic, pre-ETS services related questions) were incorporated in the survey as direct questions, given they are not measuring a construct and are easier to define and measure.

### **Independent Variables**

This study includes four clusters of independent variables (predictors) and one dependent variable (outcomes). The four independent variables included the following: (a) sociodemographic; (b) contextual factors; (c) self-determination theory and social cognitive theory factors; and (e) pre-ETS services related factors. The dependent variable was VR engagement among transition-age Hispanic youth. A total of 24 predictors were identified and are discussed in more detail to clarify the definition and rationale for each.

### ***Sociodemographic Variables***

The sociodemographic cluster of variables are comprised of 13 variables: gender, age, race, primary disability, secondary disability, years with disability, English native language, community residing in (e.g., urban, rural), highest education level, family's annual income, disability benefits, living with family, and generational status (e.g., first generation American). Gender was a categorical variable (0 = male, 1 = female, 2 = non-binary, 3 = transgender, 4 = prefer not to say). Age was a continuous variable (study focused on ages 18 to 22). Race was a categorical variable (1 = White, 2 = Black or African American, 3 = American Indian or Alaska Native, 4 = Asian, 5 = Native Hawaiian or Pacific Islander, 6 = Other). For primary disability a list of options was provided to participants where they could select only one option and a write-in option was provided in case their primary disability was not on the list. Similarly, for secondary disability the same list of options was provided, however participants were able to select multiple options. A write-in option was also provided where participants could list a secondary disability that may not have been part of the list. Years with a disability was a continuous variable, where participants could select between the ranges of 1 to 22 years. Participants were asked whether English was their native language or not; this variable was dichotomously coded (0 = no, 1 = yes). The community area participants were living in was also asked (0 = rural, 1 = suburban). Highest education level was a categorical variable ranging from 1 = *less than high school* to 7 = *graduate degree* to 8 = *other*. Participant's family annual income was a categorical variable where participants were asked to select the category that represents their family's annual income. Disability benefits was a categorical variable where participants were asked whether they were receiving any disability benefits (0 = none, 1 = SSI, 2 = SSDI). Living with family was a dichotomous variable (0 = no, 1 = yes). Lastly, generation status was a categorical variable (1 = first generation American, 2 = second generation American, 3 = third-

and-higher generation American). The rationale for including the generation variable was due to previous literature suggesting acculturation patterns impact Hispanic individuals with disabilities engagement in vocational rehabilitation services (e.g., Velcoff et al., 2010).

### ***Contextual Factors***

A total of eight variables were identified for the cluster of contextual factors. These were comprised of acculturation patterns, social support, stigma (self-stigma and perceptions of stigma of close individuals), and counselor-client variables (disability representation, language match, gender match, and ethnicity match). Acculturation patterns in this study refers to the degree to which participants identified with both U.S. mainstream and Hispanic cultural domains (Velcoff et al., 2010). Social support refers to the perceived support network the individual believes they have (i.e., perceptual dimension of social support; Chronister et al., 2006) from family and friends. Considering Hispanic communities are more collectivistic and “familismo” is a critical value, examining of support from different groups could help further examine if such cultural values play a role in the study’s outcome. Given how complex the concept of stigma can be, this study analyzed participants’ self-stigma as well as the perceived stigma they think their close circle may have about them seeking vocational rehabilitation services. As for the remainder variables (disability representation, language match, gender match, and ethnicity match), participants were asked a set of questions about their VR counselor (e.g., “does your VR counselor have a disability,” “does your VR counselor speak Spanish,” “is your VR counselor the same gender as you,” and “is your VR counselor Hispanic”).

### ***Self-Determination Theory and Social Cognitive Theory Factors***

Four variables were identified for the cluster of self-determination theory and social cognitive theory factors which include internal motivation (i.e., autonomy), vocational self-

efficacy (i.e., competence), working alliance (i.e., relatedness), and vocational outcome expectancy. Internal motivation in this study refers to vocational internal motivation specifically. This variable was included due to research demonstrating internal motivation positively influences individual's engagement in vocational rehabilitation services (e.g., Dutta et al., 2017; Iwanaga et al., 2017). Vocational self-efficacy refers to individuals' beliefs that they have the ability to successfully fulfill the tasks associated with career decision making (Taylor & Betz, 1983). Working alliance in this study is defined as the relationship between the vocational rehabilitation counselor and the consumer (i.e., participant) where both parties equally contribute to the counseling relationship (Lustig et al., 2002). Vocational outcome expectancy has been described as personal beliefs centered on probable and imagined outcomes of an individual's actions (Bandura, 1997) as well as individual's obtaining and retaining employment (Iwanaga et al., 2017). Assessment of this variable can help further comprehend participants' perceptions towards their ability to obtain and retain employment which is associated with their continuation of receiving VR services along with completion of the program (i.e., engagement in services). Additionally, vocational outcome expectancy has been associated with treatment engagement and readiness for employment (Tansey et al., 2016).

### ***Pre-Employment Transition Services Related Factors***

The number and the quality, relevance, and usefulness of pre-ETS services were assessed through the following four variables: (a) number of pre-ETS services received; (b) quality of pre-ETS services received; (c) relevance of pre-ETS services received; and (d) usefulness to use pre-ETS services training. Participants were asked how many pre-ETS services they have received via a select all that apply question format. An examination of the number of pre-ETS services received along with participants' ratings on the quality, relevance, and usefulness can help



further comprehend if such variables play a critical role in their engagement in vocational rehabilitation services as well as help further comprehend the effectiveness of pre-ETS services among this group. For quality of pre-ETS services, participants were provided with a list of all pre-ETS services and were asked to rate the ones applicable to them using a 5-point Likert-type scale (1 = *very poor* to 5 = *very good*). Similarly, the relevance of pre-ETS services were rated on a 5-point Likert-type scale (1 = *extremely irrelevant* to 5 = *extremely relevant*). Inquiring on the quality and relevance of pre-ETS services is critical because it may have implications for a consumer's decision on continuing services or not. Additionally, this can also highlight areas of improvement in the current training of future and current vocational rehabilitation counselors as it relates to serving racial/ethnic minorities. The usefulness of pre-ETS services is focused on determining whether participants utilized the information learned through receiving such service in the future. This variable was measured on a 5-point Likert-type scale (1 = *extremely not useful* to 5 = *extremely useful*). Analysis of this variable can help predict VR engagement, with my hypothesis being that the higher likelihood of youth applying the skills learned the higher likelihood they'll continue services and obtain employment.

### **Dependent Variable**

Vocational rehabilitation engagement refers to the participants' engagement with the agency in three aspects: cognitive, affective, and behavioral. Engagement has been associated with better outcome expectancy (e.g., employment; Dutta et al., 2017). Hence, assessing participants' VR engagement could help predict participants continuation of services and obtainment of the set goals.

### **Summary**

A summary with all the measures utilized, including the number of items, possible range of items, and Cronbach's alpha reliability estimates observed from the sample in the present study are presented in Table 3.1.

**Table 3.1***Measurement Scale Summary*

<b>Variable</b>	<b>Measure</b>	<b># of Items</b>	<b>Rating</b>	<b>Mean (SD)</b>	<b>Reliability</b>
<b>Contextual Factors</b>					
Social Support	Multidimensional Scale of Perceived Social Support (MSPSS) <sup>+</sup>	13	1-5 (agreement)	3.77 (0.66) 3.81 (0.76) 3.81 (0.69) 3.69 (0.72)	.88 (Full scale) .74 (Special person) .69 (Family) .70 (Friends)
Stigma	Self-Stigma of Seeking Help (SSOSH)	10	1-5 (agreement)	2.67 (0.59)	0.70
	Perceptions of Stigmatization by Others for Seeking Help (PSOSH)	15	1-5 (not at all to a great deal)	2.59 (1.07)	0.97
Acculturation	Bidimensional Acculturation Scale (BAS) <sup>+</sup>	24 (12 U.S. and 12 Hispanic Cultural Domains)	1-4 (almost never to almost always)	U.S. Cultural Domains 3.17 (0.49) Hispanic Cultural Domains 2.75 (0.66)	0.87 0.92
<b>SDT-SCT Factors</b>					
Autonomy	Vocational Rehabilitation Internal Motivation Scale (VRIMS)	7	1-5 (agreement)	3.66 (0.52)	0.56
Competence	Vocational Self-Efficacy Scale (VSES)	15	1-4 (agreement)	2.98 (0.43)	0.83
Relatedness	Working Alliance Inventory (WAI-S) <sup>+</sup>	12	1-5 (never to always)	3.60 (0.64)	0.86
Vocational Outcome expectation	Vocational Outcome Expectancy Scale (VOES)	11	1-5 (agreement)	3.56 (0.53)	0.73
<b>Dependent Variable</b>					
Vocational Rehabilitation Engagement	Vocational Rehabilitation Engagement Scale (VRES)	9	1-5 (agreement)	3.87 (0.71)	0.87

*Note.* SDT = Self-Determination Theory. SCT = Social-Cognitive Theory. <sup>+</sup>A Spanish version of measure was available.

## Procedures

The researcher sought approval for human subject research from the Institutional Review Board (IRB) from the University of Wisconsin-Madison. Once approval was obtained from IRB (see Appendix C), directors of the selected state VR agencies were contacted to inform them of the purpose of the study and sought approval. After receiving confirmation from the state VR agency directors, data collection began where prior to sending out information to participants, state VR agency directors were asked about their preferred method of communication with the respective participants (e.g., email, text, or mail).

The consent form and survey (see Appendices D.1, D.2, E.1, and E.2) were then sent to participants via the preferred method of communication identified by the directors of the selected state VR agencies. The consent form provided participants with information about the purpose of this study as well as clarified that their participation was voluntary and anonymous. Prior to participants completing the survey, they were prompted to read the consent form. Additionally, participants who completed the survey received a \$10 electronic Amazon gift card as a way to thank them for participating in the study. Reminders were sent to directors SVRAs to reshare the flyer with the respective VR counselor.

As for the data collection process, the survey was developed via “Qualtrics” online automated survey instrument in both English and Spanish. At the beginning of the survey, participants were directed to a screening questionnaire. This screening questionnaire was utilized to ensure participants met the inclusion criteria as well as to determine their preferred language to read (i.e., English, Spanish). Based on the language preference participants selected, they were redirected to the corresponding survey based on the selected language. The Spanish survey was developed by the researcher who after developing the English version translated it to Spanish.

After researcher created Spanish survey, feedback was requested from a reviewer to ensure translation was correct. The reviewer spoke Spanish (native speaker) and has a background in rehabilitation counseling. Despite sociodemographic information being collected as part of the survey, there were no items asking participants for identifiable personal information. The respondents data collected via the Qualtrics survey was secured and protected utilizing the Secure-HTTP system.

### **Security Features**

Given the online survey was shared throughout various platforms (e.g., social media) and a compensation was being offered, this increases the likelihood of fraudulent responses (e.g., bots, duplicates). To help detect fraudulent responses different measures were implemented in the Qualtrics survey such as the following: Qualtrics security features detecting bots and duplicates, checking for repeated IP Addresses, added embedded questions that were only visible to bots and a CAPTCHA question. Qualtrics' detection of bots and duplicates is assessed via a feature called "RelevantID", where a score of 75 or higher for item "RelevantIDDuplicateScore" indicated a duplicated response, and a score of 30 or higher for item "RelevantIDFraudScore" indicated a bot response (Qualtrics, n.d.). Five attention questions were also added throughout the Qualtrics survey (e.g., "Please select 'somewhat agree' for this item") to help ensure participants were paying attention. Additionally, while reviewing the collected data and before conducting the data analysis, another review was done where responses with duplicated IP addresses that were not detected the first time were dropped along with responses that did not meet the inclusion criteria and the short-answer questions had the same answer verbatim.

## Research Design and Data Analyses

### Research Design

The research design of this study is an exploratory mixed-methods study. Based on the nature of the study's problem statement, research questions, and hypotheses, an exploratory mixed-methods design was determined to be the most appropriate method of research. The emphasis of the problem statement and the limited research in transition-age Hispanic youth with disabilities VR engagement suggest that an exploratory study is appropriate to the stage of the research on the research questions. Additionally, the research design was determined to be mixed-methods due to the research questions of this study examining both relationships among variables (quantitative) and the unique experiences of the participants as it relates to receiving pre-ETS services (qualitative). Research questions 1, 1a, 1b, 1c, 1d, and 2 are quantitative, while research questions 3 and 4 are qualitative in nature. While quantitative research aims to identify relationships among variables (Creswell, 2009), qualitative research is inductive, richly descriptive, and focused on understanding an individual's complexity of a situation (Merriam & Tisdell, 2015).

A mixed-methods methodology was utilized in this study for a broader understanding of the overall factors influencing transition-age Hispanic youth with disabilities VR engagement. Specifically, how (a) sociodemographic variables; (b) contextual factors; (c) self-determination theory and social cognitive theory factors; and (d) pre-ETS services related factors were associated with VR engagement (quantitative aspect of study). Furthermore, to expand on the quantitative data collected, participants of this study were also asked about their personal experiences with receiving pre-ETS services. Data was collected at a single point in time via a survey with quantitative and qualitative procedures (i.e., open- and close-ended questions). The

survey had multiple choice questions, Likert-type questions, and ranking questions that aimed at identifying relationships among the selected independent and dependent variables. Additionally, at the end of the survey qualitative questions were added to capture respondents' perspectives toward receiving pre-ETS services. The incorporation of qualitative research methods in this study can provide further information on the participants' experiences with pre-ETS services that may not be captured via quantitative procedures.

### **Data Summarization Procedures**

The quantitative data of this study was downloaded from Qualtrics, databased, and imported into Statistical Package for Social Science 29.0 (SPSS). The first step of data analysis for the quantitative data is cleaning the data which involves importing data, naming variables, checking for accuracy, and examining missing data. For the qualitative data, Microsoft Excel was utilized, where the first step was to import the participants responses. To analyze the sample's sociodemographic information (e.g., gender, age, race/ethnicity) descriptive statistics, frequencies, and percentages were used to report such information about the study's participants. The psychometric statistics of the measures utilized in this study were presented in a table including each measures means, standard deviations, number of items in scale, rating, and reliability (Cronbach's alpha). For research questions 1, 1a, 1b, 1c, 1d, and 2 data was summarized and presented in a table with the respective statistical data of the stepwise regression and parallel mediation results (e.g., beta values, p-values, R<sup>2</sup>, confidence intervals). For research question 3 and 4, data is presented via themes that were developed based on the qualitative data of participants. Moreover, to help communicate specific points as they related to the identified themes, relevant quotes from participants were also presented (King, 2004; Thorne, 2000).

### **Statistical Analysis Procedures**

Five forms of analyses were utilized in this study, including: descriptive, bivariate correlations, psychometric overview, regression analyses, and thematic analysis. First, a descriptive analysis was conducted to describe the sample of this study. Bivariate correlation analyses were performed to examine the relationship between variables. In addition, a psychometric overview was conducted to evaluate the reliability (Cronbach's alpha) of the measures utilized in this study.

For research questions 1, 1a, 1b, 1c, and 1d a stepwise regression analysis was conducted. Research questions 1 through 1d are centered on examining the relationship between multiple independent variables and a continuous dependent variable. Moreover, stepwise regression analysis is described as a model-building analysis and is a useful exploratory technique (Tabachnick & Fidell, 2007). Considering this study is exploratory in nature, utilizing a stepwise regression analysis serves the purpose of eliminating variables that are unessential to help inform future research (Tabachnick & Fidell, 2007). The process of conducting a stepwise regression involves adding the independent variables sequentially to evaluate whether they meet the statistical criteria where variables that don't meet such criteria can be removed at any step as a result of not contributing significantly to the regression (Tabachnick & Fidell, 2007). The equation for multiple regression is the following:

$$Y' = A + B_1X_1 + B_2X_2 + \dots + B_kX_k$$

where Y' indicates the predictor variable, A is the y-intercept, X's are the independent variables, and B's are the regression coefficients (Tabachnick & Fidell, 2007).

For research question 2, a mediation analysis was conducted to examine if perceptions of the quality, relevance, and usefulness of pre-ETS services mediate the relationship between relatedness (working alliance) and VR engagement. Moreover, since there are three mediators a



parallel mediation analysis was conducted (Kane & Ashbaugh, 2017). Baron and Kenny's (1986) mediation analysis three step approach was implemented, with the steps including: (a) regressing the mediators (i.e., quality, relevance, and usefulness of pre-ETS services) on the independent variable; (b) regressing the dependent variable (i.e., VR engagement) on the independent variable (i.e., relatedness); and (c) regressing the dependent variable (i.e., VR engagement) on the independent variable (i.e., relatedness) and mediators (i.e., quality, relevance, and usefulness of pre-ETS services). The PROCESS macro for SPSS version 4.2 (Hayes, 2022) was utilized to test whether the perceived quality, relevance, and usefulness of pre-ETS services mediate the relationship between relatedness (working alliance) and VR engagement among transition-age Hispanic youth with disabilities. Specifically, the PROCESS macro (Hayes, 2022) was utilized to estimate the total, direct, and indirect effects. The PROCESS macro version 4.2 for SPSS can be downloaded at the following website: <http://processmacro.org/download.html>. Additionally, a bootstrapping test with 5,000 bootstrap samples (95% confidence interval) for multiple mediators was utilized to analyze the indirect effects of relatedness on VR engagement through the mediators (Preacher & Hayes, 2008).

Lastly, research questions 3 and 4 was analyzed via a *reflexive* thematic analysis. Thematic analysis is a flexible qualitative analysis approach that can be modified for the needs of various studies (Braun & Clarke, 2006; King, 2004). Additionally, this method is useful in analyzing the perspectives of participants by highlighting similarities and differences and reporting themes found in that collected data (Braun & Clarke, 2006). The researcher implemented the six phase approach suggested by Braun & Clarke (2006, 2021) with the phases including (a) becoming familiar with data; (b) coding; (c) generating initial themes; (d) developing and reviewing themes; (e) refining, defining and naming themes; and (f) writing up.

The first phase involved coders familiarizing themselves with the data which involves (a) immersion in data; (b) critical distancing and questioning; and (c) note taking (Braun & Clarke, 2021). The second phase involved coding which was conducted through an inductive (i.e., data driven) orientation and development of codes were guided by the research questions (Braun & Clarke, 2021). As suggested by Braun & Clarke (2021), a “systematic engagement process”, critical to ensure insight and rigour in data analysis, was utilized during this second phase (coding), thus helping prevent “cherry picking” during process. The term “cherry picking” is used by qualitative researchers as a way to refer to instances where researchers may select patterns in their data that fit their own predictions (Morse, 2010). The third phase consisted of generating initial themes based on the identified codes. During phase two and three coders engage in reflexive journaling and keep detailed notes about the development of themes (Norwell et al., 2017). In phase four, coders review the identified themes to ensure that the themes are reflective of the qualitative data collected. Phase five then is focused more on redefining and finalizing the name of the themes, and ensuring the identified themes align and are representative of the identified codes and ultimately the qualitative data. Lastly, phase six involves writing up the results which involves member checking and description of the overall coding and analysis process (Braun & Clarke, 2021).

Since the qualitative data was collected via short-answers and not interview, transcription of data was not needed. However, given the survey was available in English and Spanish, analysis of data will be done in the language the participant responded (e.g., participant completed the survey in Spanish, data analysis will be done in Spanish). The reason as to why data in Spanish was not translated prior to data analysis is to prevent losing meaningful data in the translation that may impact the richness and quality of the data. Furthermore, in situations

where participants responded in Spanish, after development of codes and themes, the data was then translated to English.

The qualitative analysis was facilitated by two coders and one auditor. Criteria for coders was that they must be able to read and code in Spanish, this is in order to ensure full comprehension and trustworthiness of data, and have a background in rehabilitation counseling (e.g., graduate of master's program in rehabilitation counseling). The second coder was provided with training by the first author on how to conduct thematic analysis, primarily in steps 1-3 emphasizing the importance of an ongoing immersion in the data as well as making notes during the process to help identify any biases. In situations where there was a disagreement between the two coders the auditor helped resolve the disagreements.

### **Assumptions/conditions for statistical analysis procedures**

#### ***Multiple Regression***

There are various issues I anticipate in meeting the assumptions of multiple regression. I foresee having issues with the assumption of normality, linearity, and homoscedasticity of residuals. Normality refers to how the residuals scatterplot should be normally distributed; linearity indicates there is a linear relationship between the dependent variable(s) and the residuals; and heteroscedasticity suggests that the standard deviations of residuals are approximately equal for all dependent variables (Tabachnick & Fidell, 2007). As discussed by Tabachnick and Fidell (2007), it is quite rare for researchers to fulfill all these assumptions in the first analysis run. Hence, I expect after running my first analysis to have some issues in meeting the mentioned assumptions. A strategy that was implemented to address violation of normality was reexamining the data, where the researcher determined measurement errors, data-entry errors, and outliers to determine valid reasons for removal of data. As for violation of linearity

assumption, a strategy the researcher applied included transforming either the independent variable(s) or dependent variable, so a linear relationship exists between each independent variable and dependent variable (Tabachnick & Fidell, 2007). Lastly, for the violation of heteroscedasticity strategies the researcher transformed the variables to attempt to reduce or eliminate heteroscedasticity as well as using weighted least squares regression (Tabachnick & Fidell, 2007). Although not precisely an assumption of stepwise regression, something I may encounter is overfitting data, which has been described as an issue of stepwise regression analysis as a result of the equation obtained from a single sample being too close to the sample and may limit the generalizability of its findings (Tabachnick & Fidell, 2007). Thus, a strategy I could implement to limit this is by bootstrapping the data.

Ratio of cases to independent variables and rules of thumb in terms of determining needed sample size ( $N$ ) are other assumptions of multiple regression. Ratio of cases to independent variables refers to the sample size ideally being at a ratio of 20 cases for every independent variable with the lowest ration of 5:1 (Tabachnick & Fidell, 2007). Rules of thumb to determine sample size needed suggest that for testing multiple correlation the sample size should be greater than or equal to 50 plus 8 times the number of predictors ( $N \geq 50 + 8m$ ); whereas when testing individual predictors the sample size should be greater than or equal to 104 plus the number of predictors ( $N \geq 104 + k$ ; Tabachnick & Fidell, 2007). These two practical issues were controlled (prevented) by determining sample size needed via a priori power analysis.

The assumption of absence of multicollinearity suggests that independent variables should not be highly correlated with each other (Tabachnick & Fidell, 2007). I foresee this being a potential issue in my study, considering the numerous independent variables there are. A

strategy to prevent violating this assumption is carefully evaluating the way the independent and dependent variables were measured along with the manner the research questions are structured. For instance, research question 2, a potential risk is that the way quality of pre-ETS services is measured could be associated with the way working alliance is measured. Hence, it is important to reevaluate the way both variables were measured.

Another assumption of multiple regression involves the absence of outliers among independent and dependent variables as well as in the solution (Tabachnick & Fidell, 2007). A strategy to navigate the likelihood of violating this assumption is when cleaning data ensuring that extreme outliers are removed. Another theoretical issue within multiple regression is the process of inclusion of variables. As suggested by Tabachnick & Fidell (2007) the process of selection of predictor variables should be informed by theory, “astute observations”, informed and educated guesses, or through careful examination of the distribution of residuals.

Furthermore, another assumption of multiple regression is that independent variables should be measured without error (Tabachnick & Fidell, 2007). This is an assumption that is highly unlikely to not violate, particularly for social and behavioral sciences research (Tabachnick & Fidell, 2007). A suggested strategy to prevent violating this assumption is to select the most reliable independent variables possible (Tabachnick & Fidell, 2007).

### ***Parallel Mediation***

According to Baron & Kenny (1986) there are three conditions a variable needs to fulfill in order to function as a mediator. These include: (a) variation in the levels of the independent variable significantly account for variation in the supposed mediator (i.e., path *a*); (b) variation in the mediator(s) significantly account for variation in the dependent variable (i.e., path *b*); and (c) when paths *a* and *b* are controlled, the previously significant relationship between the

independent variable and dependent variable is no longer significant. In situations where path  $c$  is not zero it may be an indicator of multiple mediating factors, which has been suggested to be common within psychology research due to the multiple mediators analyzed in aims of understanding a particular phenomenon (Baron & Kenny, 1986).

Moreover, Baron and Kenny (1986) also suggested three conditions to establish mediation, including: (a) independent variable must affect the mediator in the first step of the process; (b) independent variable must demonstrate to affect the dependent variable in the second step of the process; and (c) the mediator(s) must affect the dependent variable in the third step of the process. Lastly, a correlation between the independent variable and the mediator(s) is warranted in order to establish a mediation (Baron & Kenny, 1986).

### ***Statistical Hypotheses***

For research question 1, the null hypothesis is that there is no significant relationship between (a) sociodemographic variables; (b) contextual factors; (c) self-determination theory and social cognitive theory factors; and (d) pre-ETS services related with the VR engagement of transition-age Hispanic youth with disabilities. Research question 1a, the null hypothesis is that there is no relationship between sociodemographic variables and VR engagement of transition-age Hispanic youth with disabilities; whereas the alternative hypothesis argues that there is a relationship between sociodemographic variables and VR engagement of transition-age Hispanic youth with disabilities. The null hypothesis for research question 1b is that there is no relationship between cultural, social, or economic barriers and VR engagement of transition-age Hispanic youth with disabilities; whereas the alternative hypothesis indicates that there is a relationship between cultural, social, and economic barriers and VR engagement of transition-age Hispanic youth with disabilities. The null hypothesis for research question 1c is that there is

no relationship between client-counselor variables and VR engagement of transition-age Hispanic youth with disabilities; whereas the alternative hypothesis suggests that there is a relationship between client-counselor variables and VR engagement of transition-age Hispanic youth with disabilities. The null hypothesis for research question 1d is that there is no relationship between ratings of quality, relevance, and usefulness of pre-ETS services and VR engagement of transition-age Hispanic youth with disabilities; whereas the alternative hypothesis suggests there is relationship between ratings of quality, relevance, and usefulness of pre-ETS services and VR engagement of transition-age Hispanic youth with disabilities.

An a priori power analysis was conducted based on 32 predictor variables, multiple regression analysis, alpha level of .05, power of .80, and medium effect size ( $f = .15$ ). Moreover, the significant criteria that was used for the hypothesis testing of this study would include an alpha level of 0.05, power of 0.80, and a medium effect size ( $f = .15$ ) as suggested by Cohen (1988). The rationale for the selected alpha level and power are based on the standard that researchers have set (Cohen, 1992). An examination of similar studies to this one was conducted to determine the effect size. The search for similar studies was a bit limited due to the examination of factors influencing transition-age Hispanic youth VR engagement is an understudied topic. However, several studies were identified that had some type of relationship with either the population and/or some variables involved in this study. Duta and colleagues (2020) examined the relationship between working alliance and transition-VR engagement among African American high school student with disabilities where they found a large effect size ( $f^2 = .58$ ). Lustig and colleagues (2002) also identified a large effect size among the relationship between VR clients (ages ranging from 15-75 years old) with successful employment outcomes and a stronger working alliance with their VR counselor when compared

to unemployed VR clients. Lastly, a study examining the sociodemographic and VR-related factors predicting employment outcomes of transition-age Hispanic youth observed a small effect size in such relationship (Castruita Rios et al., in press). Although these studies are not fully equivalent to my study, in terms of population and/or variables studied, their findings serve as a guide towards making an informed choice to the effect size I should select for my study. Considering overall the observed effect sizes ranged from small to large, as mentioned I have selected a medium effect size for this study.



## Chapter Four: Results

### Sociodemographic Characteristics of Participants

A total of 149 participants were recruited for this study. Majority of participants were White (62.4%), female (49%) and male (48.3%), had a mean age of 20.12 years old ( $SD = 1.13$ ), English was their native language (67.8%), lived in an urban area (82.6%), had a high school diploma or equivalent (47%), had a family annual income between \$50,000 and \$59,000 (18.8%), were SSI recipients (41.6%), lived with family (94%), identified as a third-and-higher generation American (47.7%), and reported having their disability for an average of 7.6 years ( $SD = 5.04$ ). See Table 4.1 for further details on participants' sociodemographic characteristics. In addition, majority of the participants (over 70%) in this study demonstrated a high acculturation to Hispanic and U.S. culture, thus resulting in the "integration" category (Berry, 1998).

### Primary Disability Characteristics

The primary disability characteristics of participants in this study are presented in Table 4.2. Participants' primary disability consisted of amputation or missing limbs ( $n = 33$ ; 22.1%), ADHD ( $n = 22$ ; 14.8%), anxiety disorder ( $n = 20$ ; 13.4%), autism ( $n = 17$ ; 11.4%), blindness or low vision ( $n = 11$ ; 7.4%), bipolar disorder ( $n = 8$ ; 5.4%), PTSD ( $n = 7$ ; 4.7%), Deaf or hard of hearing ( $n = 6$ ; 4%), chronic pain ( $n = 4$ ; 2.7%), diabetes ( $n = 3$ ; 2%), fibromyalgia ( $n = 3$ ; 2%), intellectual disability ( $n = 3$ ; 2%), cancer ( $n = 2$ ; 1.3%), celiac disease ( $n = 1$ ; 0.7%), Crohn's disease ( $n = 1$ ; 0.7%), HIV/AIDS ( $n = 1$ ; 0.7%), major depression ( $n = 1$ ; 0.7%), migraine headaches ( $n = 1$ ; 0.7%), multiple sclerosis ( $n = 1$ ; 0.7%), schizophrenia ( $n = 1$ ; 0.7%), spinal cord injury, and other ( $n = 2$ ; 1.3%). Participants who answered "other" ( $n = 2$ ) reported having either a developmental disability or spina bifida as a primary disability.

### Secondary Disability Characteristics

The secondary disability characteristics of participants in this study are presented in Table 4.3. Participants' secondary disability consisted of anxiety disorder ( $n = 27$ ; 18.1%), amputation or missing limb ( $n = 19$ ; 12.8%), autism ( $n = 17$ ; 11.4%), attention-deficit/hyperactivity disorder ( $n = 13$ ; 8.7%), bipolar disorder ( $n = 11$ ; 7.4%), major depression ( $n = 11$ ; 7.4%), chronic pain ( $n = 7$ ; 4.7%), blindness or low vision ( $n = 5$ ; 3.4%), migraine headaches ( $n = 5$ ; 3.4%), post-traumatic stress disorder ( $n = 5$ ; 3.4%), spinal cord injury ( $n = 3$ ; 2%), Deaf or hard of hearing ( $n = 2$ ; 1.3%), celiac disease ( $n = 1$ ; 0.7%), intellectual disability ( $n = 1$ ; 0.7%), multiple disabilities ( $n = 19$ ; 12.8%), and other ( $n = 3$ ; 2%). Participants who answered "other" ( $n = 3$ ) reported having either a speech and language disability, Stickler syndrome, or only one disability.

### Reported VR Counselors' Characteristics and Pre-ETS Services Ratings

Majority of the participants revealed that their vocational rehabilitation counselor did not have a disability ( $n = 82$ ; 55%), spoke Spanish ( $n = 101$ ; 67.8%), were Hispanic ( $n = 100$ ; 67.1%), and were the same gender as them ( $n = 103$ ; 69.1%). Additionally, the majority of participants reported receiving pre-ETS ( $n = 144$ ; 96.6%) with 3 pre-ETS services being the average ( $SD = 1.59$ ). As for the ratings of quality, relevance, and usefulness of pre-ETS services received, participants on average reported a *good* quality ( $M = 4.01$ ,  $SD = 0.64$ ), *somewhat* relevant ( $M = 4.11$ ,  $SD = 0.60$ ), and *somewhat* useful ( $M = 4.16$ ,  $SD = 0.58$ ) pre-ETS services.

**Table 4.1***Sociodemographic Characteristics of Participants (n = 149)*

<b>Variable</b>	<b>n</b>	<b>%</b>
Gender		
Female	73	49%
Male	72	48.3%
Non-binary	2	1.3%
Transgender	2	1.3%
Race		
White	93	62.4%
Black or African American	30	20.1%
American Indian or Alaska Native	9	6%
Native Hawaiian or Pacific Islander	2	1.3%
Other	15	10.1%
English native language		
Yes	101	67.8%
No	48	32.2%
Type of community residing		
Urban	123	82.6%
Rural	26	17.4%
Highest level of education		
Less than high school	2	1.3%
Some high school experience	7	4.7%
High school diploma or equivalent	70	47%
Associate or some postsecondary education experience	37	24.8%
College degree	25	16.8%
Some graduate school	5	3.4%
Graduate degree (master's level or higher)	2	1.3%
Other	1	0.7%
Family annual income		
Less than \$10,000	5	3.4%
\$10,000 to \$19,999	1	0.7%
\$20,000 to \$29,999	25	16.8%
\$30,000 to \$39,999	6	4%
\$40,000 to \$49,999	21	14.1%
\$50,000 to \$59,999	28	18.8%
\$60,000 to \$69,999	15	10.1%
\$70,000 to \$79,999	13	8.7%
\$80,000 to \$89,999	19	12.8%
\$90,000 to \$99,999	14	9.4%
More than \$100,000	2	1.3%
Disability benefits		
SSI	62	41.6%
SSDI	59	39.6%
None	28	18.8%
Living with family		
Yes	140	94%
No	9	6%
Generational status		
First generation American	18	12.1%
Second generation American	60	40.3%
Third-and-higher generation American	71	47.7%

*Note.* SSI = Supplemental Security Income; SSDI = Social Security Disability Insurance; participant who responded “other” reported receiving dual credit college courses.

**Table 4.2***Primary Disability of Participants (n = 149)*

<b>Disability Type</b>	<b>n</b>	<b>%</b>
Amputation or missing limbs	33	22.1%
Attention-deficit/hyperactivity disorder	22	14.8%
Anxiety disorder	20	13.4%
Autism	17	11.4%
Blindness or low vision	11	7.4%
Bipolar disorder	8	5.4%
Post-traumatic stress disorder	7	4.7%
Deaf or hard of hearing	6	4%
Chronic pain	4	2.7%
Diabetes	3	2%
Fibromyalgia	3	2%
Intellectual disability	3	2%
Cancer	2	1.3%
Celiac disease	1	0.7%
Crohn's disease	1	0.7%
HIV/AIDS	1	0.7%
Major depression	1	0.7%
Migraine headaches	1	0.7%
Multiple Sclerosis	1	0.7%
Schizophrenia	1	0.7%
Spinal Cord Injury	1	0.7%
Other	2	1.3%

**Table 4.3***Secondary Disability of Participants (n = 149)*

<b>Disability Type</b>	<b>n</b>	<b>%</b>
Anxiety disorder	27	18.1%
Amputation or missing limb	19	12.8%
Autism	17	11.4%
Attention-deficit/hyperactivity disorder	13	8.7%
Bipolar disorder	11	7.4%
Major depression	11	7.4%
Chronic pain	7	4.7%
Blindness or low vision	5	3.4%
Migraine headaches	5	3.4%
Post-traumatic stress disorder	5	3.4%
Spinal cord injury	3	2%
Deaf or hard of hearing	2	1.3%
Celiac disease	1	0.7%
Intellectual disability	1	0.7%
Multiple	19	12.8%
Other	3	2%

### **Correlation Analysis**

A correlation analysis was conducted to examine the relationship between all the variables ( $n = 33$ ) in this study. Correlations ranged from  $x$  to  $x$  including all four categories of independent variables (sociodemographic, contextual factors, SDT-SCT factors, and pre-ETS related factors) and the dependent variable (VR engagement). See Appendix F for more details on the correlation analysis between all the 32 independent variables in this study. Moreover, correlations ( $r$ ) between the dependent variable and all the independent variables ranged from  $r = -0.39$  to  $r = 0.73$ . See Table 4.4 for more details.

**Table 4.4**

*Descriptive Analysis and Correlations Between Independent Variables and Vocational Rehabilitation Engagement (Dependent Variable)*

<b>Independent Variable</b>	<b><i>n</i></b>	<b><i>M (SD)</i></b>	<b>VR Engagement (<i>r</i>)</b>
Gender	149	0.56 (0.60)	0.80
Age	149	20.12 (1.13)	-0.18*
Race	149	1.88 (1.56)	0.07
Primary disability	149	5.70 (5.61)	0.08
Secondary disability	149	8.69 (8.10)	0.28**
Years with disability	149	7.64 (5.04)	0.13
English native language	149	0.68 (0.47)	0.12
Community residing	149	0.83 (0.38)	-0.08
Highest education level	149	3.70 (1.11)	0.12
Family annual income	149	6.18 (2.49)	0.36**
Disability benefits	149	1.21 (0.74)	-0.06
Living with family	149	0.94 (0.24)	0.13
Generational status	149	2.36 (0.69)	-0.18*
Hispanic cultural domains	148	2.75 (0.66)	-0.02
U.S. cultural domains	148	3.17 (0.49)	0.59**
Perceived social support from special person	149	3.81 (0.76)	0.70**
Perceived social support from family	149	3.81 (0.69)	0.73**
Perceived social support from friends	149	3.69 (0.72)	0.64**
Self-stigma	149	2.67 (0.59)	0.56**
Perceptions of stigma by others	149	2.59 (1.07)	-0.39**
Disability match with VR counselor	149	0.50 (0.60)	-0.20*
VR counselor spoke Spanish	149	0.79 (0.53)	-0.03
Gender match with VR counselor	149	0.69 (0.46)	-0.11
Ethnicity match with VR counselor	149	0.83 (0.55)	-0.12
Autonomy	149	3.66 (0.52)	0.51**
Competence	149	2.98 (0.43)	0.63**
Relatedness	149	3.60 (0.64)	0.67**
Vocational outcome expectancy	149	3.56 (0.53)	0.62**
Number of pre-ETS services received	146	3.05 (1.59)	-0.06
Quality of pre-ETS services	94	4.01 (0.64)	0.62**
Relevance of pre-ETS services	95	4.11 (0.60)	0.57**
Usefulness of pre-ETS services	96	4.16 (0.58)	0.72**

*Note.* Descriptives for VR engagement ( $n = 149$ ;  $M = 3.87$ ;  $SD = 0.71$ ). Pre-ETS services = pre-employment transition services. SSOSH scale was inverted. \*  $p < .05$ . \*\*  $p < .01$ .

## **Analyses Addressing the First Research Question and Sub-questions**

### **Research Question 1**

What is the relationship between sociodemographic, contextual factors, self-determination theory and social cognitive theory factors, and pre-ETS services related factors and VR engagement of transition-age Hispanic youth with disabilities?

It was hypothesized that sociodemographic variables, contextual factors, self-determination theory and social cognitive theory factors, and pre-ETS services related factors are significantly associated with the vocational rehabilitation engagement of transition-age Hispanic youth with disabilities.

A stepwise regression analysis was conducted with vocational rehabilitation engagement as the dependent variable and four categories of independent variables (sociodemographic, contextual factors, SDT-SCT factors, and pre-ETS related factors). The final model (i.e., model 4) demonstrated that the selected variables explained 87.6% of the variance (adjusted  $R^2 = .876$ ). Coefficients of analysis demonstrated several variables were statistically significant with vocational rehabilitation engagement.

The first model included sociodemographic variables and explained 30.8% (adjusted  $R^2$ ) of the variance indicating that such variables had some significant effect on VR engagement. Model 2 was comprised of sociodemographic variables and contextual factors, resulting in 80.2% (adjusted  $R^2$ ) of the variance explained. Given the increase of variance explained between model 1 and model 2, it suggests that contextual factors play a role in VR engagement. Model 3 included sociodemographic variables, contextual factors, and SDT-SCT factors, resulting in 87.5% (adjusted  $R^2$ ) of the variance explained. Although the increase of variance explained between model 2 and 3 is small, it demonstrates that SDT-SCT factors do have a significant

effect on VR engagement. Lastly, model 4 consisted of sociodemographic variables, contextual factors, SDT-SCT factors, and pre-ETS related factors, resulting in 88.4% (adjusted  $R^2$ ) of the variance explained (adjusted  $R^2 = .876$ ,  $F(4, 49) = 1.031$ ,  $F$  change = .401). The change in  $R^2$  between model 3 and 4 is small ( $\Delta R^2 = .006$ ) and not significant. The rationale for this is due to Model 3 already explaining 87.5% of the variance (adjusted  $R^2$ ), thus only leaving a small amount of variance still not explained (i.e., small room for next model to further explain more of the variance). For more details on each of the models statistics, see Table 4.5.

**Table 4.5**

*Explained Variance of Models from Stepwise Regression Analysis*

	R	$R^2$	Adjusted $R^2$	SE	$\Delta R^2$	F change	df 1	df 2	Sig F change
Model 1	.647	.419	.308	.592	.419	3.78	13	68	<.001
Model 2	.928	.861	.802	.317	.442	16.46	11	57	<.001
Model 3	.958	.918	.875	.252	.057	9.33	4	53	<.001
Model 4	.962	.925	.876	.251	.006	1.03	4	49	.401

*Note.* SDT = Self-determination Theory. SCT = Social Cognitive Theory. Pre-ETS = pre-employment transition services. SE = standard error,

Results of Model 4 identified three significant predictors (2 positive, 1 negative) of vocational rehabilitation engagement among transition-age Hispanic youth with disabilities. Positive predictors of VR engagement included living with family ( $B = .51$ ,  $p < .05$ ) and vocational outcome expectancy ( $B = .27$ ,  $p < .05$ ). One negative predictor of VR engagement was identified consisting of perceptions of stigmatization by others for seeking help ( $B = -.16$ ,  $p < .01$ ). See Table 4.6.



**Table 4.6***Predictors of Participants' Engagement in Vocational Rehabilitation Services*

Variable	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% CI	
					Lower	Upper
<b>Sociodemographic</b>						
Gender	.08	.05	1.60	<i>ns</i>	-.02	.19
Age	-.01	.03	-.17	<i>ns</i>	-.07	.06
Race	.01	.02	.29	<i>ns</i>	-.04	.05
Primary disability	.01	.01	1.24	<i>ns</i>	-.01	.03
Secondary disability	.003	.01	.40	<i>ns</i>	-.01	.02
Years with disability	-.01	.01	-1.47	<i>ns</i>	-.03	.00
English native language	-.10	.12	-.88	<i>ns</i>	-.34	.13
Community residing	-.17	.11	-1.46	<i>ns</i>	-.40	.06
Highest education level	-.08	.04	-1.94	<i>ns</i>	-.17	.00
Family annual income	.03	.03	.88	<i>ns</i>	-.03	.08
Disability benefits	-.04	.06	-.63	<i>ns</i>	-.16	.08
Living with family	.51	.20	2.58	**	.11	.91
Generational status	-.04	.07	-.60	<i>ns</i>	-.18	.10
<b>Contextual Factors</b>						
Hispanic cultural domains	-.01	.10	-.10	<i>ns</i>	-.20	.18
U.S. cultural domains	.08	.11	.76	<i>ns</i>	-.14	.31
Perceived social support from special person	.12	.10	1.20	<i>ns</i>	-.08	.32
Perceived social support from family	.16	.10	1.61	<i>ns</i>	-.04	.35
Perceived social support from friends	-.17	.090	-1.92	<i>ns</i>	-.35	.01
Self-stigma of seeking help	.12	.10	1.18	<i>ns</i>	-.08	.32
Perceived stigma of others seeking help	-.16	.06	-2.84	**	-.28	-.05
Disability match with VR counselor	-.13	.09	-1.59	<i>ns</i>	-.30	.04
VR counselor spoke Spanish	-.16	.12	-1.31	<i>ns</i>	-.41	.09
Gender match with VR counselor	.04	.10	.36	<i>ns</i>	-.16	.23
Ethnicity match with VR counselor	.140	.148	.95	<i>ns</i>	-.16	.44
<b>SDT-SCT Factors</b>						
Autonomy	.19	.12	1.54	<i>ns</i>	-.06	.43
Competence	.28	.15	1.86	<i>ns</i>	-.02	.58
Relatedness	.18	.09	1.93	<i>ns</i>	-.01	.36
Vocational outcome expectancy	.27	.12	2.22	*	.03	.51
<b>Pre-ETS Related Factors</b>						
Number of pre-ETS received	-.06	.03	-1.61	<i>ns</i>	-.13	.01
Quality of pre-ETS	.05	.10	.47	<i>ns</i>	-.15	.24
Relevance of pre-ETS	.01	.08	.15	<i>ns</i>	-.15	.18
Usefulness of pre-ETS	.01	.10	.06	<i>ns</i>	-.19	.20

*Note.* \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . *ns* = not significant. CI = confidence interval.

**Research Question 1a**

What is the relationship between sociodemographic variables and VR engagement of transition-age Hispanic youth with disabilities?

It was hypothesized that sociodemographic variables were significantly associated with the vocational rehabilitation engagement of transition-age Hispanic youth with disabilities.

A multiple regression analysis was conducted to examine the relationship between sociodemographic variables and vocational rehabilitation engagement. Findings of this analysis demonstrated that the model explained a total of 25.1% (adjusted R<sup>2</sup>) of the variance ( $SE = 0.61$ ,  $\Delta R^2 = 0.32$ ,  $F(13, 135) = 4.81$ ,  $p < .001$ ), thus suggesting that sociodemographic variables on their own help understand part of the factors influencing VR engagement among transition-age Hispanic youth. A total of four sociodemographic variables were statistically associated with vocational rehabilitation engagement in this model. Positive predictors of vocational rehabilitation engagement included English being their native language ( $B = .37$ ,  $p < .05$ ) and family annual income ( $B = .10$ ,  $p < .001$ ). Negative predictors consisted of age ( $B = -.10$ ,  $p < .05$ ) and generational status ( $B = -.29$ ,  $p < .01$ ). See Table 4.7.

**Table 4.7.***Sociodemographic Variables Associated with Vocational Rehabilitation Engagement*

Predictor	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	95% CI	
						LL	UL
Gender	-.02	.09	-.013	-.17	<i>ns</i>		
Age	-.10	.05	-.162	-2.14	*	-.20	.17
Race	.03	.04	.057	.71	<i>ns</i>	-.20	-.01
Primary disability	-.003	.01	-.028	-.35	<i>ns</i>	-.05	.10
Secondary disability	.01	.01	.139	1.70	<i>ns</i>	-.02	.02
Years with disability	.03	.01	.126	1.59	<i>ns</i>	-.00	.03
English native language	.37	.14	.244	2.57	*	-.00	.04
Community residing	-.05	.14	-.024	-.32	<i>ns</i>	.09	.65
Highest education level	.03	.06	.042	.49	<i>ns</i>	-.32	.23
Family annual income	.10	.02	.349	4.10	***	-.08	.14
Disability benefits	-.15	.08	-.158	-1.91	<i>ns</i>	.05	.15
Living with family	.25	.22	.085	1.13	<i>ns</i>	-.31	.01
Generational status	-.29	.09	-.280	-3.12	**	-.19	.69

Note. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . *ns* = not significant. CI = confidence interval.

**Research Question 1b**

What is the relationship between contextual factors and VR engagement of transition-age Hispanic youth with disabilities?

It was hypothesized that contextual factors were significantly associated with the vocational rehabilitation engagement of transition-age Hispanic youth with disabilities.

A multiple regression analysis was conducted to examine the relationship between contextual factors and vocational rehabilitation engagement. Findings of this analysis demonstrated that the model explained a total of 65.2% (adjusted  $R^2$ ) of the variance ( $SE = 0.42$ ,  $\Delta R^2 = .68$ ,  $F(11, 135) = 25.88$ ,  $p < .001$ ). This suggests that contextual factors on their own explain a significant amount of the variance in VR engagement. A total of four contextual factors were statistically associated with vocational rehabilitation engagement in this model. Positive predictors of vocational rehabilitation engagement included association to U.S. cultural domains ( $B = .30$ ,  $p < .001$ ), perceived social support from special person ( $B = .22$ ,  $p < .01$ ), perceived social support

from family ( $B = .28, p < .001$ ), and self-stigma ( $B = .20, p < .05$ ). Participants' responses surrounding who the "special person" was included: professional ( $n = 58, 39.9\%$ ), friend ( $n = 32; 21.5\%$ ), spouse/partner ( $n = 21, 14.1\%$ ), girlfriend/boyfriend ( $n = 21, 14.1\%$ ), and other family member ( $n = 17, 11.4\%$ ). No statistically significant negative predictors were identified. See Table 4.8.

**Table 4.8.**

*Contextual Factors Associated with Vocational Rehabilitation Engagement*

Predictor	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	95% CI	
						LL	UL
Hispanic cultural domains	.07	.06	.06	1.06	<i>ns</i>	-.06	.19
U.S. cultural domains	.30	.09	.21	3.48	***	.13	.48
Perceived social support from special person	.22	.08	.24	2.70	**	.06	.39
Perceived social support from family	.28	.09	.27	3.30	***	.11	.45
Perceived social support from friends	.09	.08	.09	1.06	<i>ns</i>	-.08	.25
Self-stigma	.20	.08	.17	2.42	*	.04	.36
Perceived stigma of others seeking help	-.05	.04	-.08	-1.23	<i>ns</i>	-.14	.03
Disability match with VR counselor	.01	.07	.01	.16	<i>ns</i>	-.13	.15
VR counselor spoke Spanish	.03	.08	.03	.42	<i>ns</i>	-.12	.19
Gender match with VR counselor	.01	.08	.00	.07	<i>ns</i>	-.15	.16
Ethnicity match with VR counselor	-.10	.08	-.08	-1.31	<i>ns</i>	-.26	.05

*Note.* \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . *ns* = not significant. CI = confidence interval.

### Research Question 1c

What is the relationship between self-determination theory and social cognitive theory factors and VR engagement of transition-age Hispanic youth with disabilities?

It was hypothesized that SDT-SCT factors were significantly associated with the vocational rehabilitation engagement of transition-age Hispanic youth with disabilities.

A multiple regression analysis was conducted to examine the relationship between SDT-SCT factors and vocational rehabilitation engagement. Findings of this analysis demonstrated that the model explained a total of 61.1% (adjusted R<sup>2</sup>) of the variance ( $SE = 0.44$ ,  $\Delta R^2 = .62$ ,  $F(4, 144) = 59.08$ ,  $p < .001$ ). Moreover, this model suggests that self-determination and social cognitive theoretical factors significantly predict VR engagement. All but one of the SDT-SCT factors were statistically associated with vocational rehabilitation engagement in this model. Positive predictors of vocational rehabilitation engagement consisted of competence ( $B = .40$ ,  $p < .001$ ), relatedness ( $B = .48$ ,  $p < .001$ ), and vocational outcome expectancy ( $B = .28$ ,  $p < .01$ ). No statistically significant negative predictors were identified. See Table 4.9.

**Table 4.9.**

*Self-Determination and Social Cognitive Theory Factors Associated with Vocational Rehabilitation Engagement*

Predictor	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	95% CI	
						LL	UL
Autonomy	.14	.09	.10	1.48	<i>ns</i>	-.05	.32
Competence	.40	.12	.24	3.38	***	.17	.64
Relatedness	.48	.07	.43	7.22	***	.35	.61
Vocational outcome expectancy	.28	.10	.20	2.77	**	.08	.47

*Note.* \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ . *ns* = not significant. CI = confidence interval.

### Research Question 1d

What is the relationship between the number of pre-ETS services received and the ratings of quality, relevance, and usefulness of pre-ETS and VR engagement of transition-age Hispanic youth with disabilities?

It was hypothesized that the number of pre-ETS services received and the ratings of the quality, relevance, and usefulness of pre-ETS are significantly associated with the vocational rehabilitation engagement of transition-age Hispanic youth with disabilities.

A multiple regression analysis was conducted to examine the relationship between pre-ETS related factors and vocational rehabilitation engagement. Findings of this analysis demonstrated that the model explained a total of 61.4% (adjusted R<sup>2</sup>) of the variance ( $SE = 0.44$ ,  $\Delta R^2 = .61$ ,  $F(5, 78) = 27.45$ ,  $p < .001$ ). This suggests that pre-ETS related factors on their own explain a big part of what predicts VR engagement. Two pre-ETS related factors were statistically associated with vocational rehabilitation engagement in this model. Positive predictors of vocational rehabilitation engagement consisted of perceived quality of pre-ETS services ( $B = .35$ ,  $p < .01$ ), and perceived usefulness of pre-ETS services ( $B = .62$ ,  $p < .001$ ) No statistically significant negative predictors were identified. See Table 4.10.

**Table 4.10.**

*Pre-ETS Related Variables Associated with Vocational Rehabilitation Engagement*

Predictor	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	95% CI	
						LL	UL
Number of pre-ETS received	-.00	.03	-.01	-.12	<i>ns</i>	-.07	.06
Quality of pre-ETS	.34	.11	.27	3.01	**	.12	.57
Relevance of pre-ETS	.17	.10	.14	1.65	<i>ns</i>	-.03	.37
Usefulness of pre-ETS	.63	.12	.51	5.27	***	.39	.86

*Note.* \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . *ns* = not significant. Pre-ETS = pre-employment transition services. CI = confidence interval.

## Analyses Addressing the Second Research Question

### Research Question 2

Do perceptions of quality, relevance, and usefulness of pre-ETS services mediate the relationship between working alliance and VR engagement of transition-age Hispanic youth with disabilities?

It was hypothesized that perceptions of quality, relevance, and usefulness of pre-ETS would impact the relationship between working alliance and vocational rehabilitation engagement of transition-age Hispanic youth with disabilities.

A parallel mediation analysis guided by Baron and Kenny's (1986) three step approach was conducted to examine whether participants' perceptions of quality, relevance, and usefulness of pre-ETS services mediate the relationship between working alliance (relatedness) and vocational rehabilitation engagement. The three steps involved in this procedure were: (a) regress the three mediators (i.e., quality, relevance, and usefulness of pre-ETS services) onto the independent variable (i.e., relatedness) to demonstrate that the two variables can be casually linked; (b) regress the dependent variable (i.e., VR engagement) onto the independent variable to demonstrate a causal relationship is possible; and (c) regress the dependent variable (i.e., VR engagement) and the three mediators to demonstrate that the mediators are significantly correlated with the dependent variable even when the independent variable (i.e., relatedness) is statistically controlled. The parallel mediation model explained a total of 81% of the variance in VR engagement,  $R = .81$ ,  $R^2 = .66$ ,  $F(4, 79) = 38.51$ ,  $p < .001$ . A visual representation of the parallel mediation model are presented in Figure 4.1.

### ***Total Effect***

As observed in Figure 4.1, relatedness was positively associated with VR engagement,  $c = .69$ ,  $p < .001$ , 95% confidence interval (CI) [.00, .52].

### ***Direct effect***

The relationship between relatedness and each mediator was evaluated. Relatedness was significantly positively associated with the quality  $a_1 = .40$ ,  $p < .001$ , 95% CI [.24, .56];

relevance  $a_2 = .40, p < .001, 95\% \text{ CI } [.22, .58]$ ; and usefulness  $a_3 = .53, p < .001, 95\% \text{ CI } [.38, .68]$ .

The relationship between each of the mediators with VR engagement, statistically controlling for relatedness was measured. Two of the three mediators were significantly associated with vocational rehabilitation engagement: quality of pre-ETS services  $b_1 = .28, p < .01, 95\% \text{ CI } [.07, .49]$ ; and usefulness of pre-ETS services  $b_3 = .49, p < .001, 95\% \text{ CI } [.24, .73]$ , while statistically controlling for relatedness.

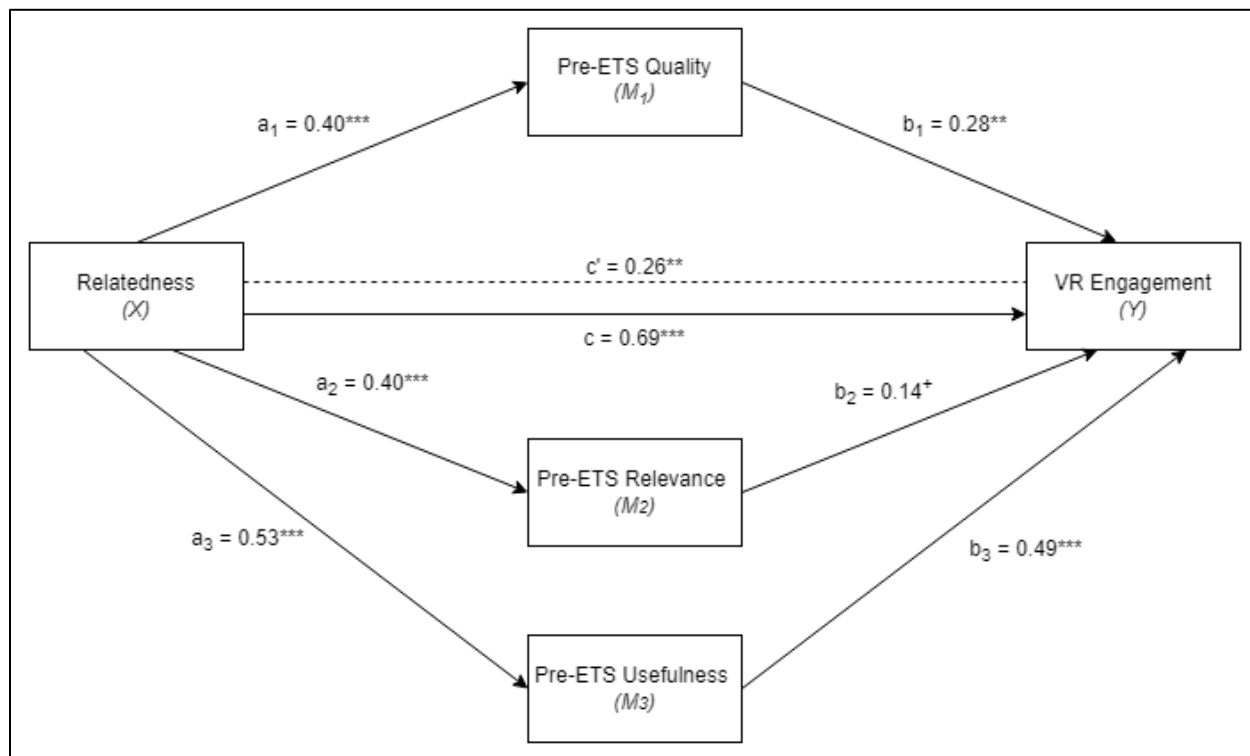
The total effect between relatedness and VR engagement was significant ( $c = .69, p < .001$ ). The direct effect between relatedness and VR engagement remained significant after statistically controlling for the effect of the mediators ( $c' = .26, p < .01$ ). Although two of the mediators (i.e., quality and usefulness of pre-ETS services) significantly increased the VR engagement of participants (from .26 to .69), these mediators only partially mediated the effect of relatedness on VR engagement. See Figure 4.1 for more details.

The indirect effects of the mediators (quality, relevance, and usefulness of pre-ETS services) on the relationship between relatedness and VR engagement were also assessed. A bootstrapping test using the PROCESS procedure with 5,000 bootstrap samples showed that only the indirect path for usefulness of pre-ETS services was significant ( $ab_{\text{pre-ETS usefulness}} = .26, 95\% \text{ CI } [.10, .42]$ ).



**Figure 4.1**

*Parallel Mediation Analysis of the Effect of Relatedness on Vocational Rehabilitation Engagement*



*Note.* The dotted line denotes the direct effect of relatedness on vocational rehabilitation engagement after controlling for the effect of the quality, relevance, and usefulness of pre-ETS services.  $a_1$ ,  $a_2$ ,  $b_1$ ,  $b_2$ ,  $c_1$ , and  $c_2$  are unstandardized regression coefficients.  $^+p$  = not significant.  $^*p < .05$ .  $^{**}p < .01$ .  $^{***}p < .001$ .

### **Analyses Addressing the Third Research Question and Sub-questions**

#### **Research Question 3 and Sub Questions**

What are the experiences of transition-age Hispanic youth with disabilities with pre-ETS services?

- (a) How is the delivery of pre-ETS services experienced by transition-age Hispanic youth with disabilities?
- (b) How has receiving pre-ETS services been supportive to transition-age Hispanic youth with disabilities in their journey to obtain employment?

A *reflexive* thematic analysis was conducted to summarize participants responses ( $n = 120$ ; 84 in English and 36 in Spanish) regarding these three questions. The number of participants varied for each research question. Specifically, based on the content from the responses, themes were developed for each question. For research question 3, three themes were developed. In the first theme, *Building and Strengthening Life and Work Skills*, participants' experiences are discussed surrounding how engaging services enhanced their life and work skills. The second theme, *My Choice or Yours?*, aims to address how some participants disclosed engaging in services was their own decision while others shared they were encouraged by close individuals. Lastly, theme three, *Opportunities for You, You, and Everyone!*, discusses how participants revealed receiving multiple opportunities and training in effort to support the attainment of their vocational goals.

### ***Building and Strengthening Life and Work Skills***

Support towards the development and improvement of life and work skills as a result of receiving pre-ETS services was evident among participants. Many participants talked about how as a result of receiving services they had been able to learn new skills along with work related skills. Some of the reported life skills learned included social skills, communication, problem solving, emotional regulation, time management, and organization. One participant shared how receiving services helped enhance their professional development skills:

*“...El séptimo mes lo pase recibiendo clases sobre temas de desarrollo profesional como técnicas de comunicación y resolución de conflictos.”*

*[“...The seventh month I spent it receiving classes on topics of professional development such as communication techniques and conflict resolution.”]*

Similarly, participants also commented on how services also helped their work skills. Specifically, numerous participants shared how they learned a lot of surrounding work job readiness skills such as how to write a resume, how to navigate an interview, what to dress for interviews, and how to navigate relationships with their supervisor (e.g., how to talk to supervisor). For example, one participant shared the following:

*“...También hablamos de los pasos que tenía que dar para prepararme para el trabajo como preparar mi Curriculum, aprender a hacer una buena entrevista, y practicar habilidades como vestirme adecuadamente para un entorno de oficina.”*

*[“...We (counselor and participant) talked about the steps I needed to take to prepare to work such as preparing mi resume, learning how to do a good interview, and practicing skills such as dressing properly for an office environment.”]*

### ***My Choice or Yours?***

Across the data, some participants also revealed differences in their decision making towards seeking and engaging in services. For example, a participant mentioned, “*...I personally sought out career counseling on the recommendation of my parents...*”, while a different participant shared, “*I was the one who went there without being forced.*”. Thus, showcasing a variety of experiences in how participants became engaged in services. Interestingly, it was observed that only participants who responded the survey in English mentioned details about their “choice” in seeking and engaging in services.

### ***Opportunities for You, You, and Everyone!***

The opportunities received as a result of engaging in pre-ETS services was another topic reported by participants. Participants reported receiving opportunities to attend training and receive guidance about employment. Various types of training were identified by participants,

such as training in technology and work (e.g., how to search for a job online, using technology as a form of accommodation), assistive technology, and disability in the workplace. Additionally, mention of activities to foster self-awareness of one's interests, ability, strengths, and areas of improvement were also discussed. For example, a participant shared the following:

*“(proveedor) Brinda capacitación sobre el uso de la tecnología para ayudar a las personas con discapacidades a participar de manera más independiente en el trabajo.”*  
 [“(provider) gives training on the use of technology to help people with disabilities participate more independently at work.”]

As for guidance on employment, participants disclosed how they received advice on topics such as how to obtain a job, career advancement, how to develop vocational goals, and information on different types of work. For example, one participant shared:

*“...La lección más valiosa que aprendí durante este proceso fue lo importante que es para mi entender que tipo de entorno de trabajo se adaptará mejor a mis necesidades, así como qué tipo de trabajo me permitirá maximizar mis habilidades.”*  
 [“The most valuable lesson I learned during this process was how important it is for me to understand what kind of work environment will best suit my needs, as well as what kind of work will allow me to maximize my skills.”]

### **Research Question 3a**

For research questions 3a, participants responses ( $n = 120$ ; 84 in English and 36 in Spanish) revealed two themes. The first theme, *Teamwork Makes the Dream Work*, discusses how participants disclosed service provision being done through collaboration of agencies as well as transition plans being developed collaboratively. In the second theme, *Flexibility in*

*Service Provision*, we report participants' responses on how services were provided to them in a variety of formats.

### ***Teamwork Makes the Dream Work***

Several participants disclosed how services were being provided through a collaboration among various stakeholders. Examples of some of the reported collaborations included: (a) schools and adult agency; (b) local educational agencies and community partners; (c) schools and communities; and (d) schools and employer. Additionally, some participants discussed how the services they were receiving were in a collaborative way, such as transition plan being developed collaboratively. A participant shared the following on this matter:

*“El programa fue impartido por un equipo de personas que trabajaron juntas para definir mis objetivos y averiguar cómo hacerlos realidad. Empezamos por definir cuáles eran mis objetivos (encontrar trabajo) luego vimos que habilidades tenía y necesitaba aprender (incluidas algunas habilidades blandas como las entrevistas) y después establecimos un plan para conseguirlo.”*

*[“The program was taught by a team of people who worked together to define my goals and figure out how to make them a reality. We started by defining what my goals were (to find a job) then we saw what skills I had and needed to learn (including some soft skills like interviews) and then we set up a plan to achieve it.”]*

Another example of collaborative service provision included having ongoing communication and support from counselor.

*“Mi consejera se aseguró de que yo supiera toda la información que necesitaba sobre cada oportunidad de trabajo antes de seguir adelante con ella; por ejemplo, siempre se ponía en contacto conmigo antes de enviar las solicitudes para asegurarnos de que*

*estuvieran completas y listas en cualquier momento. También me ayudo a entender cuánto dinero podría pagarme un trabajo por hora para que pudiéramos asegurarnos de que cubriría los gastos de manutención, como el alquiler y la comida sin ningún problema.”*

*[“My counselor made sure I knew all the information I needed about each job opportunity before moving forward with her; for example, she always contacted me before submitting applications to make sure they were complete and ready at any time. It also helped me understand how much money an hourly job could pay me so we could make sure I would cover living expenses, like rent and food without any problems.”]*

In addition, some participants shared how, due to the service delivery being done in a group setting, they were also able to learn collaboratively with their instructor and peers. Moreover, a couple of participants also shared how their services were individualized, noting how their counselor was familiar and aware of youths’ interests and abilities.

### ***Flexibility in Service Provision***

Among participants’ responses, it was observed how several of them mentioned how services were provided in a variety of formats such as through courses, individual instruction, remotely, hands-on activities, and at home. In particular, some participants revealed how their teacher would come to their home to deliver the lesson(s). Additionally, a participant mentioned how services were provided in a variety of settings, “...*in-school and out-of-school programs, summer programs, and community-based programs.*”

### **Research Question 3b**

For research question 3b, one theme was identified, *Employment Here I Come!*. This theme encompasses participants’ responses ( $n = 115$ ; 76 in English and 39 in Spanish)

surrounding how pre-ETS services were helpful in the employment preparation received, perceptions of employment, and in ultimately getting a job.

***Employment Here I Come!***

Several participants shared how pre-ETS services provided them with tools and training that increased their self-confidence and views on employment. Examples of tools that were helpful for them included exploration of career interests, learning how to develop a career plan, knowledge of resources to support them in getting a job, and skills training (e.g., advocacy, informed decision making). For example, consider this participant's response:

*“El programa de rehabilitación profesional me ayudo a adquirir formación y experiencia para que cuando llegara el momento de buscar trabajo tuviera una mejor idea de lo que había y de que empresas podrían estar interesadas en contratar a alguien como yo.”*

*[“The vocational rehabilitation program helped me gain training and experience so that when it was time to look for a job, I had a better idea of what (employers) there was and what companies might be interested in hiring someone like me.”]*

Additionally, a couple of participants shared how receiving pre-ETS services changed their perceptions towards employment. For example, a participant reported that having received pre-ETS services *“made (them) realize the importance (of employment).”* However, although most of these participants indicated receiving services having a positive impact on their views of employment, there was an individual that reported their bad experience in receiving services. This participant shared, *“It makes me more scared for future employment due to neglect from the pre-ETS services.”*

## Analyses Addressing the Fourth Research Question

### Research Question 4

What are some ways pre-ETS services can be improved for transition-age Hispanic youth with disabilities?

For research question 4, two themes were identified based on participants' responses ( $n = 109$ ; 70 in English and 39 in Spanish). The first theme, *Relationship Building*, discusses participants' concerns regarding their experiences working with providers, primarily noting the lack of individualized support and understanding of cultural factors. The second theme, *Increasing Resources, Accessibility, and Length of Program*, describes participants' suggestions on the need for more resources, better accessibility of resources and inclusiveness of all types of disabilities, as well as wishing the program lasted longer.

#### ***Relationship Building***

Some participants shared how in their experiences receiving services, they experienced instances where they felt their provider did not provide them with services that aligned with their needs or interests. For example, a participant shared:

*"... (proveedores) deben obtener una mejor comprensión de las necesidades e intereses de los participantes para poder brindarles un mejor apoyo y servicios."*

[*"... (providers) must obtain a better comprehension of the needs and interests of the participants to be able to provide better support and services."*]

Additionally, participants commented on how there still remains improvement in the provision of services in a culturally sensitive manner. A participant who spoke on this matter shared the following *"...there are still some shortcomings such as ignoring racial and cultural differences lacking sufficient professional guidance resources and lacking inclusiveness from companies."*



Similarly, another participant emphasized the need for more Hispanic and Spanish speaking counselors.

*“Lo único que no me gusto fue que el programa no estaba disponible en español. Habría sido útil que hubiera más personal hispanohablante que pudiera ayudarme con mis conocimientos de inglés para estar mejor preparada para las entrevistas y otros aspectos del proceso de búsqueda de empleo.”*

*[“The only thing I did not like was that the program was not available in Spanish. It would have been helpful if there were more Spanish-speaking staff who could help me with my English skills to be better prepared for interviews and other aspects of the job search process.”]*

### ***Increasing Resources, Accessibility, and Length of Program***

Participants mentioned the need for more resources as it related to more opportunities for internships, which they argued was due to the limited connections with businesses. Additionally, some participants identified a need for better accessibility and inclusivity for consumers. Examples of this included how there is limited support and resources for certain disabilities as well as how incorporation of more flexible formats (e.g., online) could be helpful for people from certain disability groups. Here’s an example of a participant addressing this matter:

*“In terms of areas for improvement, pre-ETS programs could benefit from greater accessibility and inclusivity particularly for individuals with disabilities who face additional barriers to accessing services and support. This could include providing more flexible and varied program options, such as online or remote training or providing additional resources and support to individuals who face transportation or communication challenges.”*

Lastly, multiple participants advocated for the length of the services to be longer. Some participants mentioned how due to the limited time they had they were not always able to fully practice the skills they had learned. In particular, there was one person who shared how they were not able to practice their skills and impacted their confidence going into the interview. The participant shared the following:

*“Lo peor del programa en el que participe fue que no tuve tiempo suficiente para practicar todo lo que me enseñaron porque me resulto muy difícil aprenderlo todo a la vez. En mi opinión este programa debería mejorar añadiendo más tiempo para que pueda practicar todo lo que me enseñan para que pueda tener más confianza cuando vaya a mi entrevista de trabajo.”*

*[“The worst thing about the program I participated in was that I didn't have enough time to practice everything I was taught because I found it very difficult to learn everything at once. In my opinion this program should improve by adding more time so that I can practice everything I am taught so that I can be more confident when I go to my job interview.”]*

## Chapter Five: Discussion

Although the efforts to support successful employment outcomes for transition-age youth with disabilities were a focus of WIOA of 2014, there continues to be racial/ethnic disparities in employment outcomes (e.g., Eilenberg et al., 2019; Yin et al., 2021) with transition-age Hispanic youth having a lower successful employment outcome as compared to White youth with disabilities (Kaya et al., 2016; Sima et al., 2015). Although the literature has demonstrated that receiving vocational rehabilitation services, including pre-ETS services, help increase the likelihood of transition-age youth with disabilities obtaining competitive integrated employment (Awsumb et al., 2020; Castruita Rios et al., in press; Rumrill et al., 2016; Taylor et al., under review), there have been concerns regarding the utilization of services by Hispanic individuals with disabilities (Breeding et al., 2005; Castruita Rios et al., in press; Hernandez et al., 2006; Muller Reed et al., 2005; Velcoff et al., 2010). Limited studies have examined the factors that could be impacting the engagement in state VR services by Hispanic individuals with disabilities (e.g., Lee et al., 2023), and even fewer studies have focused on transition-age Hispanic youth with disabilities (Castruita Rios et al., in press).

The present exploratory mixed-method study aimed to investigate the factors associated with the vocational rehabilitation engagement among transition-age Hispanic youth with disabilities. Specifically, the relationship between VR engagement and the following: (a) sociodemographic variables; (b) contextual factors; (c) self-determination and social cognitive theory factors; and (d) pre-ETS services related factors. Additionally, this study explored the perspectives and experiences of receiving pre-ETS services among transition-age Hispanic youth with disabilities. This chapter will focus on discussing the findings of this study along with the implications of findings, limitation of study, and future directions.

## Summary of Findings

### Sociodemographic Characteristics of Participants

The majority of the sample in this study reported having a primary disability of amputation or missing limb, and a secondary disability of anxiety disorder. This finding was surprising considering among VR consumers, psychiatric or intellectual disability types have been reported to be the most represented primary disability types, while physical disabilities are not that common. For example, Honeycutt and colleagues (2015) report on transition-age youth in VR programs revealed that in most states intellectual disability was the reported primary disability by majority of the applicants. Although researchers noted how the representation of primary disability types vary by state, in situations where intellectual disabilities was not the most reported primary disability, in some states it was psychiatric disability. Moreover, the report by Honeycutt and colleagues (2015) revealed that the most represented primary disability among transition-age youth VR applicants was intellectual disability (51.7%), followed by psychiatric (25%), physical (11.7%), and sensory (5.8%).

Considering the traditional values within Latino culture, the stigma towards mental health and psychiatric conditions remains prevalent (e.g., Mascayano et al., 2016; Washburn et al., 2022). Furthermore, this could potentially explain the high prevalence of participants disclosing having an amputation or missing limb (i.e., physical disability) as a primary disability. Moreover, it could possibly be due to stigma towards psychiatric disabilities, that transition-age Hispanic youth may either not want to disclose such diagnosis, or they may lack awareness on the symptoms or specific diagnosis. Thus, resulting in a potential underreporting of psychiatric disabilities on the behalf of this group. Another potential explanation for this could be due to amputation or missing limb being the first listed option under the survey question asking for their

primary disability. Thus, it could have been that people may have responded quickly to the prompt or may have not taken the time to read the options, resulting in them selecting the first listed option.

### **Correlation Analysis**

Findings of this study suggested that several variables were significantly associated with VR engagement. Consistent with prior research (Corrigan, 2004; Dutta et al., 2008, 2017, 2020; Fitzgerald et al., 2016; Fung et al., 2008; Iwanaga et al., 2021; Obuah, 2020; Ryan & Deci, 2000; Sanchez et al. 2016; Tansey et al., 2017; Tsang et al., 2010; Velcoff et al., 2010) a higher identification with U.S. cultural domains, a higher level of perceived social support (family and friends), lower self-stigma, lower perceptions of stigma by others, autonomy, competence, relatedness, and vocational outcome expectancy were positively associated with engagement in rehabilitation services, such as VR. For example, Tsang and colleagues (2010) study revealed that individuals with schizophrenia with lower levels of self-stigma were more likely to participate in treatment.

Contrary with prior research (Balcazar et al., 2011; Dutta et al., 2017; Iwanaga et al., 2021; Kim et al., 2016; Kolakowsky-Hayner et al., 2012), age (older participants), identifying as a second or higher generation American, and having a provider with a disability were negatively associated with engaging in disability-related services (e.g., VR). For example, Kim and colleagues (2016) suggested that among Latino caregivers of children with a mental health condition, those that were newer to the U.S. (i.e., first-generation American) were more likely to engage in treatment (e.g., not miss treatment sessions, complete treatment). Another study observed how peer mentorship programs (mentor and mentee with a disability) were positively associated with the utilization of community providers (Kolakowsky-Hayner et al., 2012).

Moreover, secondary disability (i.e., disability type) was positively associated with VR engagement, contrary to Dutta and colleagues (2017) findings that reported no significant relationship.

Moreover, research discussing the association between family annual income and engagement in rehabilitation services has suggested mixed findings. Although some studies have revealed a positive relationship between family annual income and engagement in rehabilitation services (Iwanaga et al., 2017; Noblitt et al., 2018), other researchers have argued for the contrary (Garfein et al., 2022). Given the limited literature examining the association of engagement in rehabilitation services and the quality, relevance, and usefulness of pre-ETS services, this study provides initial understanding of the association between these variables.

### **Research Question 1 and Sub Questions: Predictors of VR Engagement**

Findings of research question 1 (omnibus question) and its sub questions revealed the factors associated with VR engagement of participants in this study. The findings and interpretations for the four sub questions of research question 1 are discussed first, followed by research question 1.

#### ***Model 1: Sociodemographic Characteristics and VR Engagement***

Model 1 (research question 1a) demonstrated that participants whose native language was English and had a higher annual income were more likely to engage in VR services, while older participants and in a higher generational status (e.g., second or third generation American) were less likely to engage in VR services. The present study's finding on participants' whose native language was English were more likely to engage in services is consistent with the literature suggesting that Hispanic individuals whose English is not their native language are less likely to engage in rehabilitation services or programs due to language barriers (Rogler et al., 1991, as

cited in Kim et al., 2016). Moreover, considering one of the main goals of engaging in VR services is to obtain competitive integrated employment, language barriers have also been noted to impact the ability of individuals to seek and obtain employment (Hernandez et al., 2006). Prior research examining participation and engagement in rehabilitation services (Garfein et al., 2022; Noblitt et al., 2018), is consistent with the finding relating to higher family annual income predicting a higher likelihood of engaging in rehabilitation services. For example, families who had a lower annual income were reported to have less access to hearing rehabilitation services, thus impacting their opportunities to engage in such services (Noblitt et al., 2018). Additionally, Hispanic adults with cardiovascular diseases who were in the two highest income categories (i.e., \$75k or higher) were observed to have an increase in attendance of cardiac rehabilitation sessions than compared to the other income categories (Garfein et al., 2022).

Contrary to the findings, other researchers have suggested that older VR consumers have a higher engagement in VR services (Dutta et al., 2017; Iwanaga et al., 2021). A study focused on VR consumers observed that those in the prime age for employment (i.e., ages 25 to 54) had higher engagement scores than compared to younger (i.e., transition-age youth; Dutta et al., 2017). Similarly, Iwanaga and colleagues (2021) reported that older VR consumers were more likely to engage in VR services. Although these two studies have reported transition-age youth overall as having a lower engagement than older VR consumers, the finding in this study of older transition-age youth being less engaged is still surprising. Dutta et al. (2017) commented on how transition-age youth lower engagement in VR could be due to a lower commitment and engagement with VR interventions and services than compared to adult (older) VR consumers. Thus, emphasizing the saliency of implementing self-determination interventions among

transition-age youth to help enhance their engagement in VR services and ultimately their adulthood outcomes (e.g., postsecondary education, employment; Dutta et al., 2017).

Participants with a higher generational status (i.e., second or higher generation American) were less likely to engage in VR services; this finding is contrary to prior research given that individuals with a higher association to U.S. culture results in a higher likelihood of seeking and participating in disability related services (Obuah, 2020; Velcoff et al., 2010). This interpretation of the finding is based on Rogler and colleagues (1991) argument that Latino individuals who recently immigrated to the U.S. (i.e., first-generation Americans) were less acculturated to the U.S. Thus, implying that the higher the generational status, the more acculturated to the U.S. an individual will be. Similarly, Obuah (2020) argued that the more exposed an individual is to the U.S. cultural patterns, the higher their acculturation pattern be to the U.S. culture. Moreover, potential explanations for this finding could be that Hispanic individuals who recently immigrated to the U.S. (i.e., first-generation American) may be more connected with Hispanic traditional values such as *respeto* (respect) and *simpatía* (i.e., wanting to avoid conflict to maintain kindness; Kim et al., 2016). Consequently, Hispanic individuals who align more with traditional values may show up to appointments or call in advance to reschedule/cancel appointments as a way of showing respect to their VR counselor. Moreover, Hispanic individuals may also decide to continue services despite them not thinking they need the support or intervention as a way to avoid conflict (i.e., *simpatía*; Kim et al., 2016).

### ***Model 2: Contextual Factors and VR Engagement***

Model 2 (research question 1b) showed that participants who had a higher association with U.S. cultural domains, perceived a higher social support from a special person or family member, and had less self-stigma were more likely to engage in services. Consistent with the



literature, a higher association with U.S. cultural domains has been associated with a higher likelihood of engaging in rehabilitation services (Ho et al., 2007; Rogler et al., 1991; Velcoff et al., 2010). A potential explanation as to why individuals who are more acculturated to the U.S. may have a higher likelihood of engaging in VR services could be due to experiencing less cultural mistrust. Individuals who may be less acculturated to the U.S. may have limited understanding of the services and supports available in the U.S. Moreover, due to not being familiar with the system along with having limited knowledge, they may experience a higher cultural mistrust. Cultural mistrust has been cited as a common factor among racial/ethnic minorities, including Hispanic, impacting their trustworthiness on service providers and decisions surrounding whether or not they want to engage in services (Mueller Reed et al., 2005; Velcoff et al., 2010).

Nevertheless, the finding of a higher acculturation to the U.S. being a positive predictor of VR engagement may come across as contradicting to the finding observed in model 1 suggesting individuals with a higher generational status (i.e., second or higher generation American) being less likely to engage in VR services. These findings may seem contradicting given other researchers have suggested that individuals who are in higher generational status (i.e., second or higher generation American) are more likely to have cultural patterns associated with U.S. culture (Obuah, 2020; Rogler et al., 1991). However, acculturation is rather more complex than some presumed for it to be. Although some argue acculturation is a unidimensional process (i.e., one must give up their native culture to adopt the mainstream culture, e.g., Gans, 1979; Gordon, 1964) others suggest it is a bidimensional process (i.e., native and mainstream culture are independent of each other; e.g., Berry, 1997; Ramirez, 1984).

Moreover, a potential explanation as to why these findings imply that first-generation Americans and having a high acculturation to the U.S. culture are more likely to engage in VR services can be due to the complexity behind acculturation. As Berry (1998) suggested acculturation is bidimensional and can be visualized into four categories: assimilation, separation, integration, and marginalization. Thus, given the findings surrounding generational status and acculturation, it could be that individuals who fall under the category of assimilation (i.e., adopting mainstream values over native values) may be more likely to engage in services. After all, as Moyerman and Forman (1992) commented, acculturation is a dynamic process whereby an individual's attitudes and behaviors can be impacted due to their interface with those of the mainstream culture.

Consistent with the findings, prior research has demonstrated a positive relationship between social support and engagement in rehabilitation services. Specifically, family support was observed to play a critical role in individuals rehabilitation process (Zea et al., 1997; Velcoff et al., 2010). Given "special person" in this study was a broad term where it could encompass spouse/partner, girlfriend/boyfriend, friend, professional (e.g., teacher, counselor) or other family member, interpretation of social support of special person can be extensive. In our sample, we had a representation for each of the listed groups, with professionals being the most common ( $n = 58, 39.9\%$ ). Moreover, social support has been observed to be positively associated with participation in community and services, specifically social support from friends (Sanchez et al., 2016), social support from professionals (e.g., employer; Jansen et al., 2021), and overall access to social support from an individual (Beckley, 2007; Lam & Rosenheck, 1999).

The literature is aligned with the findings surrounding lower levels of self-stigma predicting engagement in rehabilitation services. Researchers examining the impact of self-

stigma on participation in psychosocial treatment among individuals with schizophrenia observed that those with lower self-stigma were more likely to engage in treatment (Fung et al., 2008; Tsang et al., 2010). Additionally, self-stigma has been observed to impact individuals' willingness to seek professional psychological help (Vogel et al., 2006, 2007), including high school youth seeking mental health help (Hartman et al., 2013). Furthermore, self-stigma has been suggested to negatively impact engagement in treatment (Moses, 2010).

***Model 3: Self-Determination and Social Cognitive Theory Factors and VR Engagement***

Model 3 (research question 1c) revealed that competence (vocational self-efficacy), relatedness (working alliance), and vocational outcome expectancy were positively associated with a higher likelihood of participants engaging in VR services. These findings align with prior research that reported a positive association between competence and VR engagement (Dutta et al., 2017, 2020; Fitzgerald et al., 2016; Iwanaga et al., 2017, 2021; Ryan & Deci, 2000; Tansey et al., 2017), relatedness and VR engagement (Dutta et al., 2017; Fitzgerald et al., 2016; Iwanaga et al., 2017, 2021; Ryan & Deci, 2000; Tansey et al., 2017) and vocational outcome expectancy and VR engagement (da Silva Cardoso et al., 2013; Dutta et al., 2017; Fitzgerald et al., 2016). Thus, contributing to the literature highlighting how Self-Determination Theory and Social Cognitive Theory factors contribute to individuals' engagement in rehabilitation programs and treatments (Dutta et al., 2017, 2020; Iwanaga et al., 2017, 2021; Tansey et al., 2017).

***Model 4: Pre-ETS Services Related Factors and VR Engagement***

Model 4 (research question 1d) demonstrated that participants who perceived the pre-ETS services they were receiving as of high quality and usefulness were more likely to engage in VR services. Although there is limited research between the quality and usefulness of pre-ETS services and engagement in VR services, there is some research suggesting the impact quality

and usefulness of VR services can have on ongoing engagement in services. For example, research has noted how the delivery of VR services varies across states (Burgess & Cimera, 2014; Miller et al., 2018; Roux et al., 2018) as well as how the delivery of services can be provided either by a VR staff member or provided by external service provider (Honeycutt et al., 2019). Specifically, differences in source of provision of pre-ETS services was observed to vary by type of pre-ETS services, with work-based learning experiences mainly being provided by an external service provider, while counseling on enrollment and instruction in self-advocacy being provided by VR staff (Honeycutt et al., 2019). Moreover, considering the delivery and source of VR services is not consistent across states leads to the possibility of the quality of pre-ETS services being impacted.

In addition, VR consumers who do not receive their desired VR services has been reported to be a factor contributing to stopping engagement in services (i.e., leaving program; Ipsen & Goe, 2016). Moreover, considering the sample of this study was transition-age Hispanic youth, cultural values could also be contributing to the observed association between perceived usefulness of pre-ETS services and engagement in VR services. Engaging in pre-ETS services that are not perceived as useful by transition-age Hispanic youth may result in the value of personal dignity being in jeopardy. Personal dignity refers to the integrity, self-respect, and feelings of self-worth of an individual (Swensen, 1994). Furthermore, the value of personal dignity may be at risk in situations where Hispanic individuals may experience challenges or delays in their receipt of services and may not seek services if they feel it will negatively impact their dignity (Rivera & Cespedes, 1983; Roessler & Rubin, 1988). Thus, this finding can explain why when transition-age Hispanic youth perceived their pre-ETS services as not useful, they may decide to no longer engage in VR services.

### ***Full Model Predicting VR Engagement***

Research question 1 (omnibus question) revealed that participants that lived with family, had lower levels of perceived stigma by others, and had higher levels of vocational outcome expectancy were more likely to be engaged in VR services. The literature suggests mixed findings on the impact of living with family and engagement in services. A study investigating the impact living with others (e.g., family members) had on their attendance on psychosocial treatment observed that those that lived with others were less likely to attend treatment (Fung et al., 2008). Similarly, Latino families who had a familial bond had been reported to be less likely to utilize mental health services (Chang et al., 2013). Conversely, closeness to family (i.e., *familismo*) has been documented one of the most valuable Latino cultural values (Stein et al., 2013), with some studies suggesting family playing a key role in emotional support and connectedness (e.g., Harrigan, 1992; Keefe & Casas, 1980; Mindel & Wright, 1982). Moreover, research has observed how family is an important part for Latino individuals' life's (Francis et al., 2020), as well as how family support enhances post-school outcomes (Bryan & Henry, 2012; Burke & Hodapp, 2014; Francis et al., 2018; Liu & White, 2017).

Prior literature aligns with the findings surrounding higher level of perceived stigma by others resulting in a lower engagement in services. For example, among individuals with disabilities it has been observed that perceptions of stigma by others can negatively impact their participation in recreational activities (Bedini, 2000; West, 1984). Additionally, among Hispanic individuals' perceptions of stigma by others have resulted in individuals withdrawing from close ones and professionals. Ijalba (2016) observed how feelings of perceived stigma by roommate (i.e., family member) resulted in Latina immigrant mother of child with autism to stay in their room and not interact with anyone from the household. Similarly, Latina caregivers of children

with disabilities disclosed how professionals have also showcased stigmatizing attitudes (i.e., discrimination) by constantly asking them about their citizenship status (Francis et al., 2020). This experience with the professional led to the Latina caregiver to seek support and resources on transition planning from community members instead (Francis et al., 2020).

The literature is consistent with the findings on vocational outcome expectancy (VOE) being positively associated with VR engagement. Higher levels of VOE among VR consumers have been reported to be associated with a higher level of engagement in VR services (Dutta et al., 2017; Tansey et al., 2017). In Iwanaga and colleagues (2019) study, VOE mediated the relationship between working alliance and stages of change for employment thus implying the significant role VOE has on VR consumers engagement in VR services. Moreover, in studies examining the engagement in pain rehabilitation treatment, a higher level of VOE has also been positively associated with rehabilitation outcomes (Vong et al., 2011).

Although the final full model explained a large percent of the variance (88.4%), a small not significant increase in variance ( $\Delta R^2 = .006$ , significant  $F$  change = .401) was observed between model 3 (sociodemographic characteristics, contextual factors, and self-determination and social cognitive theory factors) and model 4 (sociodemographic characteristics, contextual factors, self-determination and social cognitive theory factors, and pre-ETS related factors). Particularly, the final full model suggests that pre-ETS related factors did not explain too much of the variance ( $\Delta R^2 = .006$ ). The small non-significant increase between model 3 and model 4 can be a result of model 3 explaining 87.5% of the variance (adjusted  $R^2$ ), thus only leaving 12.5% unexplained. Moreover, considering the number of predictors in the final full model ( $n = 32$ ) it could be that this may have resulted in shared variance across the variables. Among the results in the individual models, model 2 (contextual factors) was the individual model that

explained the most variance (65.2%) than compared to the other three individual models (sociodemographic characteristics; self-determination and social cognitive theory factors; pre-ETS related factors). Thus, suggesting that contextual factors have a bigger significant effect on VR engagement of transition-age Hispanic youth with disabilities.

The interpretation of these overall findings is that our models demonstrate various factors impacting engagement in services by this group, noting how some of these factors are more relating to the person (i.e., transition-age Hispanic youth) while others can be counselor controlled. In other words, personal factors are something that cannot be changed by VR counselor. Examples of some of the significant predictors that are more relating to the individual include: age, native language, acculturation, family annual income, generational status, social support, individual living with family, perceived stigma by others, and self-stigma. However, it is important to note that although some of these factors relate to the person and cannot be changed by the counselor, they should not be dismissed but rather help inform service provision. For example, given higher acculturation to the U.S. and generational status impacts VR engagement, service providers should take into consideration how these factors can impact their engagement in services. Additionally, although factors such as social support and self-stigma are more personal to the individual, service providers can assist transition-age Hispanic youth through helping them connect with fellow peers or community organizations that could serve as additional support for them in their journey of transitioning to adulthood. Similarly, service providers should consider incorporating educational presentations on disability to help address any misconceptions transition-age Hispanic youth may have regarding their abilities that can then help reduce any self-stigma. Prior research has revealed how classroom-based presentations

along with interaction with an individual with similar disability can significantly help reduce self-stigma (Hartman et al. 2013).

Furthermore, the significant predictors of VR engagement that are counselor controlled include: working alliance (relatedness), quality of pre-ETS service provision, usefulness of pre-ETS services provided, vocational self-efficacy (competence), and vocational outcome expectancy. Given the significant impact on engagement, it is imperative for service providers to establish positive working alliances with transition-age Hispanic youth, through an individualized approach in getting to know them and understand how their personal and environmental factors inform their journey to employment. In addition, VR counselors must work collaboratively with transition-age Hispanic youth in the development of their Individual Plan for Employment (IPE) including the determination of services being received. In particular, it is imperative that VR counselors explain services to transition-age Hispanic youth, including how the services provided will support the completion of their IPE's goals. Implementation of these strategies can further support the perceptions of usefulness of pre-ETS services among transition-age Hispanic youth with disabilities. Additionally, to strengthen the quality of pre-ETS services among this group, service providers should ensure provision of services is being done in a culturally sensitive way, such as understanding family involvement in the process may be desired (Awsumb et al., 2020), recognize the high value in words and promises (cultural value of *la palabra*, also referred to as personal and professional commitments; Rivera & Cespedes; Roessler & Rubin, 1998), and preference for Spanish speaking provider (Torres Stone et al., 2015). Lastly, although competence and vocational outcome expectancy, may be perceived as personal factors, implementation of interventions and activities that help strengthen the competence and vocational outcome expectancy of transition-age Hispanic youth are warranted.



## **Research Question 2: Parallel Mediation Analysis**

Although research supports the relationship between relatedness and VR engagement (Dutta et al., 2017, 2020; Iwanaga et al., 2021; Fitzgerald et al., 2016; Tansey et al., 2017), the effect of the quality, relevance, and usefulness of pre-ETS services received have been understudied, particularly among transition-age Hispanic youth with disabilities. In this study, a parallel mediation analysis was conducted to evaluate the impact of the three mediators on the relationship between relatedness and VR engagement. Findings of the parallel mediation model revealed that the quality and usefulness of pre-ETS services partially mediated the relationship between relatedness and VR engagement, with usefulness of pre-ETS services being the only mediator having an indirect effect.

Findings of this present study suggest that transition-age Hispanic youths' perceived quality of pre-ETS services delivery along with their perceived usefulness of these services can have a critical impact on their engagement in VR services. In particular, the perceived usefulness of pre-ETS services was the most meaningful significant predictor (i.e., indirect effect) of VR engagement, regardless of the relatedness with their counselor. These findings imply how poorly done pre-ETS services (e.g., VR counselor not working collaboratively with youth to determine pre-ETS service that will support their VR goals) can be detrimental on whether transition-age Hispanic youth engage in VR services, regardless of the relatedness (working alliance) they may have with their VR counselor. Similarly, Ipsen and Goe (2016) observed how among a sample of VR consumers, of which 10% were Hispanic, not receiving the services they wanted was the top number two reason for them to exit the VR program. Further highlighting the impact that services provided to VR consumers can have on their decision to continue engaging in VR services or not. Moreover, it is also important for VR counselors to explain and help transition-

age Hispanic youth understand the purpose of the pre-ETS services being provided, so youth can better understand the service and how it can be useful to them.

### **Research Question 3: Experiences of Transition-age Hispanic Youth Receiving Pre-ETS Services**

Findings of research question 3, identified three themes: (a) *Building and Strengthening Life and Work Skills*; (b) *My Choice or Yours?*; (c) *Opportunities for You, You, and Everyone!*. Overall these findings revealed that receiving pre-ETS services supported the development of life and work skills of transition-age Hispanic youth with disabilities. Work related skills (e.g., time management, communication, work with others, problem-solving) have previously been suggested to be associated with a higher likelihood of obtaining employment (e.g., Brewer, 2013; Gilson et al., 2017; Lindsay et al., 2014). Moreover, this finding provides evidence of how pre-ETS services are effective in strengthening these key skills that may promote competitive integrated employment. Additionally, differences among some participants were observed in relation to how they became engaged in services. Some shared how they made an autonomous choice to seek services, while others mentioned family or friends had recommended such services. Considering the value of family (*familismo*) among Hispanic communities (e.g., Breeding et al., 2005; Stein et al., 2013), this could help explain how some participants may have been encouraged by family members to engage in services. As Awsumb and colleagues (2020) suggested family support can have a significant impact on Hispanic children engaging in services. Lastly, participants revealed how as a result of receiving pre-ETS services they were able to engage in multiple opportunities, such as attending training and receiving guidance on employment. This aligns with prior research that has demonstrated how services such as on-the-job training, job search assistance, job placement services, and work specific and participation

support are associated with successful employment outcomes among transition-age youth (Awsumb et al., 2020; Garcia-Iriarte et al., 2007; Glynn & Schaller, 2017, Rumrill et al., 2016, & Taylor-Ritzler, 2008), including those of Hispanic heritage (Castruita Rios et al., in press).

### ***Delivery of Services Impact on Continuation of Services or Future Employment***

Provision of services among participants in this study was observed to be through collaborative efforts among several stakeholders (e.g., schools, communities, employers, local educational agencies). Collaborations among stakeholders serving youth has been advocated for and proven to promote successful employment outcomes (Flannery et al., 2007; Noonan et al., 2012). This is consistent with WIOA which called for an increase of collaborative efforts as a way to avoid duplication of services and improve the service delivery for transition-age youth. Moreover, some participants in this study also commented on how there was some flexibility in their service delivery process, such as remote options. As a result of the onset of the coronavirus pandemic, remote learning and work have become more popular, particularly among the younger generations (e.g., Nandlall et al., 2022). However, implementing remote options as part of service delivery can be helpful for various individuals including those that may live in rural areas, have limited access to transportation, and/or have a critical medical condition. For example, a virtual pre-ETS program demonstrated promising findings suggesting its effectiveness in enhancing youths' work skill (Haller & Carroll, 2022). Furthermore, implementation of remote options may result in VR consumers being able to select their preferred format, which is important considering some people may prefer one over the other, either due to simple preference or due to disability symptoms.

### ***Supportive of Employment Goals***

Findings for research question 3b revealed that receiving pre-ETS services supported transition-age Hispanic youths' employment goals. Also, participants revealed how having

received pre-ETS services changed their perceptions towards employment. Activities and tools such as career exploration, learning how to apply to a job, and developing a career plan were among some of the factors increasing participants' self-confidence in seeking and obtaining a job. This aligns with prior research that has suggested how individuals with work-related skills are more likely to obtain employment (e.g., Gilson et al., 2017). As for pre-ETS services changing participants' perspectives on employment, the majority of the participants commented on their views positively changing, while there was one participant who noted feeling "scared" of future employment. Moreover, this finding highlights the importance behind the quality and usefulness of the services provided, along with the saliency of working alliance. As observed in this study both quality and usefulness of pre-ETS services were associated with VR engagement. Similarly, working alliance was also associated with VR engagement. Moreover, if these three factors are negative it could potentially result in an experience similar to that participant who disclosed how their experience receiving pre-ETS services was negative.

#### **Research Question 4: Areas of Improvement of Pre-ETS Services for Transition-age Hispanic Youth**

Two themes were identified for research question 4, (a) *Relationship Building* and (b) *Increasing Resources, Accessibility, and Length of Program*. Overall findings of this research question demonstrated how some participants have experienced challenges in their relationships working with providers. For example, some participants shared how providers would provide them with services that did not meet their needs. Additionally, a participant commented on their experience where the provider was not culturally competent and failed to recognize how racial and cultural differences play an important role when planning employment goals as well as providing services. This participant's experience aligns with a study among Latino individuals

who shared how some of the VR counselors they worked with showcased prejudiced attitudes (Hernandez et al., 2006). Considering these voiced concerns by participants in this study as well as Hispanic individuals in previous studies, an implementation of a culturally responsive Person-Centered Planning (PCP) may aid in building better rapport with transition-age Hispanic youth with disabilities while simultaneously collaboratively work with youth in their individualized future plans (Menchetti & Garcia, 2003; Trainor, 2007).

Other suggestions participants had to improve pre-ETS services included having more connections with businesses. A participant specifically mentioned how increasing connections with businesses could result in more availability of internship opportunities for them. Similarly, researchers have strongly advised for the inclusion of employers in transition programs (Fabian, 2007; Gold et al., 2013). Lastly, several participants asked for services to be provided for a longer time period. Similarly, Ipsen & Goe (2016) also observed how the pace of service delivery impacted the overall satisfaction of services and outcomes in rehabilitation programs.

### **Implications of Findings**

Transition-age Hispanic youth with disabilities face unique barriers in engaging in rehabilitation services such as language barriers, cultural mistrust, limited knowledge on services, negative attitudes from employers, and acculturation stress (Breeding et al., 2005; Hernandez et al., 2006; Mueller Reed et al., 2005; Velcoff et al., 2010). Research has noted how Hispanic individuals with disabilities experience racial/ethnic disparities in the VR system (e.g., Shaewitz & Yin, 2021). In particular, Hispanic individuals with disabilities were less likely to apply, less likely to be determined eligible (Capella, 2002; Dziekan & Okoncha, 1993), more likely to be placed on waiting lists (Zea et al., 1997), receive services at a lower rate (Yin et al., 2021), obtain employment at a lower rate (Hernandez et al., 2006; Kaya et al., 2016; Sima et al., 2015; Yin et al., 2021), and more likely to be placed in less competitive jobs (Olney & Kennedy, 2002) than compared to White individuals with disabilities. Thus, implying that apart from the unique barriers Hispanic individuals with disabilities encounter, systemic barriers are an additional layer impacting their engagement in services.

Findings of this study demonstrated how perceptions of stigma by others negatively impacted engagement in VR services. This association has also been observed in other studies, where stigmatizing attitudes by VR counselors resulted in Latina caregivers not seeking services and rather relying on community members instead (Francis et al., 2020). Similarly, Latinos with disabilities disclosed experiencing prejudiced attitudes due to their ethnicity from VR counselors and employers (Hernandez et al., 2006). Given the various barriers Hispanic individuals encounter in accessing and utilizing VR services, it is critical for VR agencies to provide VR counselors with educational training on Hispanic culture and working with Hispanic consumers. Kim and colleagues (2016) stressed the importance of family and cultural values when working

with Hispanic VR consumers by commenting how such factors could impact the VR process and relationship with VR counselor. Additionally, VR counselors must understand how Hispanic consumers' intersectionality of minoritized identities can inform the views this group may have on services and employment. For example, findings of this study revealed how family's annual income, cultural factors (e.g., native language, generational status, higher acculturation to U.S), and age were significant predictors of VR engagement.

Hispanic individuals have also reported the need of better outreach efforts on behalf of VR services. Velcoff and colleagues (2010) study revealed how Latino with disabilities had negative experiences with VR counselors due to their lack of responsiveness, not including them in the process, and placing them in short-term and low skill jobs. Similarly, a needs assessment among personnel from SVRAs and community-based rehabilitation agencies providing VR services revealed that training in outreach efforts to Hispanic VR consumers was the fifth most important training need identified (Tansey et al., 2023). Thus, further highlighting the importance and current need of reevaluating the exiting outreach efforts for this group. For example, SVRAs could consider expanding their efforts through seeking Hispanic individuals through radio stations, community centers, and religious institutions by sharing information about VR services and its benefits. Shedlin et al. (2011) revealed how Hispanic individuals' social networks (e.g., relatives and non-relatives from their native countries) and religious institutions were successful avenues in recruiting individuals from this group. Also, implemented outreach efforts by SVRAs could focus on enhancing community education, advocacy, and participation that could then help build trust in the VR system (Lee et al., 2023). Moreover, Latino individuals with disabilities have pronounced the need for more bilingual and Latino counselors, cultural sensitivity training, availability of materials in Spanish, and education on

disability rights for VR consumers as ways to improve the relationship between Latino community and SVRAs (Velcoff et al., 2010). Furthermore, technical centers such as The Vocational Rehabilitation Technical Center for Quality Employment (VRTAC-QE) are also a great resource for SVRAs, including VR counselors, in learning more about how to strengthen their outreach efforts for Hispanic individuals, including transition-age youth, as well as how to work with Hispanic VR consumers. Lastly, collaborating with individuals who are members of the Latino community could serve as a liaison and aid in increasing the involvement and interactions with Latino individuals (Trainor, 2007) which can consequently help disseminate the information about VR programs and services being provided for transition-age Hispanic youth. As discussed by Francis and colleagues (2020), due to cultural mistrust and cultural values such as *familismo* (e.g., closeness) Latinos may turn to community members for information on “trustworthy” services than professionals.

In addition, considering the age range of this group along with their Latino cultural values, development of an effective outreach program for this group should focus on the school level. Early exposure to transition planning and services among transition-age youth with disabilities have been suggested over and over (e.g., Ankeny et al., 2009; Kilgo et al., 1989) with some stakeholders (e.g., family) calling for transition planning beginning earlier than the set age (e.g., some states 14 years old; Ankeny et al., 2009). Moreover, focusing outreach efforts at schools can help in sharing information surrounding transition planning at an earlier age, allowing parents to begin familiarizing with the process hopefully to then result in their engaging in transition planning at an earlier age. Given that as observed in this study, family support plays a critical role in transition-age Hispanic youths’ engagement in VR services. Additionally, researchers have suggested how earlier engagement in employment, which at times is supported



and/or provided via VR programs, leads to a higher likelihood of successful employment outcomes (e.g., Ankeny et al., 2009; Luecking & Fabian, 2000; Wittenburg & Maag, 2002). Furthermore, by implementing outreach efforts in schools, it can help increase the likelihood of parents accessing information and learning about VR programs and the services and benefits of utilizing such services. Throughout the development and implementation of such outreach efforts in schools, it is important too to consider the school district and communities' resources to ensure the adequate information and support is being provided to parents and transition-age Hispanic youth as they begin learning and planning for the transition process.

Moreover, given the acculturation scale utilized in this study evaluated primarily language preferences on various aspects (e.g., frequency they spoke or thought in a specific language, engagement with media and books from a specific language, understand television or radio in a specific language) as well as acculturation to the U.S. being a significant positive predictor of VR engagement, it implies how the interaction between language preferences and acculturation impact VR engagement. In other words, individuals who may have obtained a higher score on acculturation items assessing Hispanic cultural domains and lower in U.S. cultural domains, would suggest that they feel more comfortable with Spanish than English. Thus, implying a preference for Spanish language which consequently could possibly impact their communication with their VR counselor, particularly if their VR counselor does not speak Spanish. Furthermore, it is imperative for state VR agencies to increase their efforts in recruiting Spanish speaking VR counselors as well as continuing providing licensed or certified interpreters in situations where the VR counselor does not speak Spanish.

Findings of this study revealed that working alliance (relatedness), competence (vocational self-efficacy), and vocational outcome expectancy predicted VRE. Additionally,

autonomy (vocational internal motivation) was positively associated with VRE. Furthermore, VR counselors should incorporate these constructs in their service provision and consider effective interventions that could strengthen these factors (Iwanaga et al., 2021). Given these are factors that can be controlled by the VR counselor, counselors should implement strategies to help promote these factors among transition-age Hispanic youth with disabilities. For example, Iwanaga and colleagues (2021) discussed how several SVRAs have implemented motivational interviewing as an effort to increase the working alliance between VR counselors and their clients, and consequently should in-service training on this topic should be provided. Researchers argued that strengthening VR counselors and consumers working alliance would consequently impact VR engagement. In addition, Iwanaga et al. (2017) suggested strategies for self-determination theory interventions, including: (a) empowering individuals with disabilities to make autonomous choices through a collaborative decision-making process on employment related matters; (b) providing support on attainable and realistic goals and positive feedback as a way to support consumers competence; and (c) developing trust and establishing goals collaboratively as an effort to foster a strong working alliance.

### **Limitations**

The present study had several limitations that should be considered in generalizability of the findings. First, as a result of the nature of the study and the set inclusion criteria, the study was prone to a sampling bias. The sample of this study was a convenient sample meaning that participants in this study had to meet the selected criteria and opted to participate based on availability and interest. Due to participants in this study already having a connection with SVRAs, it can itself influence the participants' VR engagement. Additionally, the findings of this study cannot be generalized to transition-age Hispanic youth with disabilities in general, given

that only those already involved in vocational rehabilitation services were examined. Thus, not accounting for transition-age Hispanic youth that are not currently participating in vocational rehabilitation services. In addition, because majority of the sample were second or third generation American, English speakers (native language), lived in urban areas, bicultural (associated with U.S. and Hispanic cultural domains), completed at least high school, had a medium family annual income (i.e., \$50,000 or more), and lived with family, it further limits the generalizability of transition-age Hispanic youth in VR programs who do not fall under these categories. Furthermore, because participants were not asked explicitly about the length of time they had been receiving services for at the of the survey, results of this study should be interpreted cautiously. This is due to the possibility that some participants may have been receiving services for less than a year at the time of the survey and thus their experiences and perceptions of the services may be different than compared to those who may have been receiving services for 3 years. Similarly, given the average rating of perceived quality, relevance, and usefulness of pre-ETS services was high (4 out of 5), this could have also contribute to participants being more likely to share positive experiences on the delivery of services.

Next, due to the methods utilized for data collection, there is a risk for the reliability of the responses of participants. Since one of the outlets for data collection was social media (e.g., posting flyer on LinkedIn and Facebook) and a financial compensation was provided to participants who completed the survey, this increased the risk for fraudulent responses (e.g., bots, duplicates). To help detect fraudulent responses different measures were implemented in the Qualtrics survey such as the following: Qualtrics security features detecting bots and duplicates, checking for repeated IP Addresses, added embedded questions that were only visible to bots, and a CAPTCHA question. To further try to ensure the reliability of the collected responses, a

second review of the data collected was done prior to conducting the data analysis where responses with duplicated IP addresses that were not detected the first time were dropped along with responses that did not meet the inclusion criteria and the short-answer questions had the same answer verbatim. Furthermore, despite all these extra security measures and reviewal processes to help guarantee the reliability of the responses, there still remains some risk given that some bots may have been capable of breaching these safety measures. Therefore, the interpretations of the results of this study should be done cautiously.

Third, the items of the BAS scale were not randomized as suggested by Marin and Gamba (1996). As a result, the nonrandomization of items could have possibly impacted participants' responses. Fourth, for the qualitative questions in this study participants were asked about their experiences in receiving pre-ETS services. Participants responses could have been influenced by social desirability causing for them leaning towards providing positive and more "socially acceptable" responses to these questions. Lastly, the sample size for this study ( $n = 149$ ) did not meet the minimum sample size ( $n = 193$ ) determined by a priori G\*power analysis. Consequently, the overall results of this study should be interpreted with caution due to this study being under powered thus resulting in biased conclusions and higher probability for type II error (false negative; Maxwell, 2004; Christley, 2010; Turner et al., 2013; Kühberger et al., 2014) thus limiting the overall inferences of this present study.

### **Future Directions**

Given the limited research surrounding the engagement of transition-age Hispanic youths with disabilities in VR services, this study contributes to the literature by providing further insight on the factors impacting engagement in VR services. Moreover, given this study was primarily focused on only transition-age Hispanic youth that were receiving vocational

rehabilitation services at the time of the survey, future studies should examine the employment experiences of those that are not engaged in such services. Although the literature has noted that Hispanic individuals, including transition-age youth with disabilities, underutilize vocational rehabilitation services (Castruita Rios et al., in press) and encounter barriers such as dual minority status, acculturation, and environmental factors have been argued to be barriers to participation in services (e.g., Velcoff et al., 2010; Lee et al., 2023). It is critical for future studies to further investigate more thoroughly the factors influencing the lack of participation in VR services, knowledge of VR services, and employment experiences of this group. Further investigating this area can be helpful for researchers and practitioners in identifying the support and tailoring of services to help increase the engagement of this group, their employment outcomes, and ultimately their quality of life. Additionally, such investigation can help identify stronger outreach efforts for this population through consultation of transition-age Hispanic youth (and their families).

Based on the findings of this study surrounding the impact generational status and acculturation patterns had on predicting the engagement in VR services among transition-age Hispanic youth with disabilities. Further investigation is warranted to better comprehend the effect generational status and acculturation have on individual's decision to engage in VR services. For example, future studies should consider incorporating the length of time participants have lived in the United States as an additional variable in efforts to better understand this phenomenon. Researchers have previously observed an impact between length of time living in the U.S. and acculturation which consequently has impacted other areas of individuals lives such as engagement in care (Obuah, 2020; Rogler et al., 1991).

Moreover, considering the limited studies centered on Hispanic individuals with disabilities, including transition-age youth, in VR programs, future studies should further examine this population. Given researchers have suggested differences in service provision across state VR agencies (e.g., Roux et al., 2018), future studies should evaluate the application rates, eligibility rates, service provision rates, and employment outcomes among transition-age Hispanic youth in VR programs across states. Findings of this study could help further understand and determine state differences across VR programs experienced by transition-age Hispanic VR consumers, which can further help inform areas of improvement to strengthen VR programs for this group.

As quantitative data is limited to the areas identified by researchers, future studies should implement a qualitative methodology to help provide a “bigger picture” framework as to the actual experiences of transition-age Hispanic youths’ transition to adulthood. Specifically, utilization of semi-structured interviews, case studies, or focus groups are encouraged to further comprehend this group’s experiences through richer data. Moreover, future studies could do a comparison between two focus groups (one receiving VR services, the other not receiving VR services) to explore differences and similarities on their transition to adulthood experiences (e.g., employment), and further understand the impact of VR services and barriers impeding the accessibility and utilization of these services. In addition, implementing a disability lens and disability culture framework in future qualitative studies could help further understand how the intersection of ethnicity and disability may impact transition-age Hispanic youths experiences in VR programs.

Additionally, considering quality and usefulness of pre-ETS services predicted VR engagement and usefulness of pre-ETS mediated the relationship between working alliance and

engagement, future studies should examine the perceptions of quality, relevance, and usefulness of pre-ETS services among transition-age youth, including those of Hispanic heritage.

Considering this topic has been understudied, further research can help investigate if there are differences in these perceptions across race/ethnicity groups and/or states. Additionally, given the sample size of this study was small (and underpowered) and data was collected through various platform outside SVRAs, future studies with larger sample size (and power) can help better understand the perceptions of transition-age Hispanic youths on the quality, relevance, and usefulness of the pre-ETS services they are receiving.

### **Conclusion**

This study aimed in examining the factors impacting transition-age Hispanic youths' engagement in VR services along with the effect the quality, relevance, and usefulness of pre-ETS services received on the relationship between relatedness and VR engagement. Additionally, this study also investigated the overall experiences receiving pre-ETS services of this group along with how it has contributed to their employment goals. Findings of this study revealed several predictors of VR engagement among transition-age Hispanic youth, with age (older), acculturation level to U.S., perceptions of stigma by others, and vocational outcome expectancy being some of the identified predictors. Results also demonstrated that perceived usefulness of services had a direct effect on VR engagement regardless of the existing working alliance between consumer and counselor. Moreover, qualitative findings of this study revealed strengths and areas of improvement to the existing service delivery towards transition-age Hispanic youth. Findings of this study can help rehabilitation practitioners, primarily VR counselors, identify and implement strategies as to how to better support the engagement of transition-age Hispanic youth in VR programs.

## References

- Abdullah, T., & Brown, T. L. (2011). Mental illness stigma and ethnocultural beliefs, values, and norms: An integrative review. *Clinical psychology review, 31*(6), 934-948.
- Achola, E. O., & Greene, G. (2016). Person-family centered transition planning: Improving post-school outcomes to culturally diverse youth and families. *Journal of Vocational Rehabilitation, 45*(2), 173-183.
- Ali, A., Scior, K., Ratti, V., Strydom, A., King, M., & Hassiotis, A. (2013). Discrimination and other barriers to accessing health care: perspectives of patients with mild and moderate intellectual disability and their careers. *PloS one, 8*(8), e70855.
- Alverson, H. S., Drake, R. E., Carpenter-Song, E. A., Chu, E., Ritsema, M., & Smith, B. (2007). Ethnocultural variations in mental illness discourse: some implications for building therapeutic alliances. *Psychiatric Services, 58*(12), 1541-1546.
- Ames, M. E., McMorris, C. A., Alli, L. N., & Bebko, J. M. (2016). Overview and evaluation of a mentorship program for university students with ASD. *Focus on Autism and Other Developmental Disabilities, 31*(1), 27-36.
- Arntson, P., Droge, D., Norton, R., & Murray, E. (1986). The perceived psychosocial consequences of having epilepsy. In S. Whitman & B. P. Hermann (Eds). *Psychopathology in epilepsy: Social dimensions*. Oxford University Press.
- Andelic, N., Stevens, L. F., Sigurdardottir, S., Arango-Lasprilla, J. C., & Roe, C. (2012). Associations between disability and employment 1 year after traumatic brain injury in a working age population. *Brain Injury, 26*(3), 261-269.  
<https://doi.org/10.3109/02699052.2012.654589>



- Andrade-González, N., & Fernández-Liria, A. (2016). Spanish adaptation of the working alliance Inventory-Short (WAI-S). *Current Psychology, 35*(1), 169-177.  
<https://doi.org/10.1007/s12144-015-9365-3>
- Ankeny, E. M., Wilkins, J., & Spain, J. (2009). Mothers' experiences of transition planning for their children with disabilities. *Teaching Exceptional Children, 41*(6), 28-36.
- Annesi, J. J., Marti, C. N., & Stice, E. (2010). A meta-analytic review of the Youth Fit For Life intervention for effects on body mass index in 5-to 12-year-old children. *Health Psychology Review, 4*(1), 6-21.
- Annesi, J. J., Walsh, S. M., Greenwood, B. L., Mareno, N., & Unruh-Rewkowski, J. L. (2017). Effects of the Youth Fit 4 Life physical activity/nutrition protocol on body mass index, fitness and targeted social cognitive theory variables in 9-to 12-year-olds during after-school care. *Journal of Pediatrics and Child Health, 53*(4), 365-373.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469–480. <https://doi.org/10.1037/0003-066X.55.5.469>
- Association of University Centers on Disabilities. (2014). *WIOA changes to Rehab Act*.  
[https://www.aucd.org/docs/wioa-changes-to-rehab-act%20\(1\).pdf](https://www.aucd.org/docs/wioa-changes-to-rehab-act%20(1).pdf)
- Atdjian, S., & Vega, W. A. (2005). Disparities in mental health treatment in US racial and ethnic minority groups: Implications for psychiatrists. *Psychiatric Services, 56*(12), 1600-1602.
- Aud, S., Hussar, W., Kena, G., Bianco, K., Frohlich, L., Kemp, J., & Tahan, K. (2011). *The condition of education 2011* (NCES 2011-033). Washington, DC: U.S. Department of Education. *National Center for Education Statistics*.

- Auerbach, E. S., & Richardson, P. (2005). The long-term work experiences of persons with severe and persistent mental illness. *Psychiatric Rehabilitation Journal*, 28, 267–273. <https://doi.org/10.2975/28.2005.267.273>
- Auerbach, E. S., & Richardson, P. (2005). The long-term work experiences of persons with severe and persistent mental illness. *Psychiatric Rehabilitation Journal*, 28, 267–273. <https://doi.org/10.2975/28.2005.267.273>
- Austin, J. K. (1989). Comparison of child adaptation to epilepsy and asthma. *Journal of Child and Adolescent Psychiatric Nursing*, 2(4), 139-144.
- 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), 48-60. <https://doi.org/10.1891/2168-6653.30.1.48>
- Awsumb, J. M., Balcazar, F. E., & Keel, J. M. (2020). Youth with disabilities: Are vocational rehabilitation services improving employment outcomes? *Journal of Vocational Rehabilitation*, 52(1), 61-73. <https://doi.org/10.3233/JVR-191060>
- Baker, P. M., Linden, M. A., LaForce, S. S., Rutledge, J., & Goughnour, K. P. (2018). Barriers to employment participation of individuals with disabilities: Addressing the impact of employer (mis) perception and policy. *American Behavioral Scientist*, 62(5), 657-675.
- Balcazar, F. E., Kelly, E. H., Keys, C. B., & Balfanz-Vertiz, K. (2011). Using peer mentoring to support the rehabilitation of individuals with violently acquired spinal cord injuries. *Journal of Applied Rehabilitation Counseling*, 42(4), 3-11.
- Ballesteros, J. L., & Hilliard, R. C. (2016). US-Based Latina/O college students' attitudes toward online counseling. *International Journal for the Advancement of Counselling*, 38(4), 269-285.

- Bamatter, W., Carroll, K. M., Añez, L. M., Paris Jr, M., Ball, S. A., Nich, C., ... & Martino, S. (2010). Informal discussions in substance abuse treatment sessions with Spanish-speaking clients. *Journal of substance abuse treatment, 39*(4), 353-363.
- Barnes, C., & Mercer, G. (2005). Disability, work, and welfare: Challenging the social exclusion of disabled people. *Work, employment and society, 19*(3), 527-545.  
<https://doi.org/10.1177/0950017005055669>
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173.
- Barton-Weston, H., Chen, W. J., Fike, D., Griffiths, R., Soukup, G., & Chen, L. S. (2021). Evaluation of a mandatory theory-based physical activity course on motivation among predominantly Hispanic college students. *Journal of American College Health, 1-7*.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review, 84*(2), 191.
- Bandura, A. (2004). Health promotion by social cognitive means. *Health Education & Behavior, 31*, 143–164. <http://dx.doi.org/10.1177/1090198104263660>
- Beckley, M. N. (2007). The influence of the quality and quantity of social support in the promotion of community participation following stroke. *Australian Occupational Therapy Journal, 54*(3), 215-220. <https://doi.org/10.1111/j.1440-1630.2007.00643.x>
- Bedini, L. A. (2000). " Just sit down so we can talk:" perceived stigma and community recreation pursuits of people with disabilities. *Therapeutic Recreation Journal, 34*(1), 55-68.

- Bellini, J. (2003). Counselors' multicultural competencies and vocational rehabilitation outcomes in the context of counselor—client racial similarity and difference. *Rehabilitation Counseling Bulletin, 46*(3), 164-173.
- Belton, M. A. (1984). *The effect of therapist dialect upon the black English speaking patients perception of therapist empathy, warmth, genuineness, and expertise*. Dissertation Abstract International, *44*(8-B), 2547.
- Bernier, R., Mao, A., & Yen, J. (2010). Psychopathology, families, and culture: autism. *Child and Adolescent Psychiatric Clinics, 19*(4), 855-867.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology, 46*(1), 5-34. <https://doi.org/10.1111/j.1464-0597.1997.tb01087.x>
- Berry, J. W. (1998). Acculturation stress. In P. B. Organista, K. M. Chun, & G. Marin (Eds.), *Readings in ethnic psychology* (pp. 117–122). New York: Routledge.
- Bezyak, J. L., Berven, N. L., & Chan, F. (2011). Stages of change and physical activity among individuals with severe mental illness. *Rehabilitation Psychology, 56*(3), 182-190. <https://doi.org/10.1037/a0024207>
- Blessing, L. A., & Jamieson, J. (1999). Employing persons with a developmental disability: Effects of previous experience. *Canadian Journal of Rehabilitation, 12*(4), 211–221.
- Blue-Banning, M. J., Turnbull, A. P., & Pereira, L. (2000). Group action planning as a support strategy for Hispanic families: Parent and professional perspectives. *Mental retardation, 38*(3), 262-275. [https://doi.org/10.1352/0047-6765\(2000\)038%3C0262:GAPAAS%3E2.0.CO;2](https://doi.org/10.1352/0047-6765(2000)038%3C0262:GAPAAS%3E2.0.CO;2)
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology, 3*(2), 77-101.

- Braun, V., & Clarke, V. (2021). *Thematic Analysis: A Practical Guide*. SAGE Publishing.
- Breeding, R. R., Harley, D. A., Rogers, J. B., & Crystal, R. M. (2005). The Kentucky migrant vocational rehabilitation program: A demonstration project for working with Hispanic farm workers. *Journal of Rehabilitation, 71*(1), 32.
- Brewer, L. (2013). *Enhancing youth employability: What? Why? and How? Guide to core work skills*. Geneva, Switzerland: ILO.
- Brooks, J. M., Huck, G., Iwanaga, K., Chan, F., Wu, J. R., Finnicum, C. A., ... & Estala-Gutierrez, V. Y. (2018). Towards an integration of the health promotion models of self-determination theory and theory of planned behavior among people with chronic pain. *Rehabilitation Psychology, 63*(4), 553. <https://doi.org/10.1037/rep0000245>
- Bryan, J., & Henry, L. (2012). A model for building school–family–community partnerships: Principles and process. *Journal of Counseling & Development, 90*(4), 408-420. <https://doi.org/10.1002/j.1556-6676.2012.00052.x>
- Boeltzig, H., Timmons, J. C., & Butterworth, J. (2009). Gender differences in employment outcomes of individuals with developmental disabilities. *Journal of Vocational Rehabilitation, 31*(1), 29-38.
- Bohart, A. C., & Wade, A. G. (2013). The client in psychotherapy. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (6th ed., pp. 219-257). Wiley.
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, research & practice, 16*(3), 252.

- Bose, J. L., Geist, G. O., Lam, C. S., Slaby, M., & Arens, M. (1998). Factors affecting job placement success in proprietary rehabilitation. *Journal of Applied Rehabilitation Counseling, 29*(3), 19.
- Bowman, D., Scogin, F., Floyd, M., & McKendree-Smith, N. (2001). Psychotherapy length of stay and outcome: A meta-analysis of the effect of therapist sex. *Psychotherapy: Theory, Research, Practice, Training, 38*(2), 142.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology, 3*(2), 77-101.
- Brocato, J. (2013). The impact of acculturation, motivation, and the therapeutic alliance on treatment retention and outcomes for Hispanic drug-involved probationers. *Journal of Ethnicity in Criminal Justice, 11*(3), 150-180.
- Brostrand, H. L. (2006). *Evaluating the Tilting at Windmills curriculum's effectiveness in changing attitudes toward people with disabilities in the workplace*. (Doctoral dissertation, Southern Illinois University at Carbondale).
- Buciuniene, I., & Kazlauskaitė, R. (2010). Integrating people with disability into the workforce: the case of a retail chain. *Equality, diversity and inclusion: An International Journal, 29*(5), 534-538. <https://doi.org/10.1108/02610151011052816>
- Burgess, S., & Cimera, R. E. (2014). Employment outcomes of transition-aged adults with autism spectrum disorders: A state of the states report. *American journal on intellectual and developmental disabilities, 119*(1), 64-83.
- Burke, M. M., & Hodapp, R. M. (2014). Relating stress of mothers of children with developmental disabilities to family–school partnerships. *Intellectual and Developmental Disabilities, 52*(1), 13-23. <https://doi.org/10.1352/1934-9556-52.1.13>

- Byars-Winston, A., & Rogers, J. G. (2019). Testing intersectionality of race/ethnicity× gender in a social–cognitive career theory model with science identity. *Journal of Counseling Psychology, 66*(1), 30. <https://psycnet.apa.org/doi/10.1037/cou0000309>
- Cabral, R. R., & Smith, T. B. (2011). Racial/ethnic matching of clients and therapists in mental health services: A meta-analytic review of preferences, perceptions, and outcomes. *Journal of Counseling Psychology, 58*(4), 537–554. <https://doi.org/10.1037/a0025266>
- Calzada, E. J., Tamis-LeMonda, C. S., & Yoshikawa, H. (2013). Familismo in Mexican and Dominican families from low-income, urban communities. *Journal of Family Issues, 34*(12), 1696-1724. <https://doi.org/10.1177/0192513X12460218>
- Cannella, H. I., O'Reilly, M. F., & Lancioni, G. E. (2005). Choice and preference assessment research with people with severe to profound developmental disabilities: A review of the literature. *Research in developmental disabilities, 26*(1), 1-15. <https://doi.org/10.1016/j.ridd.2004.01.006>
- Carter, C. M. (2001). Using choice with game play to increase language skills and interactive behaviors in children with autism. *Journal of Positive Behavior Interventions, 3*(3), 131-151.
- Carter, E. W., Trainor, A. A., Cakiroglu, O., Swedeen, B., & Owens, L. A. (2010). Availability of and access to career development activities for transition-age youth with disabilities. *Career Development for Exceptional Individuals, 33*(1), 13-24. <https://doi.org/10.1177/0885728809344332>

- Carter, E. W., Awsumb, J. M., Schutz, M. A., & McMillan, E. D. (2021). Preparing youth for the world of work: Educator perspectives on pre-employment transition services. *Career Development and Transition for Exceptional Individuals*, 44(3), 161-173.
- Castro-Blanco, D., North, K. K., & Karver, M. S. (2010). Introduction: The problem of engaging high-risk adolescents in treatment. In D. E. Castro-Bianco & M. S. Karver (Eds.), *Elusive alliance: Treatment engagement strategies with high-risk adolescents* (pp. 3-19).
- Castruita Rios, Y., Lee, B., Umucu, E., Estala-Gutiérrez, V., Kim, J., & Tansey, T. (in press). Facilitators and barriers of employment among Hispanic/Latinx youth with disabilities. *Rehabilitation Counseling Bulletin*.
- Cauce, A. M., Domenech-Rodriguez, M., Contreras, J. M., Kerns, K. A., & Neal-Barnett, A. M. (2002). Latino children and families in the United States. *Latino children and families in the United States*, 3-25.
- Cazden, C. B., Carrasco, R., Maldonado-Guzman, A. A., & Erikson, F. (1985). The contribution of ethnographic research to bicultural bilingual education. In J. E. Alatis & J. J. Staczek (Eds.), *Perspectives on bilingualism and bilingual education* (pp.153-169). Georgetown University Press.
- Chambless, C. E., Julnes, G., McCormick, S. T., & Reither, A. (2011). Supporting work effort of SSDI beneficiaries: Implementation of benefit offset pilot demonstration. *Journal of Disability Policy Studies*, 22(3), 179-188.
- Chan, F., Cheing, G., Chan, J. Y. C., Rosenthal, D. A., & Chronister, J. (2006). Predicting employment outcomes of rehabilitation clients with orthopedic disabilities: A CHAID analysis. *Disability and Rehabilitation*, 28(5), 257-270.



- Chan, F., McMahon, B. T., Shaw, L. R., & Lee, G. (2004). Psychometric validation of the expectations about Rehabilitation Counseling Scale: a preliminary study. *Journal of Vocational Rehabilitation, 20*(2), 127-133.
- Chan, F., Livneh, H., Pruetz, S. R., Wang, C.-C., & Zheng, L. X. (2009). Societal attitudes toward disability: Concepts, measurements, and interventions. In F. Chan, E. Da Silva Cardoso, & J. A. Chronister (Eds.), *Understanding psychosocial adjustment to chronic illness and disability: A handbook for evidence-based practitioners in rehabilitation* (pp. 333–367). Springer Publishing Company.
- Chan, F., Berven, N. L., & Thomas, K. R. (2015). *Counseling theories and techniques for rehabilitation and mental health professionals*. Springer.
- Chan, F., Shaw, L. R., McMahon, B. T., Koch, L., & Strauser, D. (1997). A model for enhancing rehabilitation counselor–consumer working relationships. *Rehabilitation Counseling Bulletin, 41*(2), 122-137.
- Chao, S. Y., Chen, R. K., Grizzell, S. T., Wilson, K. B., & Lewis, T. A. (2022). Factors Influencing the Career Decision Self-Efficacy and Outcome Expectations of College Students With Disabilities. *Rehabilitation Research, Policy, and Education*.
- Chao, P. J., Steffen, J. J., & Heiby, E. M. (2012). The effects of working alliance and client-clinician ethnic match on recovery status. *Community Mental Health Journal, 48*(1), 91-97.
- Chappel, S. L., & Somers, B. C. (2010). Employing persons with autism spectrum disorders: A collaborative effort. *Journal of Vocational Rehabilitation, 32*(2), 117-124.

- Cheng, H. L., Kwan, K. L. K., & Sevig, T. (2013). Racial and ethnic minority college students' stigma associated with seeking psychological help: Examining psychocultural correlates. *Journal of counseling psychology, 60*(1), 98.
- Chin Chou, C., Chan, F., & Tsang, H. W. (2004). Stages of Change Among Chinese People With Mental Illness: A Preliminary Study. *Rehabilitation Psychology, 49*(1), 39.
- Chin Chou, C., Ditchman, N., Pruett, S. R., Chan, F., & Hunter, C. (2009). Application of self-efficacy related theories in psychosocial interventions. In F. E. Chan, E. E. Da Silva Cardoso, & J. A. Chronister (Eds.), *Understanding psychosocial adjustment to chronic illness and disability: A handbook for evidence-based practitioners in rehabilitation*
- Christley, R. M. (2010). Power and error: increased risk of false positive results in underpowered studies. *The Open Epidemiology Journal, 3*(1), 16-19.  
<http://dx.doi.org/10.2174/1874297101003010016>
- Chronister, J. A., Johnson, E. K., & Berven, N. L. (2006). Measuring social support in rehabilitation. *Disability and Rehabilitation, 28*(2), 75-84.
- Chronister, J., Fitzgerald, S., & Chou, C. C. (2021). The meaning of social support for persons with serious mental illness: A family member perspective. *Rehabilitation Psychology, 66*(1), 87-101. <https://doi.org/10.1037/rep0000369>
- Cimera, R. E., Rumrill, P. D., Chan, F., Kaya, C., & Bezyak, J. L. (2015). Vocational rehabilitation services and outcomes for transition-age youth with visual impairments and blindness. *Journal of Vocational Rehabilitation, 43*(2), 103-111.  
<https://doi.org/10.3233/JVR-150760>

- Cimera, R. E., Burgess, S., & Wiley, A. (2013). Does providing transition services early enable students with ASD to achieve better vocational outcomes as adults?. *Research and Practice for Persons with Severe Disabilities*, 38(2), 88-93.
- Clarkin, J. F., & Levy, K. N. (2004). The influence of client variables on psychotherapy. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (5th ed., pp. 194–226). Hoboken, NJ: Wiley.
- Cmar, J. L., & Steverson, A. (2021). Job-Search Activities, Job-Seeking Barriers, and Work Experiences of Transition-Age Youths With Visual Impairments. *Journal of Visual Impairment & Blindness*, 115(6), 479-492.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd Ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohen, J. (1992). Quantitative methods in psychology: A power primer. *Psychological Bulletin*, 112, 155-159.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310–357.
- Corrigan, P. W., Angell, B., Davidson, L., Marcus, S. C., Salzer, M. S., Kottsieper, P., ... & Stanhope, V. (2012). From adherence to self-determination: Evolution of a treatment paradigm for people with serious mental illnesses. *Psychiatric Services*, 63(2), 169-173.
- Corrigan, P. W., Bink, A. B., Schmidt, A., Jones, N., & Rüsç, N. (2016). What is the impact of self-stigma? Loss of self-respect and the “why try” effect. *Journal of Mental Health*, 25(1), 10-15.

- Corrigan, P. W., Sokol, K. A., & Rüschi, N. (2013). The impact of self-stigma and mutual help programs on the quality of life of people with serious mental illnesses. *Community Mental Health Journal, 49*(1), 1-6.
- Corrigan, P. W., & Watson, A. C. (2002). The paradox of self-stigma and mental illness. *Clinical psychology: Science and practice, 9*(1), 35.
- Corrigan, P. W., Watson, A. C., & Barr, L. (2006). The self-stigma of mental illness: Implications for self-esteem and self-efficacy. *Journal of social and clinical psychology, 25*(8), 875.
- Cottone, J. G., Drucker, P., & Javier, R. A. (2002). Gender differences in psychotherapy dyads: Changes in psychological symptoms and responsiveness to treatment during 3 months of therapy. *Psychotherapy: Theory, Research, Practice, Training, 39*(4), 297-308. <https://doi.org/10.1037/0033-3204.39.4.297>
- Creswell, J. W. (2009). Mapping the field of mixed methods research. *Journal of mixed methods research, 3*(2), 95-108.
- Cuéllar, I., Arnold, B., & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the original ARSMA scale. *Hispanic journal of behavioral sciences, 17*(3), 275-304. <https://doi.org/10.1177/07399863950173001>
- Cuéllar, I., Harris, L. C., & Jasso, R. (1980). An acculturation scale for Mexican American normal and clinical populations. *Hispanic Journal of Behavioral Sciences*.
- Da Silva Cardoso, E., Chan, F., Berven, N. L., & Thomas, K. R. (2003). Measuring readiness to change among individuals in residential therapeutic community programs for treatment of substance abuse. *Rehabilitation Counseling Bulletin, 47*(1), 34-45.

- D'Angelo, E. J., Llerena-Quinn, R., Shapiro, R., Colon, F., Rodriguez, P., Gallagher, K., & Beardslee, W. R. (2009). Adaptation of the preventive intervention program for depression for use with predominantly low-income Latino families. *Family Process, 48*(2), 269-291. <https://doi.org/10.1111/j.1545-5300.2009.01281.x>
- Danzl, M. M., Etter, N. M., Andreatta, R. D., & Kitzman, P. H. (2012). Facilitating neurorehabilitation through principles of engagement. *Journal of Allied Health, 41*(1), 35-41.
- Davidson, L., Haglund, K. E., Stayner, D. A., Rakfeldt, J., Chinman, M. J., & Kraemer Tebes, J. (2001). "It was just realizing... that life isn't one big horror": A qualitative study of supported socialization. *Psychiatric Rehabilitation Journal, 24*(3), 275.
- Davidson, L., Stayner, D. A., Nickou, C., Styron, T. H., Rowe, M., & Chinman, M. L. (2001). "Simply to be let in": inclusion as a basis for recovery. *Psychiatric rehabilitation journal, 24*(4), 375.
- Danek, M. M., & Lawrence, R. E. (1982). Client-counselor racial similarity and rehabilitation outcomes. *Journal of Rehabilitation, 48*(3), 54.
- Dean, E. E., Shogren, K. A., Hagiwara, M., & Wehmeyer, M. L. (2018). How does employment influence health outcomes? A systematic review of the intellectual disability literature. *Journal of Vocational Rehabilitation, 49*(1), 1-13.
- Deci, E. L., & Ryan, R. M. (2002). *Handbook of self-determination research (2002)*. Rochester, NY: University of Rochester Press.
- Deci, E. L., & Ryan, R. M. (2002). Self-determination research: Reflections and future directions. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 431–441). University of Rochester Press.

- Deci, E. L., & Ryan, R. M. (2012). Self-determination theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (Vol. 1, pp. 416–437). Thousand Oaks, CA: Sage.
- Del Castillo, J. C. (1970). The influence of language upon symptomatology in foreign-born patients. *American Journal of Psychiatry*, *127*(2), 242-244.
- DeNavas-Walt, C., & Proctor, B. D. (2015). Income and poverty in the United States: 2014, table B-2, current population reports, P 60–252. Washington, D.C: U.S. Department of Commerce, U.S. Census Bureau. Retrieved from <http://www.census.gov/content/dam/Census/library/publications/2015/demo/p60-252.pdf#TableB-2>
- DeNavas-Walt, C., Proctor, B. D., & Smith, J. C. (2013). Income, Poverty, and Health Insurance Coverage in the United States: 2012. Current Population Reports P60-245. *US Census Bureau*.
- Des Rosiers, S. E., Schwartz, S. J., Zamboanga, B. L., Ham, L. S., & Huang, S. (2013). A cultural and social cognitive model of differences in acculturation orientations, alcohol expectancies, and alcohol-related risk behaviors among Hispanic college students. *Journal of Clinical Psychology*, *69*(4), 319-340. <https://doi.org/10.1002/jclp.21859>
- DiCerbo, P. (2000). Risking a future: How do we keep Hispanic youth in school? *On the Move with School-Based Mental Health*, *5*(1), 1–6.
- Dolgin, D. L., Salazar, A., & Cruz, S. (1987). The Hispanic treatment program: Principles of effective psychotherapy. *Journal of Contemporary Psychotherapy*, *17*(4), 285-299.

- Dominguez, K., Penman-Aguilar, A., Chang, M. H., Moonesinghe, R., Castellanos, T., Rodriguez-Lainz, A., & Schieber, R. (2015). Vital signs: leading causes of death, prevalence of diseases and risk factors, and use of health services among Hispanics in the United States—2009–2013. *Morbidity and Mortality Weekly Report*, *64*(17), 469.
- Dunham, M. D., Holliday, G. A., Douget, R. M., Koller, J. R., Presberry, R., & Wooderson, S. (1998). Vocational rehabilitation outcomes of African American adults with specific learning disabilities. *Journal of Rehabilitation*, *64*(3), 36-41.
- Dunstan, D. A., Falconer, A. K., & Price, I. R. (2017). The relationship between hope, social inclusion, and mental wellbeing in supported employment. *The Australian Journal of Rehabilitation Counselling*, *23*(1), 37-51.
- Dutta, A., Chan, F., Kundu, M. M., Kaya, C., Brooks, J., Sánchez, J., & Tansey, T. N. (2017). Assessing vocational rehabilitation engagement of people with disabilities: A factor-analytic approach. *Rehabilitation Counseling Bulletin*, *60*(3), 145-154.  
<https://doi.org/10.1177/0034355215626698>
- Dutta, A., Gerve, R., Chan, F., Chou, C. C., & Ditchman, N. (2008). Vocational rehabilitation services and employment outcomes for people with disabilities: A United States study. *Journal of occupational rehabilitation*, *18*(4), 326-334.  
<https://doi.org/10.1007/s10926-008-9154-z>
- Dutta, A., Kundu, M., Iwanaga, K., Ditchman, N., & Chan, F. (2020). Transition engagement of African American youth with disabilities: A serial mediation model. *Exceptional Children*, *86*(3), 276-292.
- Dutta, A., Kundu, M., Wu, J. R., Iwanaga, K., Bezyak, J., Boen, R., ... & Chan, F. (2021). Evaluating Career Self-Efficacy of African American College Students With Disabilities:

- A Factor-Analytic Approach. *Rehabilitation Research, Policy, and Education*, 35(4), 298-309.
- Dziekan, K. I., & Okocha, A. A. (1993). Accessibility of rehabilitation services: Comparison by racial-ethnic status. *Rehabilitation Counseling Bulletin*, 36(4), 183–189.
- Early, G. J., & Cheffer, N. D. (2019). Motivational interviewing and home visits to improve health behaviors and reduce childhood obesity: a pilot study. *Hispanic Health Care International*, 17(3), 103-110.
- Edmunds, J., Ntoumanis, N., & Duda, J. L. (2006). A test of self-determination theory in the exercise domain. *Journal of Applied Social Psychology*, 36(9), 2240-2265.
- Eggleton, I., Robertson, S., Ryan, J., & Kober, R. (1999). The impact of employment on the quality of life of people with an intellectual disability. *Journal of Vocational Rehabilitation*, 13(2), 95-107.
- Eilenberg, J. S., Paff, M., Harrison, A. J., & Long, K. A. (2019). Disparities based on race, ethnicity, and socioeconomic status over the transition to adulthood among adolescents and young adults on the autism spectrum: A systematic review. *Current Psychiatry Reports*, 21(5), 1-16.
- Eisenman, L. T. (2007). Self-determination interventions: Building a foundation for school completion. *Remedial and special education*, 28(1), 2-8.
- Elbogen, E. B., Lanier, M., Wagner, H. R., & Tsai, J. (2021). Financial strain, mental illness, and homelessness: Results from a national longitudinal study. *Medical Care*, 59, S132-S138.
- Elffers, L. (2013). Staying on track: behavioral engagement of at-risk and non-at-risk students in post-secondary vocational education. *European Journal of Psychology of Education*, 28(2), 545-562. <https://doi.org/10.1007/s10212-012-0128-3>



- Erickson, A. S. G., Noonan, P. M., Zheng, C., & Brussow, J. A. (2015). The relationship between self-determination and academic achievement for adolescents with intellectual disabilities. *Research in Developmental Disabilities, 36*, 45-54.
- Estala-Gutierrez, V. Y. (2021). *Barriers to Employment as Experienced by Hispanics with Physical Disability and Limited English Proficiency* (Doctoral dissertation, The University of Wisconsin-Madison).
- Fabian, E. S. (2007). Urban youth with disabilities: Factors affecting transition employment. *Rehabilitation Counseling Bulletin, 50*(3), 130-138.  
<https://doi.org/10.1177/00343552070500030101>
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods, 39*(2), 175-191.
- Fenton, W. S., Robinowitz, C. B., & Leaf, P. J. (1987). Male and female psychiatrists and their patients. *The American Journal of Psychiatry, 144*(3), 358-361.
- Fitzgerald, S. D. (2013). *Validating the self-determination theory as a work motivation model for clubhouse members with severe and persistent mental illness* (Doctoral dissertation, The University of Wisconsin-Madison).
- Fitzgerald, S., Deiches, J., Umucu, E., Brooks, J., Muller, V., Wu, J. R., & Chan, F. (2016). Psychometric properties of the Vocational Rehabilitation Engagement Scale when used with people with mental illness in clubhouse settings. *Rehabilitation Research, Policy, and Education, 30*(3), 276-285. <http://dx.doi.org/10.1891/2168-6653.30.3.276>
- Flannery, K. B., Slovic, R., Benz, M. R., & Levine, E. (2007). Priorities and changing practices: Vocational rehabilitation and community colleges improving workforce development

- programs for people with disabilities. *Journal of Vocational Rehabilitation*, 27(3), 141-151.
- Flaskerud, J. H., & Liu, P. Y. (1991). Effects of an Asian client-therapist language, ethnicity and gender match on utilization and outcome of therapy. *Community Mental Health Journal*, 27, 31-42.
- Flaskerud, J. H., & Liu, P. Y. (1991). Effects of an Asian client-therapist language, ethnicity and gender match on utilization and outcome of therapy. *Community Mental Health Journal*, 27(1), 31-42.
- Flicker, S. M., Waldron, H. B., Turner, C. W., Brody, J. L., & Hops, H. (2008). Ethnic matching and treatment outcome with Hispanic and Anglo substance-abusing adolescents in family therapy. *Journal of Family Psychology*, 22(3), 439-447. <https://doi.org/10.1037/0893-3200.22.3.439>
- Flores, L. Y., & O'brien, K. M. (2002). The career development of Mexican American adolescent women: A test of social cognitive career theory. *Journal of Counseling Psychology*, 49(1), 14-27. <https://doi.org/10.1037/0022-0167.49.1.14>
- Francis, G. L., Gross, J. M., Magiera, L., Schmalzried, J., Monroe-Gulick, A., & Reed, S. (2018). Supporting students with disabilities, families, and professionals to collaborate during the transition to adulthood. *International Review of Research in Developmental Disabilities*, 54, 71-104. <https://doi.org/10.1016/bs.irrdd.2018.07.004>
- Francis, G. L., Gross, J. M., Lavín, C. E., Casarez Velazquez, L. A., & Sheets, N. (2020). Facing double jeopardy: The transition experiences of Latina family caregivers of young adults with disabilities living in a rural community. *Rural Special Education Quarterly*, 39(1), 17-34. <https://doi.org/10.1177/8756870519879069>

- Franco, F., Cuadra, A., Tabol, C. E., Zea, M. C., & Peterson, R. A. (1998). Factors affecting acculturation level for Latin American immigrants. *Journal of Multicultural Nursing & Health, 4*(3), 37.
- Franquiz, M. E., & del Carmen Salazar, M. (2004). The transformative potential of humanizing pedagogy: Addressing the diverse needs of Chicano/Mexicano students. *The High School Journal, 36*-53.
- Fryers, T. (2006). Work, identity and health. *Clinical Practice and Epidemiology in Mental Health, 2*(1), 1-7. <https://doi.org/10.1186/1745-0179-2-12>
- Fujino, D. C., Okazaki, S., & Young, K. (1994). Asian-American women in the mental health system: An examination of ethnic and gender match between therapist and client. *Journal of Community Psychology, 22*(2), 164-176.
- Funderburk, J. A., McCormick, B. P., & Austin, J. K. (2007). Does attitude toward epilepsy mediate the relationship between perceived stigma and mental health outcomes in children with epilepsy?. *Epilepsy & Behavior, 11*(1), 71-76.
- Fung, K. M., Tsang, H. W., & Corrigan, P. W. (2008). Self-stigma of people with schizophrenia as predictor of their adherence to psychosocial treatment. *Psychiatric Rehabilitation Journal, 32*(2), 95. <https://psycnet.apa.org/doi/10.2975/32.2.2008.95.104>
- Garcia-Iriarte, E., Balcazar, F., & Taylor-Ritzler, T. (2007). Analysis of case managers' support of youth with disabilities transitioning from school to work. *Journal of Vocational Rehabilitation, 26*(3), 129-140.
- Garcia, O., & Kleifgen, J. A. (2010). *Educating emergent bilinguals. Policies, programs, and practices for English language learners*. New York, NY: Teachers College Press.

- García, O., & Kleifgen, J. (2010). Bilingualism for equity and excellence in minority education: The United States. In *Equity and excellence in education* (pp. 178-201). Routledge.
- Garfein, J., Guhl, E. N., Swabe, G., Sekikawa, A., Barinas-Mitchell, E., Forman, D. E., & Magnani, J. W. (2022). Racial and ethnic differences in cardiac rehabilitation participation: effect modification by household income. *Journal of the American Heart Association, 11*(13), e025591. <https://doi.org/10.1161/JAHA.122.025591>
- Galambos, N. L., Barker, E. T., & Krahn, H. J. (2006). Depression, self-esteem, and anger in emerging adulthood: seven-year trajectories. *Developmental psychology, 42*(2), 350. <https://doi.org/10.1037/0012-1649.42.2.350>
- Gallegos-Castillo, A. (2006). La casa: Negotiating family cultural practices, constructing identities. In J. Denner & B. L. Guzman (Eds.), *Latina girls: Voices of adolescent strength in the United States* (pp. 44–58). New York University Press.
- Gans, H. J. (1979). Symbolic ethnicity: The future of ethnic groups and cultures in America. *Ethnic and racial studies, 2*(1), 1-20. <https://doi.org/10.1080/01419870.1979.9993248>
- Gervery, R. (2010). Rehabilitation readiness: A construct validity study of the University of Rhode Island Change Assessment for Vocational Counseling (URICA-VC) scale for persons with mental illness. *Journal of Vocational Rehabilitation, 33*(2), 133-142.
- Gilson, C. B., Carter, E. W., & Biggs, E. E. (2017). Systematic review of instructional methods to teach employment skills to secondary students with intellectual and developmental disabilities. *Research and Practice for Persons with Severe Disabilities, 42*(2), 89-107. <https://doi.org/10.1177/1540796917698831>

- Glynn, K., & Schaller, J. (2017). Predictors of employment outcomes for transition-age state-federal vocational rehabilitation consumers with attention-deficit/hyperactivity disorder. *Journal of Vocational Rehabilitation*, 47(2), 159-174. <https://doi.org/10.3233/JVR-170892>
- Glynn, K., & Schaller, J. (2017). Predictors of employment outcomes for transition-age state-federal vocational rehabilitation consumers with attention-deficit/hyperactivity disorder. *Journal of Vocational Rehabilitation*, 47(2), 159-174. <https://doi.org/10.3233/JVR-170892>
- Gold, P. B., Fabian, E. S., & Luecking, R. G. (2013). Job acquisition by urban youth with disabilities transitioning from school to work. *Rehabilitation Counseling Bulletin*, 57(1), 31-45. <https://doi.org/10.1177/0034355213481248>
- Gordon, M. M. (1964). *Assimilation in American Life*. New York: Oxford University Press.
- Gottlieb, B. H. (1978). The development and application of a classification scheme of informal helping behaviours. *Canadian Journal of Behavioural Science*, 10(2), 105-115. <https://doi.org/10.1037/h0081539>
- Guilamo-Ramos, V., Dittus, P., Jaccard, J., Johansson, M., Bouris, A., & Acosta, N. (2007). Parenting practices among Dominican and Puerto Rican mothers. *Social Work*, 52(1), 17-30. <https://doi.org/10.1093/sw/52.1.17>
- Gutierrez-Serrano, G., Romo, L. F., & Chagolla, D. (2022). Latina First-Generation College Students' Motivation to Persist: An Attribution Theory and Self-determination Theory Perspective. *Journal of Latinos and Education*, 1-14. <https://doi.org/10.1080/15348431.2022.2096611>

- Gwadz, M., Cluesman, S. R., Freeman, R., Collins, L. M., Dorsen, C., Hawkins, R. L., ... & Kutnick, A. (2022). Advancing behavioral interventions for African American/Black and Latino persons living with HIV using a new conceptual model that integrates critical race theory, harm reduction, and self-determination theory: a qualitative exploratory study. *International Journal for Equity in Health*, 21(1), 1-28.
- Haller, L., & Carroll, A. (2022). The Simulated Café: A Virtually Delivered Pre-employment Transition Program for Students with Autism. *Department of Occupational Therapy Posters and Presentations*. Paper 80. Thomas Jefferson University. Retrieved online: <https://jdc.jefferson.edu/otpresentations/80/>
- Harmon, B. E., Nigg, C. R., Long, C., Amato, K., Kutchman, E., Anthamatten, P., ... & Hill, J. O. (2014). What matters when children play: influence of social cognitive theory and perceived environment on levels of physical activity among elementary-aged youth. *Psychology of Sport and Exercise*, 15(3), 272-279.
- Harrigan, M. P. (1992). Advantages and disadvantages of multigenerational family households: Views of three generations. *Journal of Applied Gerontology*, 11(4), 457-474.
- Harry, B. (2008). Collaboration with culturally and linguistically diverse families: Ideal versus reality. *Exceptional Children*, 74, 372-388.  
<https://doi.org/10.1177/001440290807400306>
- Harry, B. (1992). An ethnographic study of cross-cultural communication with Puerto Rican-American families in the special education system. *American Educational Research Journal*, 29(3), 471-494.

- Hartman, L. I., Michel, N. M., Winter, A., Young, R. E., Flett, G. L., & Goldberg, J. O. (2013). Self-stigma of mental illness in high school youth. *Canadian Journal of School Psychology, 28*(1), 28-42. <https://doi.org/10.1177/0829573512468846>
- Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. (3rd ed). Guilford Press.
- Hernández, B., Cometa, M. J., Rosen, J., Velcoff, J., Schober, D., & Luna, R. D. (2006). Employment, vocational rehabilitation, and the ticket to work program: Perspectives of Latinos with disabilities. *Journal of Applied Rehabilitation Counseling, 37*(3), 13-22. <https://doi.org/10.1891/0047-2220.37.3.13>
- Hillier, A., Goldstein, J., Tornatore, L., Byrne, E., & Johnson, H. M. (2019). Outcomes of a peer mentoring program for university students with disabilities. *Mentoring & Tutoring: Partnership in Learning, 27*(5), 487-508. <https://doi.org/10.1080/13611267.2019.1675850>
- Hirano, K. A., Rowe, D., Lindstrom, L., & Chan, P. (2018). Systemic barriers to family involvement in transition planning for youth with disabilities: A qualitative metasynthesis. *Journal of Child & Family Studies, 27*(11), 3440-3456. <https://doi.org/10.1007/s10826-018-1189-y>
- Ho, J., Yeh, M., McCabe, K., & Hough, R. L. (2007). Parental cultural affiliation and youth mental health service use. *Journal of Youth and Adolescence, 36*, 529-542. <https://doi.org/10.1007/s10964-006-9114-x>
- Honeycutt, T., Thompkins, A., Bardos, M., & Stern, S. (2015). State differences in the vocational rehabilitation experiences of transition-age youth with disabilities. *Journal of vocational rehabilitation, 42*(1), 17-30. <https://doi.org/10.3233/JVR-140721>

- Honeycutt, T., Sevak, P., & Rizzuto, A. (2019). Provision of pre-employment transition services: Vocational rehabilitation agency variation in the first program year of reporting. *Mathematica Center for Studying Disability Policy*.  
<https://www.mathematica.org/-/media/publications/pdfs/disability/2019/vragencypreets-py2017-rb.pdf>.
- Horvath, A. O., Del Re, A., Flückiger, C., & Symonds, D. (2011). Alliance in individual psychotherapy. In J. C. Norcross (Ed.), *Psychotherapy relationships that work* (2nd ed., pp. 25–69). New York, NY: Oxford University Press.  
<http://dx.doi.org/10.1093/acprof:oso/9780199737208.003.0002>
- Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the Working Alliance Inventory. *Journal of counseling psychology*, 36(2), 223.
- Ibarra Jr, A. (2000). Survey 2000: A snapshot of Latino families living in the Bluegrass. Available from the Lexington-Fayette Urban County Government Department of Social Services, 200.
- Ijalba, E. (2016). Hispanic immigrant mothers of young children with autism spectrum disorders: How do they understand and cope with autism?. *American Journal of Speech-Language Pathology*, 25(2), 200-213. [https://doi.org/10.1044/2015\\_AJSLP-13-0017](https://doi.org/10.1044/2015_AJSLP-13-0017)
- Interian, A., Martinez, I., Rios, L. I., Krejci, J., & Guarnaccia, P. J. (2010). Adaptation of a motivational interviewing intervention to improve antidepressant adherence among Latinos. *Cultural Diversity and Ethnic Minority Psychology*, 16(2), 215.  
<https://doi.org/10.1037/a0016072>
- Ipsen, C. (2006). Health, secondary conditions, and employment outcomes for adults with disabilities. *Journal of Disability Policy Studies*, 17(2), 77-87.



- Ipsen, C., & Goe, R. (2016). Factors associated with consumer engagement and satisfaction with the Vocational Rehabilitation program. *Journal of Vocational Rehabilitation, 44*(1), 85-96.
- Irvine, A., & Lupart, J. (2008). Into the Workforce: Employers' Perspectives of Inclusion. *Developmental Disabilities Bulletin, 36*, 225-250.
- Iwanaga, K., Chan, F., Tansey, T. N., Hoyt, W. T., & Berven, N. L. (2021). Evaluation of constructs based on self-determination theory and self-efficacy theory as predictors of vocational rehabilitation engagement for people with physical and sensory disabilities. *Rehabilitation Counseling Bulletin, 64*(3), 131-144.  
<https://doi.org/10.1177/0034355220942301>
- Iwanaga, K., Chan, F., Tansey, T. N., Strauser, D., Ritter, E., Bishop, M., & Brooks, J. (2019). Working alliance and stages of change for employment: The intermediary role of autonomous motivation, outcome expectancy and vocational rehabilitation engagement. *Journal of Occupational Rehabilitation, 29*(2), 315-324.
- Iwanaga, K., Rumrill, P., Roessler, R., Gala, B. R., Tansey, T. N., & Chan, F. (2020). Assessing Readiness for Employment in Vocational Rehabilitation: An Abbreviated Measure. *Journal of Rehabilitation, 86*(1).
- Iwanaga, K., Umucu, E., Wu, J. R., Yaghmaian, R., Lee, H. L., Fitzgerald, S., & Chan, F. (2017). Assessing vocational outcome expectancy in individuals with serious mental illness: A factor-analytic approach. *Journal of Mental Health, 29*(1), 116-123.
- Jansen, J., van Ooijen, R., Koning, P. W. C., Boot, C. R., & Brouwer, S. (2021). The role of the employer in supporting work participation of workers with disabilities: a systematic

- literature review using an interdisciplinary approach. *Journal of Occupational Rehabilitation*, 31(4), 916-949. <https://doi.org/10.1007/s10926-021-09978-3>
- Ji, E., Schaller, J., Pazez, B., & Glynn, K. (2015). Education and employment outcomes from the RSA data file for transition-age African American, White, and Hispanic youth with learning disabilities. *Journal of Applied Rehabilitation Counseling*, 46(3), 15-24. <https://doi.org/10.1891/0047-2220.46.3.15>
- Jivanjee, P., & Kruzich, J. (2011). Supports for young people with mental health conditions and their families in the transition years. *Best Practices in Mental Health*, 7(1), 115-133.
- Johnstone, B., Vessell, R., Bounds, T., Hoskins, S., & Sherman, A. (2003). Predictors of success for state vocational rehabilitation clients with traumatic brain injury. *Archives of physical medicine and rehabilitation*, 84(2), 161-167.
- Jones, E. E., & Zoppel, C. L. (1982). Impact of client and therapist gender on psychotherapy process and outcome. *Journal of Consulting and Clinical Psychology*, 50(2), 259.
- Joyce, N. (2012). *An empirical examination of the influence of personality, gender role conflict, and self-stigma on attitudes and intentions to seek online counseling in college students*. (Doctoral dissertation, The University of Akron).
- Jun, S., Osmanir, K., Kortering, L., & Zhang, D. (2015). Vocational Rehabilitation Transition Outcomes: A Look at One State's Evidence. *Journal of Rehabilitation*, 81(2).
- Kane, L., & Ashbaugh, A. R. (2017). Simple and parallel mediation: A tutorial exploring anxiety sensitivity, sensation seeking, and gender. *The Quantitative Methods for Psychology*, 13(3), 148-165. <http://dx.doi.org/10.20982/tqmp.13.3.p148>
- Kaya, C., Chan, F., Rumrill, P., Hartman, E., Wehman, P., Iwanaga, K., Pai, C.-H., & Avellone, L. (2016). Vocational rehabilitation services and competitive employment for transition-

- age youth with autism spectrum disorders. *Journal of Vocational Rehabilitation*, 45, 73-83. <https://doi.org/10.3233/JVR-160812>
- Kaya, C., Hsu, S., Rumrill, P. D., Hanley-Maxwell, C., & Chan, F. (2021). Differential vocational rehabilitation service patterns and outcomes for transition-age youth with specific learning disabilities: Implications in the COVID-19 era. *Journal of Vocational Rehabilitation*, 54(1), 59-70.
- Keefe, S. E., & Casas, J. M. (1980). Mexican Americans and mental health: A selected review and recommendations for mental health service delivery. *American Journal of Community Psychology*, 8(3), 303-326. <https://doi.org/10.1007/BF00894344>
- Kern, L., Mantegna, M. E., Vorndran, C. M., Bailin, D., & Hilt, A. (2001). Choice of task sequence to reduce problem behaviors. *Journal of Positive Behavior Interventions*, 3(1), 3-10.
- Kim, E., & Kang, M. (2018). The effects of client–counselor racial matching on therapeutic outcome. *Asia Pacific Education Review*, 19, 103-110.
- Kim, R. E., Lau, A. S., & Chorpita, B. F. (2016). The impact of Latino caregiver acculturation on treatment engagement in children’s community mental health services. *Journal of Child and Family Studies*, 25, 891-901. <https://doi.org/10.1007/s10826-015-0259-7>
- Kilgo, J. L., Richard, N., & Noonan, M. J. (1989). Teaming for the future: Integrating transition planning with early intervention services for young children with special needs and their families. *Infants & Young Children*, 2(2), 37-48.
- King, N. (2004). Using templates in the thematic analysis of text. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 257–270). London, UK: Sage.

- Kregel, J. (2012). Work Incentives Planning and Assistance Program: Current program results document the program's ability to improve employment outcomes, reduce dependence on benefits, and generate cost savings for SSA. *Journal of Vocational Rehabilitation, 36*(1), 3-12.
- Krogstad, J. M. (2014). Hispanics only group to see its poverty rate decline and incomes rise. Pew Research Center. Retrieved from: <http://www.pewresearch.org/fact-tank/2014/09/19/hispanics-only-group-to-see-its-poverty-rate-decline-and-incomes-rise/>
- Kolakowsky-Hayner, S. A., Wright, J., Shem, K., Medel, R., & Duong, T. (2012). An effective community-based mentoring program for return to work and school after brain and spinal cord injury. *NeuroRehabilitation, 31*(1), 63-73.
- Koletsis, M., Niersman, A., van Busschbach, J. T., Catty, J., Becker, T., Burns, T., . . . the EQOLISE Group. (2009). Working with mental health problems: Clients' experiences of IPS, vocational rehabilitation and employment. *Social Psychiatry and Psychiatric Epidemiology, 44*, 961–970. <http://dx.doi.org/10.1007/s00127-009-0017-5>
- Kucharczyk, S., Oswalt, A. K., Whitby, P. S., Frazier, K., & Koch, L. (2022). Emerging Trends in Youth Engagement During Transition: Youth as Interdisciplinary Partners. *Rehabilitation Research, Policy, and Education, 36*(1), 71-98. <https://doi.org/10.1891/RE-21-16>
- Kühberger, A., Fritz, A., Scherndl, T. (2014). Publication bias in psychology: A diagnosis based on the correlation between effect size and sample size. *PloS one, 9*(9): e105825. <https://doi.org/10.1371/journal.pone.0105825>

- Kuiper, L., Bakker, M., & van der Klink, J. (2016). The role of human values and relations in the employment of people with work-relevant disabilities. *Social Inclusion, 4*(4), 176-187.  
<https://doi.org/10.17645/si.v4i4.696>
- Lachapelle, Y., Wehmeyer, M. L., Haelewyck, M. C., Courbois, Y., Keith, K. D., Schalock, R., ... & Walsh, P. N. (2005). The relationship between quality of life and self-determination: an international study. *Journal of Intellectual Disability Research, 49*(10), 740-744.
- Laditka, J. N., & Laditka, S. B. (2016). Unemployment, disability and life expectancy in the United States: A life course study. *Disability and Health Journal, 9*(1), 46-53.  
<https://doi.org/10.1016/j.dhjo.2015.08.003>
- Lam, J. A., & Rosenheck, R. (1999). Social support and service use among homeless persons with serious mental illness. *International Journal of Social Psychiatry, 45*(1), 13-28.  
<https://doi.org/10.1177/002076409904500103>
- Langi, F. L., Oberoi, A., Balcazar, F. E., & Awsumb, J. (2017). Vocational rehabilitation of transition-age youth with disabilities: A propensity-score matched study. *Journal of Occupational Rehabilitation, 27*(1), 15-23. <https://doi.org/10.1007/s10926-016-9627-4>
- Langi, F. L., Oberoi, A., Balcazar, F. E., & Awsumb, J. (2017). Vocational rehabilitation of transition-age youth with disabilities: A propensity-score matched study. *Journal of Occupational Rehabilitation, 27*(1), 15-23. <https://doi.org/10.1007/s10926-016-9627-4>
- Lara, M., Gamboa, C., Kahramanian, M. I., Morales, L. S., & Hayes Bautista, D. E. (2005). Acculturation and Latino health in the United States: a review of the literature and its sociopolitical context. *Annu. Rev. Public Health, 26*, 367-397.
- Larson, J. E. (2008). User-friendly motivational interviewing and evidence-based supported employment tools for practitioners. *Journal of Rehabilitation, 74*(4), 18.

- Lawer, L., Brusilovskiy, E., Salzer, M. S., & Mandell, D. S. (2009). Use of vocational rehabilitative services among adults with autism. *Journal of Autism and Developmental Disorders, 39*(3), 487-494.
- Leavy, R. L. (1983). Social support and psychological disorder: A review. *Journal of Community Psychology, 11*(1), 3-21.
- Lechner, C. M., Tomasik, M. J., & Silbereisen, R. K. (2016). Preparing for uncertain careers: How youth deal with growing occupational uncertainties before the education-to-work transition. *Journal of Vocational Behavior, 95*, 90-101.
- Lee, C. S., López, S. R., Colby, S. M., Rohsenow, D., Hernández, L., Borrelli, B., & Caetano, R. (2013). Culturally adapted motivational interviewing for Latino heavy drinkers: Results from a randomized clinical trial. *Journal of Ethnicity in Substance Abuse, 12*(4), 356-373.
- Lee, C. S., López, S. R., Hernández, L., Colby, S. M., Caetano, R., Borrelli, B., & Rohsenow, D. (2011). A cultural adaptation of motivational interviewing to address heavy drinking among Hispanics. *Cultural Diversity and Ethnic Minority Psychology, 17*(3), 317-324. <https://doi.org/10.1037/a0024035>
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of vocational behavior, 45*(1), 79-122.
- Lent, R. W., Lopez, F. G., & Bieschke, K. J. (1993). Predicting mathematics-related choice and success behaviors: Test of an expanded social cognitive model. *Journal of vocational behavior, 42*(2), 223-236.

- Lent, R. W., Brown, S. D., Sheu, H. B., Schmidt, J., Brenner, B. R., Gloster, C. S., ... & Treistman, D. (2005). Social cognitive predictors of academic interests and goals in engineering: Utility for women and students at historically black universities. *Journal of counseling psychology*, 52(1), 84-92. <https://doi.org/10.1037/0022-0167.52.1.84>
- Leong, F. T. (1986). Counseling and psychotherapy with Asian-Americans: Review of the literature. *Journal of counseling Psychology*, 33(2), 196.
- Leong, F. T., & Chou, E. L. (1994). The role of ethnic identity and acculturation in the vocational behavior of Asian Americans: An integrative review. *Journal of Vocational Behavior*, 44(2), 155-172.
- Lequerica, A. H., & Kortte, K. (2010). Therapeutic engagement: a proposed model of engagement in medical rehabilitation. *American journal of physical medicine & rehabilitation*, 89(5), 415-422.
- Leufstadius, C., Eklund, M., & Erlandsson, L. K. (2009). Meaningfulness in work: Experiences among employed individuals with persistent mental illness. *Work: Journal of Prevention, Assessment & Rehabilitation*, 34, 21–32. doi:10.3233/WOR-2009-0899
- Levesque, D. A., Prochaska, J. M., & Prochaska, J. O. (1999). Stages of change and integrated service delivery. *Consulting Psychology Journal: Practice and Research*, 51(4), 226.
- Liddon, L., Kinglerlee, R., & Barry, J. A. (2018). Gender differences in preferences for psychological treatment, coping strategies, and triggers to help-seeking. *British Journal of Clinical Psychology*, 57(1), 42-58.
- Lindsay, S. (2011). Discrimination and other barriers to employment for teens and young adults with disabilities. *Disability and Rehabilitation*, 33(15-16), 1340-1350. doi: <https://doi.org/10.3109/09638288.2010.531372>

- Lindsay, S., Adams, T., Sanford, R., McDougall, C., Kingsnorth, S., & Menna-Dack, D. (2014). Employers' and employment counselors' perceptions of desirable skills for entry-level positions for adolescents: how does it differ for youth with disabilities?. *Disability & Society, 29*(6), 953-967. <https://doi.org/10.1080/09687599.2013.874330>
- Linquanti, R., & Cook, H. G. (2013). Toward a "Common Definition of English Learner": A Brief Defining Policy and Technical Issues and Opportunities for State Assessment Consortia. *Council of Chief State School Officers*.
- Liu, Z., & White, M. J. (2017). Education outcomes of immigrant youth: The role of parental engagement. *The Annals of the American Academy of Political and Social Science, 674*(1), 27-58.
- Livneh, H., Chan, F., & Kaya, C. (2014). Stigma related to physical and sensory disabilities. In P. W. Corrigan (Ed.), *The stigma of disease and disability: Understanding causes and overcoming injustices* (pp. 93–120). American Psychological Association. <https://doi.org/10.1037/14297-006>
- Loya, F., Reddy, R., & Hinshaw, S. P. (2010). Mental illness stigma as a mediator of differences in Caucasian and South Asian college students' attitudes toward psychological counseling. *Journal of Counseling Psychology, 57*(4), 484. <https://doi/10.1037/a0021113>
- Luecking, R. G., & Fabian, E. S. (2000). Paid internships and employment success for youth in transition. *Career development for exceptional Individuals, 23*(2), 205-221. <https://doi.org/10.1177/088572880002300207>
- Luecking, R. G., & Wittenburg, D. (2009). Providing supports to youth with disabilities transitioning to adulthood: Case descriptions from the Youth Transition Demonstration. *Journal of Vocational Rehabilitation, 30*(3), 241-251.



- Lustig, D. C., Strauser, D. R., Dewaine Rice, N., & Rucker, T. F. (2002). The relationship between working alliance and rehabilitation outcomes. *Rehabilitation Counseling Bulletin, 46*(1), 24-32.
- Mabin, A., & Randall, C. (2014). The role of client motivation in workplace rehabilitation. *Journal of Social Inclusion, 5*(1), 5-18. <https://doi.org/10.36251/josi.66>
- Mahoney, J. L., Larson, R. W., Eccles, J. S., & Lord, H. (2005). Organized activities as developmental contexts for children and adolescents. *Organized activities as contexts of development: Extracurricular activities, after-school and community programs, 3-22.*
- Manthey, T., Brooks, J., Chan, F., Hedenblad, L., & Ditchman, N. (2015). Motivational interviewing in rehabilitation health settings. In F. Chan, N. Berven, & K. Thomas (Eds.), *Counseling theories and techniques for rehabilitation health professionals* (2nd ed., pp. 247–278). New York, NY: Springer.
- Maramba, G. G., & Nagayama Hall, G. C. (2002). Meta-analyses of ethnic match as a predictor of dropout, utilization, and level of functioning. *Cultural diversity and ethnic minority psychology, 8*(3), 290-297. <https://doi.org/10.1037/1099-9809.8.3.290>
- Marcos, L. R., Urcuyo, L., Kesselman, M., & Alpert, M. (1973). The language barrier in evaluating Spanish-American patients. *Archives of General Psychiatry, 29*(5), 655-659.
- Marin, G., & Gamba, R. J. (1996). A new measurement of acculturation for Hispanics: The Bidimensional Acculturation Scale for Hispanics (BAS). *Hispanic Journal of Behavioral Sciences, 18*(3), 297-316.
- Marin, G., Sabogal, F., Marin, B. V., Otero-Sabogal, R., & Perez-Stable, E. J. (1987). Development of a short acculturation scale for Hispanics. *Hispanic journal of behavioral sciences, 9*(2), 183-205. <https://doi.org/10.1177/07399863870092005>

- Marini, I., Lee, G. K., Chan, F., Chapin, M. H., & Romero, M. G. (2008). Vocational rehabilitation service patterns related to successful competitive employment outcomes of persons with spinal cord injury. *Journal of vocational rehabilitation, 28*(1), 1-13.
- Mascayano, F., Tapia, T., Schilling, S., Alvarado, R., Tapia, E., Lips, W., & Yang, L. H. (2016). Stigma toward mental illness in Latin America and the Caribbean: A systematic review. *Brazilian Journal of Psychiatry, 38*, 73-85. <https://doi.org/10.1590/1516-4446-2015-1652>
- Matrone, K. F., & Leahy, M. J. (2005). The relationship between vocational rehabilitation client outcomes and rehabilitation counselor multicultural counseling competencies. *Rehabilitation Counseling Bulletin, 48*(4), 233-244.
- Maxwell, S. E. (2004). The persistence of underpowered studies in psychological research: causes, consequences, and remedies. *Psychological Methods, 9*(2), 147-163. <https://doi.org/10.1037/1082-989X.9.2.147>
- McKinley, V. (1987). Group therapy as a treatment modality of special value for Hispanic patients. *International Journal of Group Psychotherapy, 37*(2), 255-268.
- McWhirter, E. H., Hackett, G., & Bandalos, D. L. (1998). A causal model of the educational plans and career expectations of Mexican American high school girls. *Journal of Counseling Psychology, 45*(2), 166.
- Mehan, H. (1991). *Sociological foundations supporting the study of cultural diversity*. Santa Cruz, CA: University of California, National Center for Research on Cultural Diversity and Second Language Learning.

- Menchetti, B. M., & Garcia, L. A. (2003). Personal and Employment Outcomes of Person-Centered Career Planning. *Education and Training in Developmental Disabilities, 38*(2), 145–156. <http://www.jstor.org/stable/23879592>
- Mendoza, H., Masuda, A., & Swartout, K. M. (2015). Mental health stigma and self-concealment as predictors of help-seeking attitudes among Latina/o college students in the United States. *International Journal for the Advancement of Counselling, 37*, 207-222.
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research : A guide to design and implementation*. John Wiley & Sons, Incorporated.
- Metzel, D. S., & Giordano, A. (2007). Locations of employment services and people with disabilities: A geographical analysis of accessibility. *Journal of disability policy studies, 18*(2), 88-97.
- Mier, N., Tanguma, J., Millard, A. V., Villarreal, E. K., Alen, M., & Ory, M. G. (2011). A pilot walking program for Mexican-American women living in colonias at the border. *American Journal of Health Promotion, 25*(3), 172-175.
- Migliore, A., Timmons, J., Butterworth, J., & Lugas, J. (2012). Predictors of employment and postsecondary education of youth with autism. *Rehabilitation Counseling Bulletin, 55*(3), 176-184.
- Miller, R., P. Sevak, and T. Honeycutt. (2018). “State Vocational Rehabilitation Agencies’ Early Implementation Experiences with Pre-Employment Transition Services.” Issue Brief. Rockville, MD: TransCen, Inc., March 2018.
- Milner, P., & Kelly, B. (2009). Community participation and inclusion: People with disabilities defining their place. *Disability & Society, 24*(1), 47-62.  
<https://doi.org/10.1080/09687590802535410>

- Mindel, C. H., & Wright Jr, R. (1982). Satisfaction in multigenerational households. *Journal of Gerontology*, 37(4), 483-489.
- Miranda, A. O., & Umhoefer, D. L. (1998). Acculturation, language use, and demographic variables as predictors of the career self-efficacy of Latino career counseling clients. *Journal of Multicultural Counseling and Development*, 26(1), 39-51.
- Montenegro, M. C., Abdul-Chani, M., Valdez, D., Rosoli, A., Garrido, G., Cukier, S., ... & Montiel-Nava, C. (2022). Perceived Stigma and Barriers to Accessing Services: Experience of Caregivers of Autistic Children Residing in Latin America. *Research in Developmental Disabilities*, 120, 104123.
- Morse, J. M. (2010). "Cherry picking": Writing from thin data. *Qualitative health research*, 20(1), 3-3. <https://doi.org/10.1177/1049732309354285>
- Moses, T. (2010). Adolescent mental health consumers' self-stigma: associations with parents' and adolescents' illness perceptions and parental stigma. *Journal of Community Psychology*, 38(6), 781-798. <https://doi.org/10.1002/jcop.20395>
- Moyerman, D. R., & Forman, B. D. (1992). Acculturation and adjustment: A meta-analytic study. *Hispanic Journal of Behavioral Sciences*, 14, 163–200.
- Müller, R., Peter, C., Cieza, A., & Geyh, S. (2012). The role of social support and social skills in people with spinal cord injury—a systematic review of the literature. *Spinal cord*, 50(2), 94-106. <https://doi.org/10.1038/sc.2011.116>
- Mueller Reed, J., Holloway, L. L., Leung, P., & Menz, F. E. (2005). Barriers to the participation of Hispanic/Latino individuals in community rehabilitation programs. *Journal of Applied Rehabilitation Counseling*, 36(2), 33.

- Murphy, M. J., Faulkner, R. A., & Behrens, C. (2004). The effect of therapist–client racial similarity on client satisfaction and therapist evaluation of treatment. *Contemporary Family Therapy, 26*, 279-292.
- Naar-King, S., Outlaw, A., Green-Jones, M., Wright, K., & Parsons, J. T. (2009). Motivational interviewing by peer outreach workers: a pilot randomized clinical trial to retain adolescents and young adults in HIV care. *AIDS care, 21*(7), 868-873.
- Naar-King, S., Wright, K., Parsons, J. T., Frey, M., Templin, T., & Ondersma, S. (2006). Transtheoretical model and substance use in HIV-positive youth. *AIDS care, 18*(7), 839-845.
- Nandlall, N., Hawke, L. D., Hayes, E., Darnay, K., Daley, M., Relihan, J., & Henderson, J. (2022). Learning Through a Pandemic: Youth Experiences With Remote Learning During the COVID-19 Pandemic. *Sage Open, 12*(3), 1-13.  
<https://doi.org/10.1177/21582440221124122>
- National Center on Educational Outcomes. (2011). *Understanding subgroups in common state assessments: Special education students and ELLs* (NCEO Brief No. 4). Minneapolis: National Center on Educational Outcomes, University of Minnesota.
- National Center for Health Statistics. (2014). *Health of Hispanic or Latino population*. Center for Disease Control and Prevention.
- National Technical Assistance Center on Transition. (n.d.) *Pre-employment transition services*.  
<https://transitionta.org/topics/pre-ets/>
- Nevala, N., Pehkonen, I., Teittinen, A., Vesala, H. T., Pörtfors, P., & Anttila, H. (2019). The effectiveness of rehabilitation interventions on the employment and functioning of people

- with intellectual disabilities: a systematic review. *Journal of occupational rehabilitation*, 29(4), 773-802. <https://doi.org/10.1007/s10926-019-09837-2>
- Newman, L., Wagner, M., Knokey, A.-M., Marder, C., Nagle, K., Shaver, D., & Wei, X. (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school: A report from the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.
- Ng, J. Y., Ntoumanis, N., Thøgersen-Ntoumani, C., Deci, E. L., Ryan, R. M., Duda, J. L., & Williams, G. C. (2012). Self-determination theory applied to health contexts: A meta-analysis. *Perspectives on Psychological Science*, 7(4), 325-340.
- Niehaus, K., Rudasill, K. M., & Rakes, C. R. (2012). A longitudinal study of school connectedness and academic outcomes across sixth grade. *Journal of School Psychology*, 50(4), 443-460.
- Noblitt, B., Alfonso, K. P., Adkins, M., & Bush, M. L. (2018). Barriers to rehabilitation care in pediatric cochlear implant recipients. *Otology & Neurotology: Official Publication of the American Otological Society, American Neurotology Society [and] European Academy of Otology and Neurotology*, 39(5), e307-e313.  
<https://doi.org/10.1097/MAO.0000000000001777>
- Noonan, P. M., McCall, Z. A., Zheng, C., & Gaumer Erickson, A. S. (2012). An analysis of collaboration in a state-level interagency transition team. *Career Development and Transition for Exceptional Individuals*, 35(3), 143-154.  
<https://doi.org/10.1177/2165143412443083>
- Norcross, J. C., Krebs, P. M., & Prochaska, J. O. (2010). Stages of change. *Journal of clinical psychology*, 67(2), 143-154. <https://doi.org/10.1002/jclp.20758>

- Norwell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods* 16, 1–13. <https://doi.org/10.1177/1609406917733847>
- Nota, L., Ferrari, L., Soresi, S., & Wehmeyer, M. (2007). Self-determination, social abilities and the quality of life of people with intellectual disability. *Journal of Intellectual Disability Research*, 51(11), 850-865. <https://doi.org/10.1111/j.1365-2788.2006.00939.x>
- Obuah, I. A. (2020). *Masculine ideals, acculturation, and attitudes toward seeking psychological help among Mexican American adult males* (Doctoral dissertation, Walden University). Retrieved online: <https://www.proquest.com/openview/eb6a45dc5303d1bfc9d5bd1d5f005c4c/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Oertle, K. M., & Trach, J. S. (2007). Interagency Collaboration: The Importance of Rehabilitation Professionals' Involvement in Transition. *Journal of Rehabilitation*, 73(3), 36-44.
- Oertle, K. M., & Trach, J. S. (2007). Interagency Collaboration: The Importance of Rehabilitation Professionals' Involvement in Transition. *Journal of Rehabilitation*, 73(3).
- Oertle, K. M., Trach, J. S., & Plotner, A. J. (2013). Rehabilitation Professionals' Expectations for Transition and Interagency Collaboration. *Journal of Rehabilitation*, 79(3), 25-35.
- Ortega, A. N., & Rosenheck, R. (2002). Hispanic client-case manager matching: Differences in outcomes and service use in a program for homeless persons with severe mental illness. *The Journal of nervous and mental disease*, 190(5), 315-323.

- Ose, S. O., & Jensen, C. (2017). Youth outside the labour force—Perceived barriers by service providers and service users: A mixed method approach. *Children and Youth Services Review, 81*, 148-156. doi: <http://dx.doi.org/10.1016/j.childyouth.2017.08.002>
- Owen, F., Li, J., Whittingham, L., Hope, J., Bishop, C., Readhead, A., & Mook, L. (2015). Social return on investment of an innovative employment option for persons with developmental disabilities: Common ground co-operative. *Nonprofit Management and Leadership, 26*(2), 209-228. <https://doi.org/10.1002/nml.21187>
- Pandey, S., & Agarwal, S. (2013). Transition to adulthood for youth with disability: Issues for the disabled child and family. *International Organization of Scientific Research Journal of Humanities and Social Science, 17*(3), 41-45. doi: <http://dx.doi.org/10.9790/0837-1734145>
- Park, J., & Bouck, E. (2018). In-school service predictors of employment for individuals with intellectual disability. *Research in developmental disabilities, 77*, 68-75. <https://doi.org/10.1016/j.ridd.2018.03.014>
- Pastore, F. (2015). *The youth experience gap: Explaining national differences in the school-to-work transition*. Springer.
- Passel, J. S., & Cohn, D. (2015). *Share of unauthorized immigrant workers in production, construction job falls since 2007*. Pew Research Center. Retrieved from: <http://www.pewhispanic.org/2015/03/26/share-of-unauthorized-immigrant-workers-inproduction-construction-jobs-falls-since-2007/>
- Peck, B., & Kirkbride, L. T. (2001). Why businesses don't employ people with disabilities. *Journal of vocational rehabilitation, 16*(2), 71-75.



- Pederson, E. L., & Vogel, D. L. (2007). Male gender role conflict and willingness to seek counseling: Testing a mediation model on college-aged men. *Journal of Counseling Psychology, 54*(4), 373-384. <https://doi.org/10.1037/0022-0167.54.4.373>
- Pertab, J., Nielsen, S. L., & Lambert, M. J. (2013). Does client-therapist gender matching influence therapy course or outcome in psychotherapy?. *Department of Psychology, Brigham Young University*.
- Pew Hispanic Center, Statistical portrait of Hispanics in the United States, 2006, Retrieved April 12, 2009 from <http://pewhispanic.org/factsheets/factsheet.php?FactsheetID=35,2008>.
- Pikus, C. F., & Heavey, C. L. (1996). Client preferences for therapist gender. *Journal of College Student Psychotherapy, 10*(4), 35-43.
- Plotner, A. J., Trach, J. S., & Strauser, D. R. (2012). Vocational rehabilitation counselors' identified transition competencies: Perceived importance, frequency, and preparedness. *Rehabilitation Counseling Bulletin, 55*(3), 135-143. <https://doi.org/10.1177/0034355211427950>
- Plotner, A. J., Trach, J. S., Oertle, K. M., & Fleming, A. R. (2014). Differences in service delivery between transition VR counselors and general VR counselors. *Rehabilitation Counseling Bulletin, 57*(2), 109-115. <https://doi.org/10.1177/0034355213499075>
- Plotner, A. J., Trach, J. S., & Strauser, D. R. (2012). Vocational rehabilitation counselors' identified transition competencies: Perceived importance, frequency, and preparedness. *Rehabilitation Counseling Bulletin, 55*(3), 135-143. <https://doi.org/10.1177/0034355211427950>
- Poppen, M., Lindstrom, L., Unruh, D., Khurana, A., & Bullis, M. (2017). Preparing youth with disabilities for employment: An analysis of vocational rehabilitation case services data.

*Journal of Vocational Rehabilitation*, 46(2), 209-224. <https://doi.org/10.3233/JVR-160857>

Povenmire-Kirk, T. C., Lindstrom, L., & Bullis, M. (2010). De escuela a la vida adulta/From school to adult life: Transition needs for Latino youth with disabilities and their families. *Career Development for Exceptional Individuals*, 33(1), 41-51.

<https://doi.org/10.1177/0885728809359004>

Praswati, A. N., Sari, N. P., & Murwanti, S. (2022). Youth Entrepreneurial Intention: Theory of Planned Behaviour and Social Cognitive Theory. *Benefit: Jurnal Manajemen dan Bisnis*, 7(1), 66-79.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891. <https://doi.org/10.3758/BRM.40.3.879>

Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: toward an integrative model of change. *Journal of consulting and clinical psychology*, 51(3), 390.

Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change. Applications to addictive behaviors. *American Psychologist*, 47, 1102–1114.

<http://dx.doi.org/10.1037/0003-066X.47.9.1102>

Próspero, M., Russell, A. C., & Vohra-Gupta, S. (2012). Effects of motivation on educational attainment: Ethnic and developmental differences among first-generation students. *Journal of Hispanic Higher Education*, 11(1), 100-119.

<https://doi.org/10.1177/1538192711435556>

Qualtrics. (n.d.). *Qualtrics support: Fraud detection*. Retrieved online:

<https://www.qualtrics.com/support/survey-platform/survey-module/survey-checker/fraud-detection/#RelevantID>

Quiñones-Mayo, Y., Wilson, K. B., & McGuire, M. V. (2000). Vocational rehabilitation and cultural competency for Latino populations: Considerations for rehabilitation counselors. *Journal of Applied Rehabilitation Counseling, 31*(1), 19.

Ramirez, M. I. (1984). Assessing and understanding biculturalism-multiculturalism in Mexican-American adults. In J. L. Martinez,(Ed.), *Chicano Psychology* (2nd ed, pp. 77-94). New York: Academic Press.

Rangarajan, A., Reed, D., Mamun, A., Martinez, J., & Fraker, T. (2009). *The social security administration's youth transition demonstration projects: Analysis plan for interim reports*. Princeton, NJ: Mathematica Policy Research.

Ravindran, N., & Myers, B. J. (2012). Cultural influences on perceptions of health, illness, and disability: A review and focus on autism. *Journal of child and family studies, 21*(2), 311-319.

Rehabilitation Research & Training Center for Evidence-Based Practice in Vocational Rehabilitation. (2014). *Vocational Rehabilitation Internal Motivation Scale*. Department of Rehabilitation Psychology & Special Education, University of Wisconsin-Madison, Madison, WI.

Rehabilitation Services Administration. (2019). *Reporting manual for the case service report (RSA 911)*. (RSA-PD-19-03). Washington, DC: U.S. Department of Education, Office of Special Education, and Rehabilitative Services.

- Riemer-Reiss, M. (2000). Vocational rehabilitation counseling at a distance: Challenges, strategies and ethics to consider. *Journal of Rehabilitation, 66*(1).
- Rivera, O. A., & Cespedes, R. (1983). Rehabilitation counseling with disabled Hispanics. *Journal of Applied Rehabilitation Counseling, 14*, 65-71. doi:10.1891/0047-2220.14.3.65
- Rivera, L. M., Chen, E. C., Flores, L. Y., Blumberg, F., & Ponterotto, J. G. (2007). The effects of perceived barriers, role models, and acculturation on the career self-efficacy and career consideration of Hispanic women. *The Career Development Quarterly, 56*(1), 47-61.
- Robichaud-Fuentes, R. D. (2013). *Factors Influencing Perceptions Toward a Therapist-Working Alliance Among Hispanic Adults* (Doctoral dissertation, Walden University).
- Roessler, R. T., & Rubin, S. E. (1998). *Case management and rehabilitation counseling*. Austin TX: Proed.
- Rogler, L. H., Cortes, D. E., & Malgady, R. G. (1991). Acculturation and mental health status among Hispanics: Convergence and new directions for research. *American Psychologist, 46*, 585-597.
- Roux, A. M., Rast, J. E., Nye-Lengerman, K., Purtle, J., Lello, A., & Shattuck, P. T. (2019). Identifying patterns of state vocational rehabilitation performance in serving transition-age youth on the autism spectrum. *Autism in Adulthood, 1*(2), 101-111.
- Roux, A. M., Rast, J. E., & Shattuck, P. T. (2018). State-level variation in vocational rehabilitation service use and related outcomes among transition-age youth on the autism spectrum. *Journal of Autism and Developmental Disorders, 50*(7), 2449-2461.
- Rucker, T. F., Rice, N. D., Lustig, D. C., & Strauser, D. R. (2003). Gender differences in rehabilitation counseling consumer involvement and employment outcomes. *Journal of*

*Applied Rehabilitation Counseling*, 34(2), 22-26. <https://doi.org/10.1891/0047-2220.34.2.22>

Rumrill, P., Wehman, P., Cimera, R., Kaya, C., Dillard, C., & Chan, F. (2016). Vocational Rehabilitation Services and Outcomes for Transition-Age Youth With Traumatic Brain Injuries. *Journal of Head Trauma Rehabilitation*.  
<https://doi.org/10.1097/HTR.000000000000186>

Rumrill, P. D., Merchant, D., Kaya, C., Chan, F., Hartman, E., & Tansey, T. (2017). Demographic and service-related correlates of competitive employment outcomes among state-federal vocational rehabilitation clients with learning disabilities: A purposeful selection logistic regression analysis. *Journal of Vocational Rehabilitation*, 47(2), 123-134.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78.  
<http://dx.doi.org/10.1037/0003-066X.55.1.68>

Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of personality and social psychology*, 79(1), 49.  
<https://doi/10.1037/0022-3514.79.1.49>

Sabogal, F., Marín, G., Otero-Sabogal, R., Marín, B. V., & Perez-Stable, E. J. (1987). Hispanic familism and acculturation: What changes and what doesn't?. *Hispanic journal of behavioral sciences*, 9(4), 397-412. <https://doi.org/10.1177/07399863870094003>

Sánchez, J., Rosenthal, D. A., Chan, F., Brooks, J., & Bezyak, J. L. (2016). Relationships between world health organization international classification of functioning, disability

and health constructs and participation in adults with severe mental illness. *Rehabilitation Research, Policy, and Education*, 30(3), 286-304. <https://doi.org/10.1891/2168-6653.30.3.286>

- Sanford, C., Newman, L., Wagner, M., Cameto, R., Knokey, A. M., & Shaver, D. (2011). The Post-High School Outcomes of Young Adults with Disabilities up to 6 Years after High School: Key Findings from the National Longitudinal Transition Study-2 (NLTS2). NCSER 2011-3004. *National Center for Special Education Research*.
- Santiago, A. M., Villarruel, F., & Leahy, M. J. (1996). Latino access to rehabilitation services: Evidence from Michigan. *American Rehabilitation*, 22, 10-17.
- Shaewitz, D. M., & Yin, M. (2021). Serving All Consumers: Identifying Racial Disparities in the Vocational Rehabilitation System. Policy Brief. *Institute for Educational Leadership*.
- Schaller, J., & Yang, N. K. (2005). Competitive employment for people with autism: Correlates of successful closure in competitive and supported employment. *Rehabilitation Counseling Bulletin*, 49(1), 4-16.
- Schilling, S., Bustamante, J. A., Sala, A., Acevedo, C., Tapia, E., Alvarado, R., ... & Tapia, T. (2015). Development of an intervention to reduce self-stigma in outpatient mental health service users in Chile. *Revista de la Facultad de Ciencias Médicas de la Universidad Nacional de Córdoba*, 72(4), 284-294.
- Schlegelmilch, A., Roskowski, M., Brinck, E. A., Anderson, C. A., Hartman, E., Chan, F., ... & Decker-Maurer, H. (2021). Stages of Change Scale to Measure Work Readiness of Transition-Age Youth With Disabilities: A Promising Approach. *Rehabilitation Counseling Bulletin*, 65(1), 61-69.

- Schutz, M. A., Awsumb, J. M., Carter, E. W., & McMillan, E. D. (2021). Parent perspectives on pre-employment transition services for youth with disabilities. *Rehabilitation Counseling Bulletin*, 65(4), 266-278. <https://doi.org/10.1177/0034355221993542>
- Segovia Price, C. S., & Cuellar, I. (1981). Effects of language and related variables on the expression of psychopathology in Mexican American psychiatric patients. *Hispanic Journal of Behavioral Sciences*, 3(2), 145-160.
- Shapiro, J., Monzó, L. D., Rueda, R., Gomez, J. A., & Blacher, J. (2004). Alienated advocacy: Perspectives of Latina mothers of young adults with developmental disabilities on service systems. *Mental Retardation*, 42(1), 37-54. [https://doi.org/10.1352/0047-6765\(2004\)42%3C37:AAPOLM%3E2.0.CO;2](https://doi.org/10.1352/0047-6765(2004)42%3C37:AAPOLM%3E2.0.CO;2)
- Shier, M., Graham, J. R., & Jones, M. E. (2009). Barriers to employment as experienced by disabled people: A qualitative analysis in Calgary and Regina, Canada. *Disability & society*, 24(1), 63-75.
- Shin, S. M., Chow, C., Camacho-Gonsalves, T., Levy, R. J., Allen, I. E., & Leff, H. S. (2005). A Meta-Analytic Review of Racial-Ethnic Matching for African American and Caucasian American Clients and Clinicians. *Journal of Counseling Psychology*, 52(1), 45.
- Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Rifenbark, G. G., & Little, T. D. (2015). Relationships between self-determination and postschool outcomes for youth with disabilities. *The Journal of Special Education*, 48(4), 256-267. <https://doi.org/10.1177/0022466913489733>
- Silen, J. A. (1971). *We the Puerto Rican people: A story of oppression and persistence*. New York: Monthly Review Press.

- Sima, A. P., Wehman, P. H., Chan, F., West, M. D., & Leucking, R. G. (2015). An evaluation of risk factors related to employment outcomes for youth with disabilities. *Career Development and Transition for Exceptional Individuals*, 38(2), 89-100.  
<https://doi.org/10.1177/2165143414534887>
- Smart, J. F., & Smart, D. W. (1994). The rehabilitation of Hispanics experiencing acculturative stress: Implications for practice. *Journal of Rehabilitation*, 60(4), 8.
- Southwick, J. D., & Schultz, J. C. (2019). Participant Engagement in Public Vocational Rehabilitation Programs: An Analysis of Counselor Ratings. *Journal of Rehabilitation*, 85(2).
- Staudt, M., Lodato, G., & Hickman, C. R. (2012). Therapists talk about the engagement process. *Community Mental Health Journal*, 48(2), 212-218.  
<https://doi.org/10.1007/s10597-011-9377-x>
- Stodden, R. A., & Mruzek, D. W. (2010). An introduction to postsecondary education and employment of persons with autism and developmental disabilities. *Focus on Autism and Other Developmental Disabilities*, 25(3), 131-133.
- Strauser, D. R. (2013). *Career development, employment, and disability in rehabilitation: From theory to practice*. New York, NY: Springer.
- Sung, C., Chan, F., Brooks, J. M., Bezyak, J., Umucu, E., & Chen, X. (2022). Professional orientation and ethical practice. In F. Chan, M. Bishop, J. Chronister, E. Lee, & C. Chiu (Eds.) *Certified rehabilitation counselor examination preparation* (3<sup>rd</sup> ed.) (pp.13-38). Springer Publishing.



- Swift, J. K., Callahan, J. L., Tompkins, K. A., Connor, D. R., & Dunn, R. (2015). A delay-discounting measure of preference for racial/ethnic matching in psychotherapy. *Psychotherapy, 52*(3), 315-320. <https://doi.org/10.1037/pst0000019>
- Szapocznik, J., Scopetta, M. A., Kurtines, W., & Aranalde, M. D. (1978). Theory and measurement of acculturation. *Interamerican Journal of Psychology, 12*(2), 113-130.
- Tabachnick, B. G., & Fidell, L. (2007). Using Multivariate Statistics. (5<sup>th</sup> ed.). *Chapter 5: Multiple Regression* (pp.117-194). Pearson Education.
- Tang, M., Fouad, N. A., & Smith, P. L. (1999). Asian Americans' career choices: A path model to examine factors influencing their career choices. *Journal of vocational behavior, 54*(1), 142-157.
- Tansey, T. N., Bishop, M., Iwanaga, K., Zhou, K., & Chan, F. (2023). Vocational rehabilitation service delivery: Technical assistance needs of vocational rehabilitation professionals. *Journal of Vocational Rehabilitation, 58*(1), 49-62. <https://doi.org/10.3233/JVR-221224>
- Tansey, T. N., Iwanaga, K., Bezyak, J., & Ditchman, N. (2017). Testing an integrated self-determined work motivation model for people with disabilities: A path analysis. *Rehabilitation Psychology, 62*(4), 534.
- Tansey, T. N., Bezyak, J. L., Iwanaga K., Anderson, C., & Ditchman, N. (2016). Path analysis of a self-determination model of work motivation in vocational rehabilitation. Paper presented at the annual meeting of the National Rehabilitation Educators Conference, Newport Beach, CA.
- Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision. *Journal of vocational behavior, 22*(1), 63-81.

- Taylor, T., Serrano, E., Anderson, J., & Kendall, P. (2000). Knowledge, skills, and behavior improvements on peer educators and low-income Hispanic participants after a stage of change-based bilingual nutrition education program. *Journal of Community Health, 25*(3), 241-262.
- Taylor, J. P., Whittenburg, H. N., Avellone, L., Castruita Rios, Y., Park, S., Poppen, M., & Tansey T. (under review). Impact of pre-employment transition and individualized vocational rehabilitation services on employment outcomes. *Career Development and Transition for Exceptional Individuals*.
- Taylor, J. P., Whittenburg, H. N., Rooney-Kron, M., Gokita, T., Lau, S. J., Thoma, C. A., & Scott, L. A. (2022). Implementation of pre-employment transition services: A content analysis of workforce innovation and opportunity act state plans. *Career Development and Transition for Exceptional Individuals, 45*(2), 60-70.  
<https://doi.org/10.1177%2F2165143421993027>
- Taylor-Ritzler, T. (2008). School dropout and teen moms with learning disabilities. *Impact, 21*(1), 19-34.
- Test, D. W., Carver, T., Ewers, L., Haddad, J., & Person, J. (2000). Longitudinal job satisfaction of persons in supported employment. *Education and Training in Mental Retardation and Developmental Disabilities, 365-373*. <http://www.jstor.org/stable/23879859>
- Thompson, M. N., & Dahling, J. J. (2019). Employment and poverty: Why work matters in understanding poverty. *American Psychologist, 74*(6), 673.  
<https://psycnet.apa.org/doi/10.1037/amp0000468>

- Timmons, J. C., Schuster, J., Hamner, D., & Bose, J. (2002). Ingredients for success: Consumer perspectives on five essential elements to service delivery. *Journal of Vocational Rehabilitation, 17*(3), 183-194.
- Torres, J. B., & Solberg, V. S. (2001). Role of self-efficacy, stress, social integration, and family support in Latino college student persistence and health. *Journal of vocational behavior, 59*(1), 53-63.
- Torres Stone, R. A., Delman, J., McKay, C. E., & Smith, L. M. (2015). Appealing features of vocational support services for Hispanic and non-Hispanic transition age youth and young adults with serious mental health conditions. *The Journal of Behavioral Health Services & Research, 42*(4), 452-465. <https://doi.org/10.1007/s11414-014-9402-2>
- Torres, A., Frain, M., & Tansey, T. N. (2019). The impact of motivational interviewing training on rehabilitation counselors: Assessing working alliance and client engagement. A randomized controlled trial. *Rehabilitation Psychology, 64*(3), 328. <https://psycnet.apa.org/doi/10.1037/rep0000267>
- Tracey, T. J., & Kokotovic, A. M. (1989). Factor structure of the working alliance inventory. *Psychological Assessment: A journal of consulting and clinical psychology, 1*(3), 207.
- Trainor, A. A. (2007). Person-centered planning in two culturally distinct communities: Responding to divergent needs and preferences. *Career Development for Exceptional Individuals, 30*(2), 92-103. <https://doi-org.ezproxy.library.wisc.edu/10.1177/08857288070300020601>

- Trainor, A., Murray, A., & Kim, H. J. (2016). English learners with disabilities in high school: Population characteristics, transition programs, and postschool outcomes. *Remedial and Special Education, 37*(3), 146-158.
- Trinidad, J. E. (2019). Understanding when parental aspirations negatively affect student outcomes: The case of aspiration-expectation inconsistency. *Studies in Educational Evaluation, 60*, 179-188.
- Tsang, H. W. H., Fung, K. M. T., & Chung, R. C. K. (2010). Self-stigma and stages of change as predictors of treatment adherence of individuals with schizophrenia. *Psychiatry Research, 180*(1), 10-15. <https://doi.org/10.1016/j.psychres.2009.09.001>
- Turner, R. M., Bird, S. M., & Higgins, J. P. (2013). The impact of study size on meta-analyses: Examination of underpowered studies in Cochrane reviews. *PloS one, 8*(3), e59202. <https://doi.org/10.1371/journal.pone.0059202>
- Umucu, E., Iwanaga, K., Fitzgerald, S., Thompson, K., Moser, E., Sánchez, J., ... & Brooks, J. (2016). Assessing vocational competency of people with serious mental illness through self-report: A brief clinical measure. *Journal of Applied Rehabilitation Counseling, 47*(3), 22-28.
- United Nations. (1948). *Universal Declaration of Human Rights: Article 23*. <https://www.un.org/en/about-us/universal-declaration-of-human-rights#:~:text=Everyone%20has%20the%20right%20to%20work%2C%20to%20free%20choice%20of,equal%20pay%20for%20equal%20work>.
- U.S. Department of Labor (n.d.-a). Workforce and Innovation and Opportunity Act. <https://www.dol.gov/agencies/eta/wioa>

U.S. Department of Labor (n.d.-b). Youth Transition Services.

<https://www.dol.gov/agencies/odep/program-areas/individuals/youth/transition/federal-partners>

U. S. Department of Labor. (2022). *Disability employment statistics: 2021 annual youth labor force participation rate and unemployment rate.*

<https://www.dol.gov/agencies/odep/research-evaluation/statistics>

Vail, A. (1978). Factors influencing lower-class Black patients remaining in treatment. *Journal of Consulting and Clinical Psychology*, 46(2), 341.

<https://doi.org/10.1037/0022-006X.46.2.341>

Van Campen, C., & Cardol, M. (2009). When work and satisfaction with life do not go hand in hand: health barriers and personal resources in the participation of people with chronic physical disabilities. *Social science & medicine*, 69(1), 56-60.

van der Noordt, M., IJzelenberg, H., Droomers, M., & Proper, K. I. (2014). Health effects of employment: a systematic review of prospective studies. *Occupational and environmental medicine*, 71(10), 730-736. <http://dx.doi.org/10.1136/oemed-2013-101891>

Vansteenkiste, M., Williams, G. C., & Resnicow, K. (2012). Toward systematic integration between self-determination theory and motivational interviewing as examples of top-down and bottom-up intervention development: autonomy or volition as a fundamental theoretical principle. *International Journal of Behavioral Nutrition and Physical Activity*, 9(1), 1-11.

Velasco-Mondragon, E., Jimenez, A., Palladino-Davis, A. G., Davis, D., & Escamilla-Cejudo, J. A. (2016). Hispanic health in the USA: a scoping review of the literature. *Public health reviews*, 37(1), 1-27. <https://doi.org/10.1186/s40985-016-0043-2>

- Velcoff, J., Hernandez, B., & Keys, C. (2010). Employment and vocational rehabilitation experiences of Latinos with disabilities with differing patterns of acculturation. *Journal of Vocational Rehabilitation, 33*(1), 51-64. <https://doi.org/10.3233/JVR-2010-0515>
- Vespa, J., Medina, L., & Armstrong, D. M. (2020). *Demographic turning points for the United States: Population projections for 2020 to 2060*. United States Census Bureau. <https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf>
- Vierling, K. K., Standage, M., & Treasure, D. C. (2007). Predicting attitudes and physical activity in an “at-risk” minority youth sample: A test of self-determination theory. *Psychology of Sport and Exercise, 8*(5), 795-817.
- Veith, E. M., Sherman, J. E., Pellino, T. A., & Yasui, N. Y. (2006). Qualitative analysis of the peer-mentoring relationship among individuals with spinal cord injury. *Rehabilitation Psychology, 51*(4), 289. <https://doi/10.1037/0090-5550.51.4.289>
- Vogel, D. L., Armstrong, P. I., Tsai, P. C., Wade, N. G., Hammer, J. H., Efstathiou, G., ... & Topkaya, N. (2013). Cross-cultural validity of the Self-Stigma of Seeking Help (SSOSH) scale: Examination across six nations. *Journal of counseling psychology, 60*(2), 303.
- Vogel, D. L., Wade, N. G., & Ascheman, P. L. (2009). Measuring perceptions of stigmatization by others for seeking psychological help: Reliability and validity of a new stigma scale with college students. *Journal of counseling psychology, 56*(2), 301.
- Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology, 53*(3), 325. <https://psycnet.apa.org/doi/10.1037/0022-0167.53.3.325>

- Vogel, D. L., Wade, N. G., & Hackler, A. H. (2007). Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes toward counseling. *Journal of Counseling Psychology, 54*(1), 40.  
<https://psycnet.apa.org/doi/10.1037/0022-0167.54.1.40>
- Vong, S. K., Cheing, G. L., Chan, F., So, E. M., & Chan, C. C. (2011). Motivational enhancement therapy in addition to physical therapy improves motivational factors and treatment outcomes in people with low back pain: a randomized controlled trial. *Archives of physical medicine and rehabilitation, 92*(2), 176-183.
- Vorhies, V., Davis, K. E., Frounfelker, R. L., & Kaiser, S. M. (2012). Applying social and cultural capital frameworks: Understanding employment perspectives of transition age youth with serious mental health conditions. *The Journal of Behavioral Health Services & Research, 39*(3), 257-270. <https://doi.org/10.1007/s11414-012-9274-2>
- Wampold, B. E. (2001). *The great psychotherapy debate*. Mahwah, NJ: Erlbaum.
- Wagner, M. M., Newman, L. A., & Javitz, H. S. (2014). The influence of family socioeconomic status on the post-high school outcomes of youth with disabilities. *Career Development and Transition for Exceptional Individuals, 37*(1), 5-17.  
<https://doi.org/10.1177/2165143414523980>
- Wagner, S. L., Wessel, J. M., & Harder, H. G. (2011). Workers' perspectives on vocational rehabilitation services. *Rehabilitation Counseling Bulletin, 55*(1), 46-61.  
<https://doi.org/10.1177%2F0034355211418250>
- Wagner, M., Newman, L., Cameto, R., Javitz, H., & Valdes, K. (2012). A national picture of parent and youth participation in IEP and transition planning meetings. *Journal of Disability Policy Studies, 23*(3), 140-155. <https://doi.org/10.1177/1044207311425384>

- Wagner, M. M., Newman, L. A., & Javitz, H. S. (2014). The influence of family socioeconomic status on the post-high school outcomes of youth with disabilities. *Career Development and Transition for Exceptional Individuals*, 37(1), 5-17.  
<https://doi.org/10.1177/2165143414523980>
- Washburn, M., Brewer, K., Gearing, R., Leal, R., Yu, M., & Torres, L. (2022). Latinos' Conceptualization of Depression, Diabetes, and Mental Health-Related Stigma. *Journal of Racial and Ethnic Health Disparities* 9, 1912-1922 (2022).  
<https://doi.org/10.1007/s40615-021-01129-x>
- Watts, J. R., Tu, W. M., & O'Sullivan, D. (2019). Vocational Expectations and Self-Stigmatizing Views Among Collegiate Recovery Students: An Exploratory Investigation. *Journal of College Counseling*, 22(3), 240-255. <https://doi.org/10.1002/jocc.12140>
- Weathers, R. R., & Hemmeter, J. (2011). The impact of changing financial work incentives on the earnings of Social Security Disability Insurance (SSDI) beneficiaries. *Journal of Policy Analysis and Management*, 30(4), 708-728.
- Wehman, P., Sima, A. P., Ketchum, J., West, M. D., Chan, F., & Luecking, R. (2015). Predictors of successful transition from school to employment for youth with disabilities. *Journal of occupational rehabilitation*, 25(2), 323-334.
- Wehmeyer, M. L., & Bolding, N. (2001). Enhanced self-determination of adults with intellectual disability as an outcome of moving to community-based work or living environments. *Journal of intellectual disability research*, 45(5), 371-383.  
<https://doi.org/10.1046/j.1365-2788.2001.00342.x>



- Wehmeyer, M. L., & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three-years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities*, 131-144.
- Weinstein, A., Lisman, S. A., & Johnson, M. D. (2015). Modifying alcohol expectancies of Hispanic children: Examining the effects of expectancy-targeted, developmentally congruous prevention videos. *Journal of studies on alcohol and drugs*, 76(2), 237-246.
- Wells, H. (1969). *The modernization of Puerto Rico: A political study of changing values and institutions*. Cambridge, MA: Harvard University Press.
- West, P. C. (1984). Social stigma and community recreation participation by the mentally and physically handicapped. *Therapeutic Recreation Journal*, 18(1), 40-49.
- Westbrook, L. E., Bauman, L. J., & Shinnar, S. (1992). Applying stigma theory to epilepsy: a test of a conceptual model. *Journal of Pediatric Psychology*, 17(5), 633-649.
- Whitehead, M., Clayton, S., Holland, P., Burstrom, B., Nylén, L., Dahl, E., ... & Uppal, S. (2009). Helping chronically ill or disabled people into work: What can we learn from international comparative analyses?.
- Whitehead, M., Clayton, S., Holland, P., Drever, F., Barr, B., Gosling, R., Dahl, E., Van Der Wel, K.A., Westin, S., Burstrom, B., Nylén, L., Lundberg, O., Diderichsen, F., Thielen, K., Ng, E., Uppal, S., & Chen, W. (2009). Helping chronically ill and disabled people into work: what can we learn from international comparative analysis? Public Health Research Consortium. Short Report 9. Retrieved only from:  
[https://www.phrc.online/assets/uploads/files/PHRC\\_C2\\_06\\_Short\\_Report\\_1.pdf](https://www.phrc.online/assets/uploads/files/PHRC_C2_06_Short_Report_1.pdf)

- Whitfield, H. W., Venable, R., & Broussard, S. (2010). Are client—counselor ethnic/racial matches associated with successful rehabilitation outcomes?. *Rehabilitation Counseling Bulletin, 53*(2), 96-105.
- Williams, U., Law, M., Hanna, S., & Gorter, J. W. (2019). Personal, environmental, and family factors of participation among young children. *Child: Care, Health and Development, 45*(3), 448-456. <https://doi.org/10.1111/cch.12651>
- Wittenburg, D. C., & Maag, E. (2002). School to where? A literature review on economic outcomes of youth with disabilities. *Journal of Vocational Rehabilitation, 17*(4), 265-280.
- Wong, Y. L. I., & Solomon, P. L. (2002). Community integration of persons with psychiatric disabilities in supportive independent housing: A conceptual model and methodological considerations. *Mental health services research, 4*(1), 13-28.
- Wu, I. H., & Windle, C. (1980). Ethnic specificity in the relative minority use and staffing of community mental health centers. *Community Mental Health Journal, 16*, 156-168. <https://doi.org/10.1007/BF00778587>
- Yaghmaian, R., Iwanaga, K., Wu, J.-R., Chen, X., Umucu, E., Tao, J., Livneh, H., & Chan, F. (2019). Reducing prejudice toward people with disabilities. In D. S. Dunn (Ed.), *Understanding the experience of disability: Perspectives from social and rehabilitation psychology* (pp. 52–73). Oxford University Press.
- Yan, T., Wilber, K. H., Aguirre, R., & Trejo, L. (2009). Do sedentary older adults benefit from community-based exercise? Results from the Active Start program. *The Gerontologist, 49*(6), 847-855.

- Yin, M., Pathak, A., Lin, D., & Dizdari, N. (2022). Identifying Racial Differences in Vocational Rehabilitation Services. *Rehabilitation Counseling Bulletin*, 66(1), 13-24.  
<https://doi.org/10.1177/00343552211048218>
- Young, A. E., & Murphy, G. C. (2009). Employment status after spinal cord injury (1992–2005): A review with implications for interpretation, evaluation, further research, and clinical practice. *International Journal of Rehabilitation Research*, 32(1), 1-11.  
<https://doi.org/10.1097/MRR.0b013e32831c8b19>
- Zea, M. C., Belgrave, F. Z., García, J. G., & Quezada, T. (1997). Socioeconomic and cultural factors in rehabilitation of Latinos with disabilities. In J. G. García & M. C. Zea (Eds.), *Psychological interventions and research with Latino populations* (pp. 217–234). Allyn & Bacon.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, 52(1), 30-41.
- Zimet, G. D., Powell, S. S., Farley, G. K., Werkman, S., & Berkoff, K. A. (1990). Psychometric characteristics of the multidimensional scale of perceived social support. *Journal of personality assessment*, 55(3-4), 610-617.

**Appendix A: Email Sent to Directors of State Vocational Rehabilitation Agencies**

[Date]

Dear [State Vocational Rehabilitation Director]:

My name is Yazmin Castruita Rios, and I am a doctoral student at the University of Wisconsin-Madison. I am writing to request your assistance with a research study I am conducting with Dr. Timothy Tansey. The study examines the vocational readiness of transition-age Hispanic youth with disabilities and engagement in vocational rehabilitation services. Previous literature and data suggest that this group has a lower application rate and utilization rate than compared to other transition-age youth with disabilities. This is concerning as limited engagement in vocational rehabilitation programs can impact obtaining and retaining competitive integrated employment. This study is focused on individuals that (a) identify as Hispanic, (b) are between the ages of 18 and 22, and (c) are receiving pre-employment transition services or have received pre-employment transition services and are currently receiving adult services. Findings of this study may help vocational rehabilitation counselors and researchers identify new strategies and interventions to support transition-age Hispanic youth in their engagement in VR services and transition to employment.

[Insert SVRA Director's Name], I am asking for your assistance with distributing the attached flyer of the study to your vocational rehabilitation counselors and pre-Employment Transition Service providers that are working with individuals the meet the criteria above. Participation in this study is completely voluntary and consists of completing a 30 minute online survey (link is provided in the flyer). Additionally, transition-age Hispanic youth who decide to participate in this study and complete the online survey will receive a \$10 Amazon gift card via email.

I will be sending two reminders after you have received this email to help ensure transition-age Hispanic youth that are receiving vocational rehabilitation services are being notified about this research opportunity. I will be sending the first reminder email two weeks after you have received this first email. The second email reminder will be sent two weeks after the first email reminder was sent.

Thank you in advance for your assistance. If you have any questions or concerns, please feel free to contact me at [castruita@wisc.edu](mailto:castruita@wisc.edu)

Sincerely,

Yazmin Castruita Rios, MRC, CRC (Ph.D. Candidate)  
Department of Rehabilitation Psychology and Special Education  
University of Wisconsin-Madison

## Appendix B.1: Flyer for Dissertation Study – English Version

# RESEARCH STUDY ON TRANSITION-AGE HISPANIC YOUTH

### DESCRIPTION OF THE STUDY

The purpose of this study is to understand the reasons why transition-age Hispanic youth with disabilities participate in vocational rehabilitation services. This study will help researchers at the University of Wisconsin-Madison better understand the experiences of transition-age Hispanic youth with disabilities who are receiving vocational rehabilitation services. Specifically, the services and supports that influence Hispanic youths' participation in vocational rehabilitation services. By participating in this study you will (1) have the opportunity to talk about your experiences receiving services, and (2) help us help you by learning more about any additional supports or resources you may need during your journey to obtaining employment.

### WHAT TO EXPECT FROM PARTICIPATING IN THIS PROJECT?

If you decide to participate in this research, you will be asked to complete a 1 minute online screening questionnaire to determine your eligibility. If you are determined eligible, you will be asked to respond to a 30 minute online survey. The questions on the survey will ask about your support system, language preference, motivation, relationship with your counselor, and experiences receiving vocational rehabilitation services. Participants who complete the online survey for this study will receive a \$10 Amazon gift card via email.

### FOR MORE INFORMATION, CONTACT:

**Yazmin Castruita Rios, MRC, CRC (Ph.D. Candidate)**

**Doctoral Student Researcher**

**University of Wisconsin-Madison**

 [castruita@wisc.edu](mailto:castruita@wisc.edu)



### WHO CAN PARTICIPATE?

Individuals who meet the following criteria:

1. Identify as Hispanic
2. Between the ages of 18 and 22 at the time of the study
3. Currently receiving pre-employment transition services (pre-ETS services) at the time of the survey or had previously received pre-ETS services prior to applying for adult services

**PARTICIPANTS WHO COMPLETE THE  
ONLINE SURVEY FOR THIS STUDY  
WILL RECEIVE A \$10 AMAZON GIFT  
CARD VIA EMAIL.**

If interested in participating,  
please follow the link below  
(or scan QR code)  
to access the research study  
survey.



[https://uwmadison.co1.qualtrics.com/jfe/form/SV\\_11b3dj2ozrslHsq](https://uwmadison.co1.qualtrics.com/jfe/form/SV_11b3dj2ozrslHsq)

## Appendix B.2: Flyer for Dissertation Study – Spanish Version

# INVESTIGACIÓN SOBRE JÓVENES HISPANOS EN EDAD DE TRANSICIÓN

## DESCRIPCIÓN DEL ESTUDIO

El propósito de este estudio es comprender los motivos que influyen la participación de jóvenes Hispanos con discapacidades en edad de transición en servicios de rehabilitación vocacional. Este estudio ayudara a los investigadores de la Universidad de Wisconsin-Madison a comprender mejor las experiencias y factores (por ejemplo, apoyo familiar o de amigos) que influyen la participación de este grupo en servicios de rehabilitación vocacional.

Tu participación en este estudio te (1) dará la oportunidad de hablar sobre tus experiencias recibiendo servicios, y (2) nos ayudará ayudarte por medio de que aprendamos que apoyos o recursos adicionales necesitas para obtener empleo.

## ¿EN QUÉ CONSISTE MI PARTICIPACIÓN EN ESTE ESTUDIO?

Si decides participar en este estudio, se te pedirá que completes un cuestionario de selección en línea de 1 minuto para determinar tu elegibilidad. Si cumples con los requisitos para este estudio, se te pedirá que respondas a un cuestionario en línea de 30 minutos. Las preguntas en el cuestionario cubren temas sobre tu sistema de apoyo (por ejemplo, familia y amigos), preferencia de idioma, motivación, relación con tu consejero/a de rehabilitación vocacional, y tus experiencias al recibir servicios de rehabilitación vocacional. Los participantes que completen el cuestionario en línea para este estudio recibirán una tarjeta de regalo de Amazon de \$10 dólares por correo electrónico.

## FOR MORE INFORMATION, CONTACT:

**Yazmin Castruita Rios, MRC, CRC (Ph.D. Candidate)**

**Investigadora y Estudiante de Doctorado**

**University of Wisconsin-Madison**

 [castruita@wisc.edu](mailto:castruita@wisc.edu)



## ¿QUIÉN PUEDE PARTICIPAR?

Individuos que cumplan con los siguientes requisitos:

1. Se identifiquen como Hispanos
2. Esten entre las edades de 18 y 22 al tiempo de completar la encuesta
3. Este recibiendo servicios de un programa de rehabilitación vocacional

**Los participantes que completen el cuestionario en línea recibirán una tarjeta de regalo de Amazon de \$10 dólares por correo electrónico.**

Si estas interesado en participar, por favor haz clic en el enlace de abajo (o escaneo el código QR) para acceder el cuestionario de este estudio.



[https://uwmadison.co1.qualtrics.com/jfe/form/SV\\_11b3dj2ozrsLHsq](https://uwmadison.co1.qualtrics.com/jfe/form/SV_11b3dj2ozrsLHsq)

## Appendix C: Institutional Review Board Approval



Minimal Risk Research IRB  
1/27/2023

**Submission ID number:** [2023-0053](#)  
**Title:** An Examination of the Vocational Readiness Among Transition-age Hispanic Youth with Disabilities: An Exploratory Study  
**Principal Investigator:** Timothy N Tansey  
**Point-of-contact:** Yazmin Castruita Rios  
**IRB Staff Reviewer:** Olyvia Kuchta

The MRR IRB conducted a review of the above referenced initial application. The study was determined to meet the criteria for exempt human subjects in accordance with the following category(ies) as defined under 45 CFR 46:

(2)(ii) Tests, surveys, interviews, or observation (low risk)

If this study falls under VA regulations, you must get final approval from the VA Research & Development Committee prior to starting research activities.

NOTE: If the research under this exemption application becomes subject to FDA regulations, or other changes are made that could affect the exemption status, you must contact the IRB as the IRB's exemption determination may no longer apply.

You have identified the following financial sources to support the research activities in this IRB application:

None.

If this information is incorrect, please submit a change to modify your application as appropriate.

To access the materials the IRB reviewed and accepted as part of the exemption determination, please log in to your ARROW account and view the documents tab in the submission's workspace.

Although the human subjects research described in the ARROW application referenced above was determined to meet the federal criteria for exemption and thus does not require continuing review, please be aware of your responsibilities related to the conduct of the research and when additional IRB review is required. Prior to starting research activities, please review the Principal Investigator and Study Team Responsibilities in the [Investigator Manual](#), which

includes a description of the types of changes that must be submitted to ensure the research continues to comply with the conditions of the exemption and/or category(ies) of exemption.

If you have general questions, please contact the Minimal Risk Research IRB at 608-263-2362. For questions related to this submission, contact the assigned staff reviewer.



**Appendix D.1: Consent Form – English Version**  
**University of Wisconsin - Madison**  
**Research Participant Information and Consent Form Study**

**Title:** An Examination of the Vocational Readiness of Transition-age Hispanic Youth with Disabilities: An Exploratory Study

**Principal Investigator:** Timothy Tansey (Phone: (608) 265-8991) (Email: [tantansey@wisc.edu](mailto:tantansey@wisc.edu))

**Doctoral Student Researcher:** Yazmin Castruita Rios (Phone: (915) 251-5961) (Email: [castruita@wisc.edu](mailto:castruita@wisc.edu))

**Description of the Research**

You are invited to participate in a research study about transition-age Hispanic youth's engagement in vocational rehabilitation services. This study will help researchers at the University of Wisconsin-Madison better understand the experiences as well as the factors that influence transition-age Hispanic youth to engage in vocational rehabilitation services. You have been asked to participate because you are a Hispanic individual with a disability between the ages of 18 to 22 who is receiving services from a state vocational rehabilitation program.

The purpose of the research is to identify the services and supports that help you participate and complete a vocational rehabilitation program. This study will include individuals that meet the following criteria: (a) identify as Hispanic; (b) are between the ages of 18 and 22; and (c) are either currently receiving pre-employment transition services (pre-ETS) or have previously received pre-ETS services prior to applying for adult services.

If you decide to participate in this research, you will be asked to complete an online survey that evaluates the factors associated with vocational rehabilitation engagement. The online survey consists of a mixture of multiple choice, ranking, and a couple short answer questions. The questionnaire will take approximately 30 minutes to complete.

**What will my participation involve?**

If you decide to participate in this research, you will be asked to click on the survey link and complete the screening questionnaire. After completing those items you may be asked to participate in the research study survey. The screening questionnaire will take less than 1 minute, while the research study survey will take about 30 minutes.

Your participation will last approximately 30 minutes per session and only 1 session is required which will result in 30 minutes total.

**Are there any risks to me?**

All efforts will be made to protect your confidentiality. For example, all study data will be stored securely and only accessed by approved personnel. However, there may be minimal risk of losing confidentiality. In addition, there is a potential risk of fatigue given the length of this survey.

**Are there any benefits to me?**

There are no direct benefits to you from participating in this study.



**Will I be compensated for my participation?**

If you participate in this study, you will receive a \$10 Amazon gift card. If you do not complete this study, you will not receive any compensation. **You can only participate ONCE and receive the compensation ONCE.**

**How will my confidentiality be protected?**

This study is confidential. Neither your name nor any other identifiable information will be collected. Only approved personnel will have access to the data. Subsequent publication of findings will use aggregate, or group, information. If you participate in this study, we would like to be able to quote you directly but will not provide demographic information associated with the response to maintain anonymity.

**Whom should I contact if I have questions?**

You may ask any questions about the research at any time. If you have questions, concerns, or complaints, or think that participating in the research has hurt you, talk to the research team or contact the Principal Investigator Timothy Tansey at (608) 265-8991.

If you have any questions about your rights as a research participant or have complaints about the research study or study team, call the confidential research compliance line at 1-833-652-2506. Staff will work with you to address concerns about research participation and assist in resolving problems.

Your participation is completely voluntary. If you decide not to participate or to withdraw from the study, it will have no effect on any services you are currently receiving.

If you were to experience any difficulties completing the online survey, please contact Yazmin Castruita Rios at (915) 251-5961 to complete the survey via phone.

Thank you for your time and participation in this study.

Sincerely,

Yazmin Castruita Rios, MRC, CRC (Ph.D. Candidate)

Doctoral Student Researcher

Department of Rehabilitation Psychology and Special Education

University of Wisconsin-Madison

**Appendix D.2: Consent Form – Spanish Version  
Universidad de Wisconsin - Madison**

**Información de los Participantes de la Investigación y Formulario de Consentimiento**

**Título:** Una Examinación de la Preparación Vocacional de los Jóvenes Hispanos con Discapacidades en Edad de Transición: Un Estudio Exploratorio

**Investigador Principal:** Timothy Tansey (Teléfono: (608) 265-8991) (Correo electrónico: tntansey@wisc.edu)

**Estudiante de Doctorado Investigador:** Yazmin Castruita Rios (Teléfono: (915) 251-5961) (Correo electrónico: castruita@wisc.edu)

**Descripción de la investigación**

Estas invitado(a) a participar en un estudio de investigación sobre la participación en servicios de rehabilitación vocacional de los jóvenes Hispanos de edad de transición. Este estudio ayudara a investigadores de la Universidad de Wisconsin-Madison a mejor entender las experiencias al igual que los factores que impactan la participación de jóvenes Hispanos de edad de transición en los servicios de rehabilitación vocacional. Se te ha pedido que participes porque eres una persona Hispana con una discapacidad entre las edades de 18 a 22 que está recibiendo servicios de un programa estatal de rehabilitación vocacional.

El propósito de esta investigación es identificar los servicios y apoyos que te ayudan a participar y completar tu programa de rehabilitación vocacional. Este estudio incluye individuos que cumplen con el siguiente criterio: (a) se identifican como Hispanos; (b) tiene entre 18 y 22 años de edad; y (c) están recibiendo actualmente servicios de transición previo al empleo (pre-ETS, por sus siglas en inglés) o han recibo previamente pre-ETS antes de aplicar a servicios para adultos.

Si tú decides participar en esta investigación, se te pedirá que completes un cuestionario en línea que evalúa los factores asociados con la participación en rehabilitación vocacional. El cuestionario en línea consiste en una combinación de preguntas de opciones múltiple, clasificación, y un par de preguntas de respuesta corta. El cuestionario dura aproximadamente 30 minutos en total.

**¿En qué consistirá mi participación?**

Si tú decides participar en esta investigación, se te pedirá que selecciones el enlace del cuestionario y que completes el cuestionario de selección. Después de completa el cuestionario de selección se te pedirá que participes en el cuestionario de esta investigación. El cuestionario de selección tomara menos de un minuto, mientras el cuestionario de esta investigación dura aproximadamente 30 minutos.

Tu participación durara aproximadamente 30 minutos por sesión y solo una sesión es requerida, lo que resultara en 30 minutos en total.

**¿Hay algún riesgo para mí?**

Se hará todo lo posible para proteger tu confidencialidad. Por ejemplo, todos los datos del estudio serán almacenados de forma segura y solo el personal autorizado podrá acceder dichos

datos. Sin embargo, puede haber un riesgo mínimo de perder la confidencialidad. Además, existe un riesgo potencial de fatiga dada la duración de este cuestionario.

**¿Hay algún beneficio para mí?**

No hay ningún beneficio directo para ti por haber participado en este estudio.

**¿Seré compensado por mi participación?**

Si tu participas en este estudio, recibirás una tarjeta de regalo de Amazon de \$10 dólares. Si no completas este estudio, no recibirás ninguna compensación.

**¿Como se protegerá mi confidencialidad?**

Este estudio es confidencial. No se publicará ni su nombre ni ninguna otra información identificable. Solo el personal autorizado tendrá acceso a los datos. La publicación posterior de los hallazgos utilizará información agregada o grupal. Si tu participas en este estudio, nos gustaría poder citarlo directamente pero no proporcionaremos información demográfica asociada con la respuesta para mantener el anonimato.

**¿A quién debo de contactar si tengo alguna pregunta?**

Puedes hacer cualquier pregunta que tengas sobre la investigación en cualquier momento. Si tienes alguna pregunta, preocupaciones, o quejas, o crees que participar en esta investigación te ha causado daño, habla con el equipo de investigación o contacta al Investigador Principal Timothy Tansey en el número de teléfono (608) 265-8991.

Si tienes alguna pregunta sobre tus derechos como participante de esta investigación o quejas sobre la investigación o el equipo, puedes llamar a la línea confidencial de cumplimiento de investigación a 1-833-652-2506. El personal trabajara contigo para atender tus preocupaciones sobre la participación en la investigación y ayudar a resolver problemas.

Tu participación es completamente voluntaria. Si tú decides no participar o retirarte de este estudio, puedes hacerlo sin penalización.

Si llegas a tener alguna dificultad para completar este cuestionario en línea, por favor póngase en contacto con Yazmin Castruita Rios en (915) 251-5961 para completar el cuestionario por teléfono.

Gracias por tu tiempo y participación en este estudio.

Atentamente,

Yazmin Castruita Rios, MRC, CRC (Candidata de Doctorado)  
Estudiante de Doctorado - Investigadora  
Departamento de Psicología de Rehabilitación y Educación Especial  
Universidad de Wisconsin-Madison

## Appendix E.1: Study Questionnaire – English Version

### Screening Questionnaire

Please complete the following screening questionnaire.		
1	Are you completing this survey independently?*	<input type="checkbox"/> Yes
2	Do you identify as Hispanic or Latinx?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3	Do you have a disability?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4	Are you between the ages of 18 and 22?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5	Are you currently receiving services from a state vocational rehabilitation program?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6	Do you prefer to read in English or Spanish?	<input type="checkbox"/> English <input type="checkbox"/> Spanish
7	How did you hear about this study?	
8	CAPTCHA question	

\*This was an embedded question, only visible to bots.

### Section 1: Sociodemographic Questionnaire

	Question	Response Options
1	What is your gender?	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Non-binary <input type="checkbox"/> Transgender <input type="checkbox"/> Prefer not to say
2	How old are you?	<input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 <input type="checkbox"/> 22
3	What is your race?	<input type="checkbox"/> White <input type="checkbox"/> Black or African American <input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Native Hawaiian or Pacific Islander <input type="checkbox"/> Other (please specify):
4	What is your primary disability?	<input type="checkbox"/> Amputation or missing limbs <input type="checkbox"/> Attention-deficit/hyperactivity disorder (ADHD) <input type="checkbox"/> Anxiety disorder <input type="checkbox"/> Autism <input type="checkbox"/> Bipolar disorder <input type="checkbox"/> Blindness or low vision <input type="checkbox"/> Cancer <input type="checkbox"/> Celiac disease

		<input type="checkbox"/> Cerebral palsy <input type="checkbox"/> Chronic pain <input type="checkbox"/> Crohn's disease <input type="checkbox"/> Deaf or hard of hearing <input type="checkbox"/> Diabetes <input type="checkbox"/> Fibromyalgia <input type="checkbox"/> HIV/AIDS <input type="checkbox"/> Intellectual disability <input type="checkbox"/> Major depression <input type="checkbox"/> Migraine headaches <input type="checkbox"/> Multiple sclerosis <input type="checkbox"/> Post-traumatic stress disorder (PTSD) <input type="checkbox"/> Schizophrenia <input type="checkbox"/> Spinal cord injury <input type="checkbox"/> Other (please specify):
5	What is your secondary disability?	<input type="checkbox"/> Amputation or missing limbs <input type="checkbox"/> Attention-deficit/hyperactivity disorder (ADHD) <input type="checkbox"/> Anxiety disorder <input type="checkbox"/> Autism <input type="checkbox"/> Bipolar disorder <input type="checkbox"/> Blindness or low vision <input type="checkbox"/> Cancer <input type="checkbox"/> Celiac disease <input type="checkbox"/> Cerebral palsy <input type="checkbox"/> Chronic pain <input type="checkbox"/> Crohn's disease <input type="checkbox"/> Deaf or hard of hearing <input type="checkbox"/> Diabetes <input type="checkbox"/> Fibromyalgia <input type="checkbox"/> HIV/AIDS <input type="checkbox"/> Intellectual disability <input type="checkbox"/> Major depression <input type="checkbox"/> Migraine headaches <input type="checkbox"/> Multiple sclerosis <input type="checkbox"/> Post-traumatic stress disorder (PTSD) <input type="checkbox"/> Schizophrenia <input type="checkbox"/> Spinal cord injury <input type="checkbox"/> Other (please specify):
6	How many years have you had this disability?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5

		<input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 <input type="checkbox"/> 22
7	Is English your native language?	<input type="checkbox"/> Yes <input type="checkbox"/> No
8	What type of community do you live in?	<input type="checkbox"/> Rural <input type="checkbox"/> Urban
9	What is your highest level of education?	<input type="checkbox"/> Less than high School <input type="checkbox"/> Some high school experience <input type="checkbox"/> High school diploma or equivalent <input type="checkbox"/> Associate or some postsecondary education experience <input type="checkbox"/> College degree <input type="checkbox"/> Some graduate School <input type="checkbox"/> Graduate degree (master's level or higher) <input type="checkbox"/> Other (please specify):
10	What is your family's annual income?	<input type="checkbox"/> Less than \$10,000 <input type="checkbox"/> \$10,000-19,999 <input type="checkbox"/> \$20,000-29,999 <input type="checkbox"/> \$30,000-39,999 <input type="checkbox"/> \$40,000-49,999 <input type="checkbox"/> \$50,000-59,999 <input type="checkbox"/> \$60,000-69,999 <input type="checkbox"/> \$70,000-79,999 <input type="checkbox"/> \$80,000-89,999 <input type="checkbox"/> \$90,000-99,999 <input type="checkbox"/> \$100,000 or above
11	Do you receive any of the listed disability benefits?	<input type="checkbox"/> Supplemental Security Income (SSI) <input type="checkbox"/> Social Security Disability Insurance (SSDI) <input type="checkbox"/> I do not receive disability benefits

12	Are you currently living with family?	<input type="checkbox"/> Yes <input type="checkbox"/> No
13	Which of the following best describes you?	<input type="checkbox"/> First generation: Born outside U.S. <input type="checkbox"/> Second generation: At least one parent was born outside the U.S. <input type="checkbox"/> Third-and-higher generation: Both parents were born in the U.S.

## Section 2: Vocational Rehabilitation Engagement Questionnaire

### Vocational Rehabilitation Engagement Scale (VRES; Dutta et al., 2017)

<b>Instructions:</b> Please rate the following items (1 = <i>strongly disagree</i> to 5 = <i>strongly agree</i> ).						
		Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	I strive to complete assignments and rehabilitation activities agreed upon with my rehabilitation counselor.	1	2	3	4	5
2	I communicate with my rehabilitation counselor regularly.	1	2	3	4	5
3	I show up for appointments related to my rehabilitation program.	1	2	3	4	5
4	I understand and accept the need for vocational rehabilitation services.	1	2	3	4	5
	I am paying attention to the survey. Please select 'somewhat agree' for this item.	1	2	3	4	5
5	I recognize the benefits of participating in vocational rehabilitation activities.	1	2	3	4	5
6	I am determined to complete all the services identified in my individualized plan for employment.	1	2	3	4	5
7	I get along with my rehabilitation counselor.	1	2	3	4	5
8	I am actively involved in my planning of my rehabilitation program with my counselor.	1	2	3	4	5
9	I am open to suggestions and feedback.	1	2	3	4	5

**Section 3: Acculturation Questionnaire**  
**Bidimensional Acculturation Scale (BAS; Marin & Gamba, 1996)**

<b>Instructions:</b> Please rate the following items (1 = <i>almost never</i> to 4 = <i>almost always</i> )					
		Almost never	Sometimes	Often	Almost always
1	How often do you speak English?	1	2	3	4
2	How often do you speak English with your friends?	1	2	3	4
3	How often do you think in English?	1	2	3	4
4	How often do you speak Spanish?	1	2	3	4
5	How often do you speak in Spanish with your friends?	1	2	3	4
6	How often do you think in Spanish?	1	2	3	4
		Very poorly	Poorly	Well	Very well
7	How well do you speak English?	1	2	3	4
8	How well do you read in English?	1	2	3	4
9	How well do you understand television programs in English?	1	2	3	4
10	How well do you understand radio programs in English?	1	2	3	4
11	How well do you write in English?	1	2	3	4
12	How well do you understand music in English?	1	2	3	4
13	How well do you speak Spanish?	1	2	3	4
14	How well do you read in Spanish?	1	2	3	4
15	How well do you understand television programs in Spanish?	1	2	3	4
16	How well do you understand radio programs in Spanish?	1	2	3	4
17	How well do you write in Spanish?	1	2	3	4
18	How well do you understand music in Spanish?	1	2	3	4



		Almost never	Sometimes	Often	Almost always
19	How often do you watch television programs in English?	1	2	3	4
20	How often do you listen to radio programs in English?	1	2	3	4
21	How often do you listen to music in English?	1	2	3	4
22	How often do you watch television programs in Spanish?	1	2	3	4
23	How often do you listen to radio programs in Spanish?	1	2	3	4
24	How often do you listen to music in Spanish?	1	2	3	4

### Section 4: Social Support Questionnaire

#### Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988, 1990)

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	There is a special person who is around when I am in need.	1	2	3	4	5
2	There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5
3	My family really tries to help me.	1	2	3	4	5
4	I get the emotional help and support I need from my family.	1	2	3	4	5
5	I have a special person who is a real source of comfort to me.	1	2	3	4	5
6	My friends really try to help me.	1	2	3	4	5
7	I can count on my friends when things go wrong.	1	2	3	4	5
8	I can talk about my problems with my family.	1	2	3	4	5
9	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5
	Please respond agree to this item to prove you are paying attention.	1	2	3	4	5
10	There is a special person in my life who cares about my feelings.	1	2	3	4	5
11	My family is willing to help me make decisions.	1	2	3	4	5
12	I can talk about my problems with my friends.	1	2	3	4	5
13	Please identify who the "special person" is:	<input type="checkbox"/> Spouse/Partner <input type="checkbox"/> Girlfriend/Boyfriend <input type="checkbox"/> Friend <input type="checkbox"/> Professional (e.g., teacher, doctor, counselor, pastor) <input type="checkbox"/> Other family member				

### Section 5: Self-Stigma Questionnaire

#### Self-Stigma of Seeking Help (SSOSH; Vogel et al., 2006)

<b>Instructions:</b> Please rate the following items (1 = <i>strongly disagree</i> to 5 = <i>strongly agree</i> ).						
		Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	I would feel inadequate if I went to a vocational rehabilitation counselor for vocational rehabilitation services.	1	2	3	4	5
2	My self-confidence would NOT be threatened if I sought professional help.	1	2	3	4	5
3	Seeking vocational rehabilitation services would make me less intelligent.	1	2	3	4	5
4	My self-esteem would increase if I talked to a vocational rehabilitation counselor.	1	2	3	4	5
5	My view of myself would not change just because I made the choice to see a vocational rehabilitation counselor.	1	2	3	4	5
6	It would make me feel inferior to ask a vocational rehabilitation counselor for help.	1	2	3	4	5
7	I would feel okay about myself if I made the choice to seek professional help.	1	2	3	4	5
8	If I went to a vocational rehabilitation counselor, I would be less satisfied with myself.	1	2	3	4	5
9	My self-confidence would remain the same if I sought help for a problem I could not solve.	1	2	3	4	5
10	I would feel worse about myself if I could not solve my own problems.	1	2	3	4	5

## Section 6: Perceptions of Stigma of Close Individuals Questionnaire

### Perceptions of Stigmatization by Others for Seeking Help (PSOSH; Vogel et al., 2009)

<b>Imagine you had an academic or vocational issue that you could not solve on your own. If you sought rehabilitation counseling services for this issue, to what degree do you believe that <i>your family</i> would ____”.</b>						
		Not at all	A little	Some	A lot	A great deal
1	React negatively to you	1	2	3	4	5
2	Think bad things of you	1	2	3	4	5
3	See you as seriously disturbed	1	2	3	4	5
4	Think of you in a less favorable way	1	2	3	4	5
5	Think you posed a risk to others	1	2	3	4	5
<b>Imagine you had an academic or vocational issue that you could not solve on your own. If you sought rehabilitation counseling services for this issue, to what degree do you believe that <i>your friends</i> would ____”.</b>						
		Not at all	A little	Some	A lot	A great deal
1	React negatively to you	1	2	3	4	5
2	Think bad things of you	1	2	3	4	5
3	See you as seriously disturbed	1	2	3	4	5
4	Think of you in a less favorable way	1	2	3	4	5
5	Think you posed a risk to others	1	2	3	4	5
<b>Imagine you had an academic or vocational issue that you could not solve on your own. If you sought rehabilitation counseling services for this issue, to what degree do you believe that <i>vocational rehabilitation counselors</i> would ____”.</b>						
		Not at all	A little	Some	A lot	A great deal
1	React negatively to you	1	2	3	4	5
2	Think bad things of you	1	2	3	4	5
3	See you as seriously disturbed	1	2	3	4	5
4	Think of you in a less favorable way	1	2	3	4	5
5	Think you posed a risk to others	1	2	3	4	5

**Section 7: Counselor-Client Questionnaire**

	Question	Response
1	Does your vocational rehabilitation counselor have a disability?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
2	Does your vocational rehabilitation counselor speak Spanish?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
3	Is your vocational rehabilitation counselor the same gender as you?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
4	Is your vocational rehabilitation counselor Hispanic or Latinx?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure

## Section 8: Internal Motivation Questionnaire

### Vocational Rehabilitation Internal Motivation Scale (VRIMS)

<b>Instructions:</b> Please rate the following items (1 = <i>strongly disagree</i> to 5 = <i>strongly agree</i> )						
		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	I want to work because it is fun.	1	2	3	4	5
2	I want to work because people say I should.	1	2	3	4	5
3	I want to work because I feel like a failure to not have a job.	1	2	3	4	5
4	I want to work because my family and friends say I should.	1	2	3	4	5
	Please respond disagree to this question to prove you are paying attention.	1	2	3	4	5
5	I want to work because I value the social and financial benefits of work.	1	2	3	4	5
6	I want to work because I want to make some changes in my life.	1	2	3	4	5
7	I choose to receive vocational rehabilitation services because it is an opportunity for change.	1	2	3	4	5

### Section 9: Vocational Self-Efficacy Questionnaire

#### Vocational Self-Efficacy Scale (VSES; Fitzgerald, 2013; Fitzgerald et al., 2016)

<b>Instructions:</b> Please rate your level of confidence in performing the following actions.					
		Strongly disagree	Disagree	Agree	Strongly agree
1	I know how to prepare for a job that is of interest to me.	1	2	3	4
2	I know my skills and abilities and how they relate to jobs I am interested in.	1	2	3	4
3	I know how to prepare a cover letter and resume.	1	2	3	4
4	I know how to talk about my skills and abilities in a job interview.	1	2	3	4
5	I have the physical and mental stamina for a full-time job.	1	2	3	4
6	I know how to maintain regular work attendance on the job.	1	2	3	4
7	I know how to get along with supervisors.	1	2	3	4
8	I know how to be a team player at work.	1	2	3	4
9	I know how to maintain appropriate attention and concentration on the job.	1	2	3	4
10	I know how to maintain good personal hygiene at work.	1	2	3	4
11	I know how to accept criticism from supervisors.	1	2	3	4
12	I know how to manage my emotions on the job.	1	2	3	4
13	I know when to seek help at work when needed.	1	2	3	4
14	I know how to cope with discouragements from people who are important to me.	1	2	3	4
15	I can determine what is appropriate to wear to work.	1	2	3	4

**Section 10: Working Alliance Questionnaire**  
**Working Alliance Inventory (WAI-S)**

<b>Instructions:</b> Below is a list of statements and questions about experiences people might have with their vocational rehabilitation services or rehabilitation counselor. Some items refer directly to your rehabilitation counselor with an underlined space ____ as you read the sentences, mentally insert the name of your rehabilitation counselor in place of ____ in the text. Think about your experience in vocational rehabilitation services, and decide which category best describes your own experience. <b>IMPORTANT!!! Please take your time to consider each question carefully.</b>						
		Never	Rarely	Sometimes	Often	Always
1	As a result of these sessions I am clearer as to how I might be able to change.	1	2	3	4	5
2	What I am doing in vocational rehabilitation services gives me new ways of looking at my problem.	1	2	3	4	5
3	I believe ____ likes me.	1	2	3	4	5
4	____ and I collaborate on setting goals for my vocational rehabilitation services.	1	2	3	4	5
5	____ and I respect each other	1	2	3	4	5
6	____ and I are working towards mutually agreed upon goals.	1	2	3	4	5
	Select 'often' to prove you are paying attention.	1	2	3	4	5
7	I feel that ____ appreciates me.	1	2	3	4	5
8	____ and I agree on what is important for me to work on.	1	2	3	4	5
9	I feel ____ cares about me even when I do things that they do not approve of.	1	2	3	4	5
10	I feel that the things I do in vocational rehabilitation services will help me to accomplish the changes that I want.	1	2	3	4	5
11	____ and I have established a good understanding of the kind of changes that would be good for me.	1	2	3	4	5
12	I believe the way we are working with my situation is correct.	1	2	3	4	5



## Section 11: Vocational Outcome Expectancy Questionnaire

### Vocational Outcome Expectancy Scale (VOES; Iwanaga et al., 2017)

<b>Instructions:</b> Please rate your level of agreement with the following statements.						
		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	Completing my vocational rehabilitation program will likely allow me to:					
1	Have a job that is good for my lifestyle	1	2	3	4	5
2	Do work that I would find satisfying	1	2	3	4	5
3	Find a job that I can do well	1	2	3	4	5
4	Work for an employer who would be supportive of individuals with disabilities	1	2	3	4	5
5	Have a job with good pay and benefits	1	2	3	4	5
6	Go into a field with high employment demand	1	2	3	4	5
	Please respond to strongly agree to this question to prove you are paying attention.	1	2	3	4	5
7	Experience increased stress	1	2	3	4	5
8	Increase in responsibilities	1	2	3	4	5
9	Increase cost of housing	1	2	3	4	5
10	Disruption in my daily routine	1	2	3	4	5
11	Reduce government financial and health benefits	1	2	3	4	5

### Section 12: Pre-ETS Services Questionnaire

	Question	Response
1	Did you receive or are currently receiving pre-employment transition services (such as college counseling, self-advocacy, career counseling, working on a job, how to get along in the workplace)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2	Please select all the pre-ETS services you have received, or you are currently receiving.	<input type="checkbox"/> College counseling (counseling on enrollment opportunities) <input type="checkbox"/> Self-advocacy (instruction in self-advocacy) <input type="checkbox"/> Career counseling (job exploration counseling) <input type="checkbox"/> Working on a job (work based learning experiences) <input type="checkbox"/> How to get along in the workplace (Work readiness training)

### Section 12a: Quality of Pre-ETS Services Questionnaire

<b>Instructions:</b> Please rate the quality of the following pre-ETS services (1 = <i>very poor</i> to 5 = <i>very good</i> ). If you did not receive one of the listed services, please select the "NA" option.							
		Very Poor	Poor	Acceptable	Good	Very Good	NA
1	College counseling (counseling on enrollment opportunities)	1	2	3	4	5	
2	Self-advocacy (instruction in self-advocacy)	1	2	3	4	5	
3	Career counseling (job exploration counseling)	1	2	3	4	5	
4	Working on a job (work based learning experiences)	1	2	3	4	5	
5	How to get along in the workplace (work readiness training)	1	2	3	4	5	

### Section 12b: Relevance of Pre-ETS Services Questionnaire

<b>Instructions:</b> Please rate the relevance of the following pre-ETS services (1 = <i>extremely irrelevant</i> to 5 = <i>extremely relevant</i> ). If you did not receive one of the listed services, please select the “NA” option.							
		Extremely irrelevant	Somewhat irrelevant	Neither relevant nor irrelevant	Somewhat relevant	Extremely relevant	NA
1	College counseling (counseling on enrollment opportunities)	1	2	3	4	5	
2	Self-advocacy (instruction in self-advocacy)	1	2	3	4	5	
3	Career counseling (job exploration counseling)	1	2	3	4	5	
4	Working on a job (work based learning experiences)	1	2	3	4	5	
5	How to get along in the workplace (work readiness training)	1	2	3	4	5	

### Section 12c: Usefulness of Pre-ETS Services Questionnaire

<b>Instructions:</b> Please rate the usefulness of the following pre-ETS services (1 = <i>extremely not useful</i> to 5 = <i>extremely useful</i> ). If you did not receive one of the listed services, please select the “NA” option.							
		Extremely not useful	Somewhat not useful	Neither useful nor not useful	Somewhat useful	Extremely useful	NA
1	College counseling (counseling on enrollment opportunities)	1	2	3	4	5	
2	Self-advocacy (instruction in self-advocacy)	1	2	3	4	5	
3	Career counseling (job exploration counseling)	1	2	3	4	5	
4	Working on a job (work based learning experiences)	1	2	3	4	5	
5	How to get along in the workplace (work readiness training)	1	2	3	4	5	

### Section 12d: Qualitative Pre-ETS Services Questionnaire

<b>Instructions:</b> Please respond to the following questions.		
Question		Response
1	Can you tell me about your experiences in the pre-ETS programming that you received? How was it provided? How long did the program last? What did you learn from it?	
2	How did your experience receiving pre-ETS services affect your decision to apply for adult services? Or thinking about future employment?	
3	What did you like most about the pre-ETS program you participated in? What did you like the least? How could the program be improved?	

## Appendix E.2: Study Questionnaire – Spanish Version

### Screening Questionnaire

Por favor completa el siguiente cuestionario de selección.		
1	¿Está completando esta encuesta de forma independiente?*	<input type="checkbox"/> Si
2	¿Te identificas como Hispano o Latino?	<input type="checkbox"/> Si <input type="checkbox"/> No
3	¿Tienes alguna discapacidad?	<input type="checkbox"/> Si <input type="checkbox"/> No
4	¿Tienes entre 18 y 22 años?	<input type="checkbox"/> Si <input type="checkbox"/> No
5	¿Está recibiendo actualmente servicios de un programa estatal de rehabilitación vocacional?	<input type="checkbox"/> Si <input type="checkbox"/> No
6	¿Prefieres leer en inglés o español?	<input type="checkbox"/> Inglés <input type="checkbox"/> Español
7	¿Como escuchaste sobre esta investigación?	
8	Pregunta CAPTCHA	

\*This was an embedded question, only visible to bots.

### Sección 1: Cuestionario Demográfico

	Pregunta	Opciones de respuesta
1	¿Cuál es tu género?	<input type="checkbox"/> Masculino <input type="checkbox"/> Femenino <input type="checkbox"/> No binario <input type="checkbox"/> Transgénero <input type="checkbox"/> Prefiero no decir
2	¿Cuál es tu edad?	<input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 <input type="checkbox"/> 22
3	¿Te identificas como Hispano o Latino/a/e?	<input type="checkbox"/> Si <input type="checkbox"/> No
4	¿Cuál es tu raza?	<input type="checkbox"/> Blanco <input type="checkbox"/> Negro o Afroamericano <input type="checkbox"/> Indio Americano o Nativo de Alaska <input type="checkbox"/> Asiático <input type="checkbox"/> Nativo de Hawái o Isleño del Pacífico <input type="checkbox"/> Otro (por favor especifica):
5	¿Cuál es tu discapacidad primaria?	<input type="checkbox"/> Amputación o miembros ausentes

		<input type="checkbox"/> Trastorno por déficit de atención e hiperactividad (TDAH) <input type="checkbox"/> Trastorno de ansiedad <input type="checkbox"/> Autismo <input type="checkbox"/> Trastorno bipolar <input type="checkbox"/> Ceguera o baja visión <input type="checkbox"/> Cáncer <input type="checkbox"/> Enfermedad celiaca <input type="checkbox"/> Parálisis cerebral <input type="checkbox"/> Dolor crónico <input type="checkbox"/> Enfermedad de Crohn <input type="checkbox"/> Sordo o con dificultad para oír <input type="checkbox"/> Diabetes <input type="checkbox"/> Fibromialgia <input type="checkbox"/> VIH/Sida <input type="checkbox"/> Discapacidad Intelectual <input type="checkbox"/> Depresión severa <input type="checkbox"/> Migraña (dolor de cabeza) <input type="checkbox"/> Esclerosis múltiple <input type="checkbox"/> Trastorno de estrés postraumático (TEPT) <input type="checkbox"/> Esquizofrenia <input type="checkbox"/> Lesión de medula espinal <input type="checkbox"/> Otro (por favor especifica):
6	¿Cuál es tu discapacidad secundaria?	<input type="checkbox"/> Amputación o miembros ausentes <input type="checkbox"/> Trastorno por déficit de atención e hiperactividad (TDAH) <input type="checkbox"/> Trastorno de ansiedad <input type="checkbox"/> Autismo <input type="checkbox"/> Trastorno bipolar <input type="checkbox"/> Ceguera o baja visión <input type="checkbox"/> Cáncer <input type="checkbox"/> Enfermedad celiaca <input type="checkbox"/> Parálisis cerebral <input type="checkbox"/> Dolor crónico <input type="checkbox"/> Enfermedad de Crohn <input type="checkbox"/> Sordo o con dificultad para oír <input type="checkbox"/> Diabetes <input type="checkbox"/> Fibromialgia <input type="checkbox"/> VIH/Sida <input type="checkbox"/> Discapacidad Intelectual <input type="checkbox"/> Depresión severa <input type="checkbox"/> Migraña (dolor de cabeza) <input type="checkbox"/> Esclerosis múltiple

		<input type="checkbox"/> Trastorno de estrés postraumático (TEPT) <input type="checkbox"/> Esquizofrenia <input type="checkbox"/> Lesión de medula espinal <input type="checkbox"/> Otro (por favor especifica):
7	¿Por cuantos años has tenido esta discapacidad?	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 <input type="checkbox"/> 22
8	¿Tu idioma nativo (o primer idioma) es Ingles?	<input type="checkbox"/> Si <input type="checkbox"/> No
9	¿Cuál es tu locación geográfica?	<input type="checkbox"/> Rural <input type="checkbox"/> Urbana
10	¿Cuál describe tu nivel más alto de educación?	<input type="checkbox"/> Menos de la preparatoria <input type="checkbox"/> Alguna experiencia en la preparatoria <input type="checkbox"/> Diploma de la preparatoria o equivalente <input type="checkbox"/> Asociado o alguna experiencia en educación postsecundaria <input type="checkbox"/> Diploma (titulo) de universidad <input type="checkbox"/> Algo de escuela de posgrado <input type="checkbox"/> Diploma (titulo) de posgrado (nivel de maestría o superior) <input type="checkbox"/> Otro (por favor especifica):
11	¿Cuál es el ingreso anual de tu familia?	<input type="checkbox"/> Menos de \$10,000 <input type="checkbox"/> \$10,000-19,999 <input type="checkbox"/> \$20,000-29,999

		<input type="checkbox"/> \$30,000-39,999 <input type="checkbox"/> \$40,000-49,999 <input type="checkbox"/> \$50,000-59,999 <input type="checkbox"/> \$60,000-69,999 <input type="checkbox"/> \$70,000-79,999 <input type="checkbox"/> \$80,000-89,999 <input type="checkbox"/> \$90,000-99,999 <input type="checkbox"/> \$100,000 o mas
12	¿Recibes algunos de estos beneficios por tu discapacidad?	<input type="checkbox"/> Seguridad de Ingreso Suplementario (SSI, siglas in ingles) <input type="checkbox"/> Seguro por Incapacidad del Seguro Social (SSDI, siglas en ingles) <input type="checkbox"/> No recibo ningún tipo de beneficio por discapacidad
13	¿Estas actualmente viviendo con tu familia?	<input type="checkbox"/> Si <input type="checkbox"/> No
14	¿Cuál de las siguientes opciones te describe mejor?	<input type="checkbox"/> Primera generación: Naciste fuera de los Estados Unidos <input type="checkbox"/> Segunda generación: Al menos uno de tus padres nació fuera de los Estados Unidos <input type="checkbox"/> Tercera-o-más alta generación: Ambos de tus padres nacieron fuera de los Estados Unidos



## Sección 2: Cuestionario de la Participación en Rehabilitación Vocacional

<b>Instrucciones:</b> Por favor califique los siguientes artículos (1 = <i>totalmente en desacuerdo</i> a 5 = <i>totalmente de acuerdo</i> ).						
		Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo ni en desacuerdo	De acuerdo	Totalmente de acuerdo
1	Yo me esfuerzo por completar las tareas y actividades de rehabilitación acordadas con mi consejero de rehabilitación.	1	2	3	4	5
2	Yo me comunico con mi consejero de rehabilitación regularmente.	1	2	3	4	5
3	Yo me presento a citas relacionada con mi programa de rehabilitación.	1	2	3	4	5
4	Yo entiendo y acepto la necesidad de servicios de rehabilitación vocacional.	1	2	3	4	5
	Yo estoy poniendo atención a la encuesta. Por favor selecciona 'de acuerdo' a esta pregunta.					
5	Yo reconozco los beneficios de participar en actividades de rehabilitación vocacional.	1	2	3	4	5
6	Yo estoy determinado a completar todos los servicios identificados en mi plan individualizado de empleo.	1	2	3	4	5
7	Yo me llevo bien con mi consejero de rehabilitación.	1	2	3	4	5
8	Yo estoy activamente involucrado en mi planificación de mi programa de rehabilitación con mi consejero.	1	2	3	4	5
9	Yo estoy abierto a sugerencias y comentarios.	1	2	3	4	5

### Sección 3: Cuestionario de Aculturación

<b>Instrucciones:</b> Por favor califique los siguientes artículos (1 = <i>casi nunca</i> a 4 = <i>casi siempre</i> ).					
		Casi nunca	Algunas veces	Frecuentemente	Casi siempre
1	¿Con qué frecuencia hablas Inglés?	1	2	3	4
2	¿Con qué frecuencia hablas en Inglés con tus amigas/os?	1	2	3	4
3	¿Con qué frecuencia piensas en inglés?	1	2	3	4
4	¿Con qué frecuencia hablas Español?	1	2	3	4
5	¿Con qué frecuencia hablas Español con tus amigas/os?	1	2	3	4
6	¿Con qué frecuencia piensas en español?	1	2	3	4
		Muy mal	No muy bien	Bien	Muy bien
7	¿Qué tan bien hablas inglés?	1	2	3	4
8	¿Qué tan bien lees en inglés?	1	2	3	4
9	¿Qué tan bien entiendes los programas de televisión en inglés?	1	2	3	4
10	¿Qué tan bien entiendes los programas de radio en inglés?	1	2	3	4
11	¿Qué tan bien escribes en inglés?	1	2	3	4
12	¿Qué tan bien entiendes la música en inglés?	1	2	3	4
13	¿Qué tan bien hablas en español?	1	2	3	4
14	¿Qué tan bien lees en español?	1	2	3	4
15	¿Qué tan bien entiendes los programas de televisión en español?	1	2	3	4
16	¿Qué tan bien entiendes los programas de radio en español?	1	2	3	4
17	¿Qué tan bien escribes en español?	1	2	3	4
18	¿Qué tan bien entiendes la música en español?	1	2	3	4
		Casi nunca	Algunas veces	Frecuentemente	Casi siempre
19	¿Con qué frecuencia ves programas de Televisión en inglés?	1	2	3	4

20	¿Con qué frecuencia escuchas programas de radio en inglés?	1	2	3	4
21	¿Con qué frecuencia escuchas música en inglés?	1	2	3	4
22	¿Con qué frecuencia ves programas de Televisión en Español?	1	2	3	4
23	¿Con qué frecuencia escuchas programas de radio en español?	1	2	3	4
24	¿Con qué frecuencia ves programas de Televisión en inglés?	1	2	3	4

### Sección 4: Cuestionario de Apoyo Social

<b>Instrucciones:</b> Evalúe las siguientes declaraciones usando la siguiente escala (1 = <i>Totalmente en desacuerdo</i> a 5 = <i>Totalmente de acuerdo</i> )						
		Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo ni en desacuerdo	De acuerdo	Totalmente de acuerdo
1	Hay una persona en especial que está cerca cuando yo estoy en necesidad.	1	2	3	4	5
2	Hay una persona en especial con la cual yo puedo compartir mis alegrías y mis penas (lamentos).	1	2	3	4	5
3	Mi familia realmente trata de ayudarme.	1	2	3	4	5
4	Yo recibo la ayuda emocional y el apoyo que necesito de mi familia.	1	2	3	4	5
5	Yo tengo una persona en especial la cual es verdaderamente una fuente de consuelo para mí.	1	2	3	4	5
6	Mis amistades realmente tratan de ayudarme.	1	2	3	4	5
7	Yo puedo contar con mis amistades cuando las cosas salen mal.	1	2	3	4	5
8	Yo puedo hablar de mis problemas con mi familia.	1	2	3	4	5
9	Yo tengo amistades con las cuales yo puedo compartir mis alegrías y mis penas (lamentos).	1	2	3	4	5
	Por favor responde “de acuerdo” en este artículo para comprobar que estas poniendo atención.					
10	Hay una persona en especial en mi vida a quien le importa mis sentimientos.	1	2	3	4	5
11	Mi familia está dispuesta a ayudarme a hacer decisiones.	1	2	3	4	5
12	Yo puedo hablar de mis problemas con mis amistades.	1	2	3	4	5
13	Por favor identifique esa “persona en especial”	<input type="checkbox"/> Esposo(a)/Pareja <input type="checkbox"/> Novio(a) <input type="checkbox"/> Amigo(a) <input type="checkbox"/> Profesional (por ejemplo, maestro(a), doctor/medico, consejero(a), pastor) <input type="checkbox"/> Otro miembro de la familia				

### Sección 5: Cuestionario de Autoestigma

<b>Instrucciones:</b> Por favor califique los siguientes artículos (1 = <i>totalmente en desacuerdo</i> a 5 = <i>totalmente de acuerdo</i> ).						
		Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo ni en desacuerdo	De acuerdo	Totalmente de acuerdo
1	Yo me sentiría inadecuado(a) si fuera a un consejero(a) de rehabilitación vocacional para recibir servicios de rehabilitación vocacional.	1	2	3	4	5
2	Mi confianza en mí mismo(a) NO se vería amenazada si buscara ayuda profesional.	1	2	3	4	5
3	Buscar servicios de rehabilitación vocacional me haría menos inteligente.	1	2	3	4	5
4	Mi autoestima aumentaría si yo hablara con un consejero(a) de rehabilitación vocacional.	1	2	3	4	5
5	Mi punto de vista de mí mismo no cambiaría solo porque tome la decisión de ver a un consejero(a) de rehabilitación vocacional.	1	2	3	4	5
6	Me haría sentir inferior pedirle ayuda a un consejero(a) de rehabilitación vocacional.	1	2	3	4	5
7	Me sentiría bien sobre mí mismo(a) si yo tomara la decisión de buscar ayuda profesional.	1	2	3	4	5
8	Si yo fuera con un consejero(a) de rehabilitación vocacional, yo estaría menos satisfecho(a) conmigo mismo(a).	1	2	3	4	5
9	Mi confianza en mí mismo(a) seguiría siendo la misma si yo buscara ayuda para un problema que yo no podría resolver.	1	2	3	4	5
10	Yo me sentiría peor conmigo mismo(a) si yo no pudiera resolver mis propios problemas.	1	2	3	4	5

### Sección 6: Cuestionario de las Percepciones del Estigma de Individuos Cercanos

<b>Imagina que tienes un problema académico o vocacional que tú no puedes resolver por tu cuenta. Si tu buscaras servicios de rehabilitación vocacional para este problema, a que grado crees que tu familia ____”.</b>						
		Para nada	Un poco	Algo	Mucho	Bastante
1	Reaccionaria negativamente a ti	1	2	3	4	5
2	Pensaría cosas malas sobre ti	1	2	3	4	5
3	Te vería como seriamente perturbado	1	2	3	4	5
4	Pensaría en ti de una manera menos favorable	1	2	3	4	5
5	Pensaría que tú eres un riesgo para otros	1	2	3	4	5
<b>Imagina que tienes un problema académico o vocacional que tú no puedes resolver por tu cuenta. Si tu buscaras servicios de rehabilitación vocacional para este problema, a que grado crees que tus amigos ____”.</b>						
		Para nada	Un poco	Algo	Mucho	Bastante
1	Reaccionaria negativamente a ti	1	2	3	4	5
2	Pensaría cosas malas sobre ti	1	2	3	4	5
3	Te vería como seriamente perturbado	1	2	3	4	5
4	Pensaría en ti de una manera menos favorable	1	2	3	4	5
5	Pensaría que tú eres un riesgo para otros	1	2	3	4	5
<b>Imagina que tienes un problema académico o vocacional que tú no puedes resolver por tu cuenta. Si tu buscaras servicios de rehabilitación vocacional para este problema, a que grado crees que tu consejero(a) de rehabilitación vocacional ____”.</b>						
		Para nada	Un poco	Algo	Mucho	Bastante
1	Reaccionaria negativamente a ti	1	2	3	4	5
2	Pensaría cosas malas sobre ti	1	2	3	4	5
3	Te vería como seriamente perturbado	1	2	3	4	5
4	Pensaría en ti de una manera menos favorable	1	2	3	4	5
5	Pensaría que tú eres un riesgo para otros	1	2	3	4	5

### Sección 7: Cuestionario Consejero-Cliente

	Pregunta	Respuesta
1	¿Tu consejero(a) de rehabilitación vocacional tiene una discapacidad?	<input type="checkbox"/> Si <input type="checkbox"/> No <input type="checkbox"/> No estoy seguro(a)
2	¿Tu consejero(a) de rehabilitación vocacional habla español?	<input type="checkbox"/> Si <input type="checkbox"/> No <input type="checkbox"/> No estoy seguro(a)
3	¿Tu consejero(a) es del mismo género que tú?	<input type="checkbox"/> Si <input type="checkbox"/> No <input type="checkbox"/> No estoy seguro(a)
4	¿Tu consejero(a) es Hispano(a) o Latino(a)?	<input type="checkbox"/> Si <input type="checkbox"/> No <input type="checkbox"/> No estoy seguro(a)

### Sección 8: Cuestionario de Motivación Interna

<b>Instrucciones:</b> Por favor califica cada uno de los artículos (1 = <i>totalmente en desacuerdo</i> a 5 = <i>totalmente de acuerdo</i> ).						
		Totalmente en desacuerdo	En desacuerdo	No estoy seguro(a)	De acuerdo	Totalmente de acuerdo
1	Yo quiero trabajar porque es divertido.	1	2	3	4	5
2	Yo quiero trabajar porque la gente dice que debería.	1	2	3	4	5
3	Yo quiero trabajar porque me siento como un fracaso por no tener un trabajo.	1	2	3	4	5
4	Yo quiero trabajar porque mi familia y amigos dicen que debería.	1	2	3	4	5
	Por favor responde “en desacuerdo” a esta pregunta para comprobar que si estas poniendo atención.	1	2	3	4	5
5	Yo quiero trabajar porque valoro los beneficios sociales y financieros del trabajo.	1	2	3	4	5
6	Yo quiero trabajar porque quiero hacer algunos cambios en mi vida.	1	2	3	4	5
7	Yo elijo recibir servicios de rehabilitación vocacional porque es una oportunidad para el cambio.	1	2	3	4	5



### Sección 9: Cuestionario de Autoeficacia Vocacional

<b>Instrucciones:</b> Por favor califique su nivel de confianza en la realización de las siguientes acciones.					
		Totalmente en desacuerdo	En desacuerdo	De acuerdo	Totalmente de acuerdo
1	Yo sé cómo prepararme para un trabajo que me interesa.	1	2	3	4
2	Yo conozco mis habilidades y como se relacionan con los trabajos que me interesan.	1	2	3	4
3	Yo sé cómo preparar una carta de presentación y un currículum.	1	2	3	4
4	Yo sé cómo hablar sobre mis habilidades en una entrevista de trabajo.	1	2	3	4
5	Yo tengo resistencia física y mental para un trabajo de tiempo completo.	1	2	3	4
6	Yo sé cómo mantener mi asistencia laboral regular en el trabajo.	1	2	3	4
7	Yo sé cómo llevarme bien con mis supervisores.	1	2	3	4
8	Yo sé cómo trabajar en equipo.	1	2	3	4
9	Yo sé cómo mantener la atención y concentración adecuada en el trabajo.	1	2	3	4
10	Yo sé cómo mantener buena higiene personal en el trabajo.	1	2	3	4
11	Yo sé cómo aceptar las críticas de mis supervisores.	1	2	3	4
12	Yo sé cómo manejar mis emociones en el trabajo.	1	2	3	4
13	Yo sé cuándo buscar ayuda en el trabajo cuando es necesario.	1	2	3	4
14	Yo sé cómo lidiar con los desánimos de las personas que son importantes para mí.	1	2	3	4
15	Yo puedo determinar que es apropiado usar para trabajar.	1	2	3	4

### Sección 10: Cuestionario de la Alianza de Trabajo

**Instrucciones:** La siguiente es una lista de declaraciones y preguntas sobre las experiencias que las personas pueden tener con sus servicios de rehabilitación vocacional o consejero(a) de rehabilitación. Algunos artículos se refieren directamente a tu consejero(a) de rehabilitación, indicado por un espacio \_\_\_\_\_. Como vayas leyendo las oraciones, mentalmente inserta el nombre de tu consejero(a) de rehabilitación en lugar de \_\_\_\_\_ en el texto. Piensa sobre tus experiencias en los servicios de rehabilitación vocacional, y decide que categoría mejor describe tu propia experiencia.

**!!!IMPORTANTE!!! Por favor toma tu tiempo para considerar cada pregunta cuidadosamente.**

		Nunca	Rara vez	A veces	A menudo	Siempre
1	Como resultado de estas sesiones, entiendo perfectamente la manera en que podré cambiar.	1	2	3	4	5
2	Lo que yo estoy haciendo en mis servicios de rehabilitación vocacional me da nuevas maneras de ver mi problema.	1	2	3	4	5
3	Yo creo que le caigo bien a _____.	1	2	3	4	5
4	_____ y yo colaboramos en establecer metas para los servicios de rehabilitación vocacional.	1	2	3	4	5
5	_____ y yo nos respetamos.	1	2	3	4	5
6	_____ y yo trabajamos juntos hacia metas que los dos acordamos son las mejores.	1	2	3	4	5
	Selecciona "a menudo" para demostrar que está prestando atención.	1	2	3	4	5
7	Yo siento que _____ me aprecia.	1	2	3	4	5
8	_____ y yo estamos de acuerdo en lo que es importante que yo trabaje.	1	2	3	4	5
9	Siento que _____ se preocupa por mí aun cuando hago cosas indebidas.	1	2	3	4	5
10	Creo que las cosas que hacemos en servicios de rehabilitación vocacional me ayudarán a realizar los cambios que deseo.	1	2	3	4	5
11	_____ y yo hemos establecido un buen entendimiento acerca de los tipos de cambios que serían buenos para mí.	1	2	3	4	5
12	Yo creo que la manera en que estamos trabajando con mi problema es la correcta.	1	2	3	4	5

### Sección 11: Cuestionario de las Expectativas de Resultados Vocacionales

<b>Instrucciones:</b> Por favor califique su nivel de acuerdo con las siguientes declaraciones.						
	El completar mi programa de rehabilitación vocacional probablemente me permitirá:	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo ni en desacuerdo	De acuerdo	Totalmente de acuerdo
1	Tener un trabajo que sea bueno para mi estilo de vida	1	2	3	4	5
2	Hacer un trabajo que encuentre satisfactorio	1	2	3	4	5
3	Encontrar un trabajo que pueda hacer bien	1	2	3	4	5
4	Trabajar para una empresa que apoye a las personas con discapacidad	1	2	3	4	5
5	Tener un trabajo con un buen salario y beneficios	1	2	3	4	5
6	Ir a un campo de trabajo con alta demanda de empleo	1	2	3	4	5
	Por favor responde “totalmente de acuerdo” a esta pregunta para comprobar que si estas poniendo atención.	1	2	3	4	5
7	Experimentar un aumento de estrés	1	2	3	4	5
8	Aumentar mis responsabilidades	1	2	3	4	5
9	Aumentar el costo de la vivienda	1	2	3	4	5
10	Interrumpir mi rutina diaria	1	2	3	4	5
11	Reducir los beneficios financieros y de salud del gobierno	1	2	3	4	5

### Sección 12: Cuestionario de Servicios de Transición Previo al Empleo (Pre-ETS)

	Pregunta	Respuesta
1	¿Recibiste, o estas recibiendo, servicios de transición previo al empleo (como por ejemplo asesoramiento sobre la universidad, autoafirmación, asesoramiento sobre carreras o profesión, experiencias de trabajo, cómo llevarse bien en el lugar de trabajo)?	<input type="checkbox"/> Si <input type="checkbox"/> No
2	Por favor selecciona todos los servicios de transición previo al empleo que has recibido, o estas actualmente recibiendo.	<input type="checkbox"/> Asesoramiento sobre la universidad (asesoría en educación postsecundaria) <input type="checkbox"/> Autoafirmación (servicios de autoafirmación y tutoría) <input type="checkbox"/> Asesoramiento sobre carreras (exploración y asesoría de empleo) <input type="checkbox"/> Experiencias de trabajo (experiencia de aprendizaje basadas en el trabajo) <input type="checkbox"/> Como llevarse bien en el lugar de trabajo (capacitación en preparación para el trabajo)

**Sección 12a: Cuestionario Sobre la Calidad de Servicios de Transición Previo al Empleo  
(Pre-ETS)**

<b>Instrucciones:</b> Por favor califique la calidad de los siguientes servicios de transición previo al empleo (1 = <i>muy malo</i> a 5 = <i>muy bien</i> ). Si no recibiste uno de los servicios listados, por favor selecciona la opción “NA”.							
		Muy malo	No muy bueno	Aceptable	Bien	Muy bien	NA
1	Asesoramiento sobre la universidad (asesoría en educación postsecundaria)	1	2	3	4	5	
2	Autoafirmación (servicios de autoafirmación y tutoría)	1	2	3	4	5	
3	Asesoramiento sobre carreras (exploración y asesoría de empleo)	1	2	3	4	5	
4	Experiencias de trabajo (experiencia de aprendizaje basadas en el trabajo)	1	2	3	4	5	
5	Como llevarse bien en el lugar de trabajo (capacitación en preparación para el trabajo)	1	2	3	4	5	

**Sección 12b: Cuestionario Sobre la Relevancia de Servicios de Transición Previo al Empleo (Pre-ETS)**

<b>Instrucciones:</b> Por favor califique la relevancia de los siguientes servicios de transición previo al empleo (1 = <i>extremadamente relevante</i> a 5 = <i>extremadamente relevante</i> ). Si no recibiste uno de los servicios listados, por favor selecciona la opción "NA".							
		Extremadamente irrelevante	Algo relevante	Ni relevante o irrelevante	Algo relevante	Extremadamente relevante	NA
1	Asesoramiento sobre la universidad (asesoría en educación postsecundaria)	1	2	3	4	5	
2	Autoafirmación (servicios de autoafirmación y tutoría)	1	2	3	4	5	
3	Asesoramiento sobre carreras (exploración y asesoría de empleo)	1	2	3	4	5	
4	Experiencias de trabajo (experiencia de aprendizaje basadas en el trabajo)	1	2	3	4	5	
5	Como llevarse bien en el lugar de trabajo (capacitación en preparación para el trabajo)	1	2	3	4	5	

**Sección 12c: Cuestionario Sobre la Utilidad de Servicios de Transición Previo al Empleo  
(Pre-ETS)**

<b>Instrucciones:</b> Por favor califique la relevancia de los siguientes servicios de transición previo al empleo (1 = <i>extremadamente inútil</i> a 5 = <i>extremadamente útil</i> ). Si no recibiste uno de los servicios listados, por favor selecciona la opción “NA”.							
		Extremadamente inútil	Nada útil	Ni útil ni nada útil	Algo útil	Extremadamente útil	NA
1	Asesoramiento sobre la universidad (asesoría en educación postsecundaria)	1	2	3	4	5	
2	Autoafirmación (servicios de autoafirmación y tutoría)	1	2	3	4	5	
3	Asesoramiento sobre carreras (exploración y asesoría de empleo)	1	2	3	4	5	
4	Experiencias de trabajo (experiencia de aprendizaje basadas en el trabajo)	1	2	3	4	5	
5	Como llevarse bien en el lugar de trabajo (capacitación en preparación para el trabajo)	1	2	3	4	5	

**Sección 12d: Cuestionario Cualitativo de Servicios de Transición Previo al Empleo (Pre-ETS)**

<b>Instrucciones:</b> Por favor responde a las siguientes preguntas.		
Pregunta		Respuesta
1	¿Puedes contarme sobre tus experiencias en la programación de servicios de transición previo al empleo que recibiste? ¿Como se proporcionaron? ¿Cuánto tiempo duro el programa? ¿Qué aprendiste de ello?	
2	¿Como afecto tu experiencia recibiendo servicios de transición previo al empleo en tu decisión de aplicar a servicios para adultos? ¿O en pensando en tu futuro empleo?	
3	¿Qué es (o fue) lo que más te gusto del programa de servicios de transición previo al empleo en el que participaste? ¿Qué es (o fue) lo que menos te gusto? ¿Cómo se puede mejorar el programa?	



## Appendix F:

## Descriptive Statistics and Correlations for All Independent Variables

Variable A	Variable B	<i>M</i> ( <i>SD</i> )	<i>r</i>
<b>Gender</b>		0.56 (0.60)	
	Age	20.12 (1.13)	0.00
	Race	1.88 (1.56)	0.20*
	Primary disability	5.70 (5.61)	0.19*
	Secondary disability	8.69 (8.10)	0.17*
	Years with disability	7.64 (5.04)	0.10
	English native language	0.68 (0.47)	0.21**
	Community residing	0.83 (0.38)	-0.02
	Highest education level	3.70 (1.11)	0.01
	Family annual income	6.18 (2.49)	-0.02
	Disability benefits	1.21 (0.74)	-0.13
	Living with family	0.94 (0.24)	0.10
	Generational status	2.36 (0.69)	0.07
	Hispanic cultural domains	2.75 (0.66)	-0.19*
	U.S. cultural domains	3.17 (0.49)	0.07
	Perceived social support from special person	3.81 (0.76)	0.06
	Perceived social support from family	3.81 (0.69)	0.03
	Perceived social support from friends	3.69 (0.72)	0.07
	Self-stigma	2.67 (0.59)	0.19*
	Perceptions of stigma by others	2.59 (1.07)	-0.16
	Disability match with VR counselor	0.50 (0.60)	-0.03
	VR counselor spoke Spanish	0.79 (0.53)	-0.03
	Gender match with VR counselor	0.69 (0.46)	0.04
	Ethnicity match with VR counselor	0.83 (0.55)	0.04
	Autonomy	3.66 (0.52)	-0.10
	Competence	2.98 (0.43)	-0.07
	Relatedness	3.60 (0.64)	0.03
	Vocational outcome expectancy	3.56 (0.53)	0.01
	Number of pre-ETS services received	3.05 (1.59)	-0.05
	Quality of pre-ETS services	4.01 (0.64)	0.03
	Relevance of pre-ETS services	4.11 (0.60)	0.14
	Usefulness of pre-ETS services	4.16 (0.58)	0.20
<b>Age</b>			
	Race	--	0.17*
	Primary disability	--	-0.12
	Secondary disability	--	-0.03
	Years with disability	--	0.02
	English native language	--	-0.03
	Community residing	--	0.05
	Highest education level	--	0.05
	Family annual income	--	-0.07
	Disability benefits	--	0.08
	Living with family	--	-0.12
	Generational status	--	-0.10

	Hispanic cultural domains	0.20*
	U.S. cultural domains	-0.07
	Perceived social support from special person	-0.17*
	Perceived social support from family	-0.12
	Perceived social support from friends	-0.20*
	Self-stigma	-0.10
	Perceptions of stigma by others	0.28**
	Disability match with VR counselor	0.10
	VR counselor spoke Spanish	-0.04
	Gender match with VR counselor	0.02
	Ethnicity match with VR counselor	-0.05
	Autonomy	0.03
	Competence	-0.06
	Relatedness	-0.12
	Vocational outcome expectancy	-0.04
	Number of pre-ETS services received	0.16
	Quality of pre-ETS services	-0.18
	Relevance of pre-ETS services	-0.12
	Usefulness of pre-ETS services	-0.26*
<b>Race</b>	Primary disability	0.04
	Secondary disability	0.05
	Years with disability	0.26**
	English native language	0.06
	Community residing	-0.01
	Highest education level	-0.21*
	Family annual income	-0.04
	Disability benefits	0.00
	Living with family	0.13
	Generational status	-0.01
	Hispanic cultural domains	-0.05
	U.S. cultural domains	-0.00
	Perceived social support from special person	0.06
	Perceived social support from family	0.13
	Perceived social support from friends	0.11
	Self-stigma	0.20*
	Perceptions of stigma by others	-0.09
	Disability match with VR counselor	-0.01
	VR counselor spoke Spanish	0.07
	Gender match with VR counselor	-0.02
	Ethnicity match with VR counselor	0.07
	Autonomy	-0.07
	Competence	0.06
	Relatedness	0.05
	Vocational outcome expectancy	0.10
	Number of pre-ETS services received	0.16*
	Quality of pre-ETS services	0.02
	Relevance of pre-ETS services	0.24*
	Usefulness of pre-ETS services	0.07

<b>Primary disability</b>	
Secondary disability	0.34**
Years with disability	-0.01
English native language	0.15
Community residing	-0.02
Highest education level	0.19*
Family annual income	0.14
Disability benefits	0.07
Living with family	0.12
Generational status	0.17*
Hispanic cultural domains	-0.17*
U.S. cultural domains	0.04
Perceived social support from special person	0.15
Perceived social support from family	0.17*
Perceived social support from friends	0.12
Self-stigma	0.11
Perceptions of stigma by others	-0.27**
Disability match with VR counselor	-0.01
VR counselor spoke Spanish	0.05
Gender match with VR counselor	0.10
Ethnicity match with VR counselor	0.11
Autonomy	0.01
Competence	-0.01
Relatedness	0.14
Vocational outcome expectancy	0.06
Number of pre-ETS services received	-0.23**
Quality of pre-ETS services	0.15
Relevance of pre-ETS services	0.10
Usefulness of pre-ETS services	0.25*
<b>Secondary disability</b>	
Years with disability	0.05
English native language	0.29**
Community residing	-0.08
Highest education level	0.07
Family annual income	0.24**
Disability benefits	0.06
Living with family	0.08
Generational status	0.05
Hispanic cultural domains	-0.28**
U.S. cultural domains	0.14
Perceived social support from special person	0.12
Perceived social support from family	0.29**
Perceived social support from friends	0.09
Self-stigma	0.31**
Perceptions of stigma by others	-0.44**
Disability match with VR counselor	-0.03
VR counselor spoke Spanish	0.10

Gender match with VR counselor	-0.02
Ethnicity match with VR counselor	0.12
Autonomy	-0.10
Competence	-0.02
Relatedness	0.26**
Vocational outcome expectancy	0.04
Number of pre-ETS services received	-0.12
Quality of pre-ETS services	0.16
Relevance of pre-ETS services	0.23*
Usefulness of pre-ETS services	0.33**
<hr/>	
<b>Years with disability</b>	
English native language	-0.14
Community residing	0.29**
Highest education level	-0.13
Family annual income	-0.08
Disability benefits	-0.11
Living with family	0.01
Generational status	-0.10
Hispanic cultural domains	-0.21*
U.S. cultural domains	0.19*
Perceived social support from special person	0.01
Perceived social support from family	0.06
Perceived social support from friends	-0.08
Self-stigma	0.21*
Perceptions of stigma by others	-0.17*
Disability match with VR counselor	0.24**
VR counselor spoke Spanish	0.22**
Gender match with VR counselor	0.01
Ethnicity match with VR counselor	0.15
Autonomy	-0.07
Competence	0.04
Relatedness	0.16
Vocational outcome expectancy	0.09
Number of pre-ETS services received	0.17*
Quality of pre-ETS services	0.14
Relevance of pre-ETS services	0.14
Usefulness of pre-ETS services	0.14
<hr/>	
<b>English native language</b>	
Community residing	-0.05
Highest education level	0.01
Family annual income	0.10
Disability benefits	0.25**
Living with family	0.13
Generational status	0.55**
Hispanic cultural domains	-0.35**
U.S. cultural domains	0.20*
Perceived social support from special person	0.02

Perceived social support from family	0.13
Perceived social support from friends	0.03
Self-stigma	0.21*
Perceptions of stigma by others	-0.36**
Disability match with VR counselor	-0.04
VR counselor spoke Spanish	0.02
Gender match with VR counselor	0.07
Ethnicity match with VR counselor	0.10
Autonomy	-0.11
Competence	-0.02
Relatedness	0.24**
Vocational outcome expectancy	-0.06
Number of pre-ETS services received	-0.20*
Quality of pre-ETS services	-0.06
Relevance of pre-ETS services	0.06
Usefulness of pre-ETS services	0.25*
<hr/>	
<b>Community residing</b>	
Highest education level	-0.08
Family annual income	0.01
Disability benefits	-0.01
Living with family	-0.04
Generational status	-0.07
Hispanic cultural domains	0.28**
U.S. cultural domains	-0.06
Perceived social support from special person	-0.08
Perceived social support from family	-0.05
Perceived social support from friends	-0.08
Self-stigma	-0.01
Perceptions of stigma by others	0.15
Disability match with VR counselor	-0.23**
VR counselor spoke Spanish	-0.15
Gender match with VR counselor	-0.04
Ethnicity match with VR counselor	-0.24**
Autonomy	0.01
Competence	-0.12
Relatedness	-0.07
Vocational outcome expectancy	0.01
Number of pre-ETS services received	0.12
Quality of pre-ETS services	0.22
Relevance of pre-ETS services	-0.17
Usefulness of pre-ETS services	-0.10
<hr/>	
<b>Highest education level</b>	
Family annual income	0.43**
Disability benefits	0.30**
Living with family	-0.02
Generational status	-0.03
Hispanic cultural domains	0.07
U.S. cultural domains	-0.01

Perceived social support from special person	0.13
Perceived social support from family	0.08
Perceived social support from friends	0.18*
Self-stigma	-0.19*
Perceptions of stigma by others	0.10
Disability match with VR counselor	-0.05
VR counselor spoke Spanish	-0.07
Gender match with VR counselor	0.02
Ethnicity match with VR counselor	0.07
Autonomy	0.18*
Competence	0.16*
Relatedness	0.28**
Vocational outcome expectancy	0.26**
Number of pre-ETS services received	-0.29**
Quality of pre-ETS services	0.29**
Relevance of pre-ETS services	-0.08
Usefulness of pre-ETS services	0.13
<hr/>	
<b>Family annual income</b>	
<hr/>	
Disability benefits	0.32**
Living with family	-0.12
Generational status	0.01
Hispanic cultural domains	-0.26**
U.S. cultural domains	0.01
Perceived social support from special person	0.33**
Perceived social support from family	0.25**
Perceived social support from friends	0.36**
Self-stigma	0.22**
Perceptions of stigma by others	-0.22**
Disability match with VR counselor	-0.05
VR counselor spoke Spanish	0.09
Gender match with VR counselor	0.03
Ethnicity match with VR counselor	0.08
Autonomy	0.16*
Competence	0.23**
Relatedness	0.46**
Vocational outcome expectancy	0.23**
Number of pre-ETS services received	-0.24**
Quality of pre-ETS services	0.41**
Relevance of pre-ETS services	0.44**
Usefulness of pre-ETS services	0.42**
<hr/>	
<b>Disability benefits</b>	
<hr/>	
Living with family	-0.08
Generational status	0.24**
Hispanic cultural domains	0.02
U.S. cultural domains	-0.27**

Perceived social support from special person	-0.07
Perceived social support from family	-0.10
Perceived social support from friends	-0.05
Self-stigma	-0.16
Perceptions of stigma by others	0.06
Disability match with VR counselor	-0.10
VR counselor spoke Spanish	-0.01
Gender match with VR counselor	0.07
Ethnicity match with VR counselor	0.09
Autonomy	-0.05
Competence	-0.06
Relatedness	0.21*
Vocational outcome expectancy	-0.12
Number of pre-ETS services received	-0.33**
Quality of pre-ETS services	0.00
Relevance of pre-ETS services	-0.07
Usefulness of pre-ETS services	-0.08
<hr/>	
<b>Living with family</b>	
Generational status	-0.03
Hispanic cultural domains	-0.03
U.S. cultural domains	0.12
Perceived social support from special person	0.18*
Perceived social support from family	0.13
Perceived social support from friends	0.13
Self-stigma	0.05
Perceptions of stigma by others	-0.12
Disability match with VR counselor	0.07
VR counselor spoke Spanish	0.00
Gender match with VR counselor	0.07
Ethnicity match with VR counselor	-0.03
Autonomy	0.03
Competence	0.08
Relatedness	0.10
Vocational outcome expectancy	0.14
Number of pre-ETS services received	0.08
Quality of pre-ETS services	-0.03
Relevance of pre-ETS services	0.02
Usefulness of pre-ETS services	0.28**
<hr/>	
<b>Generational status</b>	
Hispanic cultural domains	-0.30**
U.S. cultural domains	-0.06
Perceived social support from special person	-0.07
Perceived social support from family	-0.17*
Perceived social support from friends	-0.10
Self-stigma	0.03
Perceptions of stigma by others	-0.17*
Disability match with VR counselor	0.09

VR counselor spoke Spanish	0.12
Gender match with VR counselor	0.16
Ethnicity match with VR counselor	0.19*
Autonomy	-0.28**
Competence	-0.22**
Relatedness	0.08
Vocational outcome expectancy	-0.27**
Number of pre-ETS services received	-0.26**
Quality of pre-ETS services	-0.22*
Relevance of pre-ETS services	-0.16
Usefulness of pre-ETS services	-0.10
<b>Hispanic cultural domains</b>	
U.S. cultural domains	-0.13
Perceived social support from special person	-0.01
Perceived social support from family	0.05
Perceived social support from friends	0.07
Self-stigma	-0.31**
Perceptions of stigma by others	0.45**
Disability match with VR counselor	-0.15
VR counselor spoke Spanish	-0.27**
Gender match with VR counselor	-0.09
Ethnicity match with VR counselor	-0.22**
Autonomy	0.32**
Competence	0.18*
Relatedness	-0.13
Vocational outcome expectancy	0.24**
Number of pre-ETS services received	0.22**
Quality of pre-ETS services	0.13
Relevance of pre-ETS services	-0.26*
Usefulness of pre-ETS services	-0.18
<b>U.S. cultural domains</b>	
Perceived social support from special person	0.44**
Perceived social support from family	0.53**
Perceived social support from friends	0.40**
Self-stigma	0.43**
Perceptions of stigma by others	-0.31**
Disability match with VR counselor	0.01
VR counselor spoke Spanish	0.03
Gender match with VR counselor	-0.09
Ethnicity match with VR counselor	-0.04
Autonomy	0.29**
Competence	0.48**
Relatedness	0.36**
Vocational outcome expectancy	0.47**
Number of pre-ETS services received	0.13
Quality of pre-ETS services	0.34**



	Relevance of pre-ETS services	0.24*
	Usefulness of pre-ETS services	0.50**
<b>Perceive social support from special person</b>		
	Perceived social support from family	0.72**
	Perceived social support from friends	0.79**
	Self-stigma	0.43**
	Perceptions of stigma by others	-0.28**
	Disability match with VR counselor	-0.27**
	VR counselor spoke Spanish	-0.2
	Gender match with VR counselor	-0.05
	Ethnicity match with VR counselor	-0.06
	Autonomy	0.45**
	Competence	0.56**
	Relatedness	0.57**
	Vocational outcome expectancy	0.58**
	Number of pre-ETS services received	-0.09
	Quality of pre-ETS services	0.64**
	Relevance of pre-ETS services	0.53**
	Usefulness of pre-ETS services	0.70**
<b>Perceived social support from family</b>		
	Perceived social support from friends	0.69**
	Self-stigma	0.49**
	Perceptions of stigma by others	-0.33**
	Disability match with VR counselor	-0.24**
	VR counselor spoke Spanish	-0.10
	Gender match with VR counselor	-0.17*
	Ethnicity match with VR counselor	-0.07
	Autonomy	0.43**
	Competence	0.56**
	Relatedness	0.54**
	Vocational outcome expectancy	0.57**
	Number of pre-ETS services received	0.02
	Quality of pre-ETS services	0.53**
	Relevance of pre-ETS services	0.42**
	Usefulness of pre-ETS services	0.65**
<b>Perceived social support from friends</b>		
	Self-stigma	0.40**
	Perceptions of stigma by others	-0.25**
	Disability match with VR counselor	-0.24**
	VR counselor spoke Spanish	-0.03
	Gender match with VR counselor	-0.04
	Ethnicity match with VR counselor	-0.04
	Autonomy	0.45**
	Competence	0.56**
	Relatedness	0.58**

Vocational outcome expectancy	0.54**
Number of pre-ETS services received	-0.07
Quality of pre-ETS services	0.53**
Relevance of pre-ETS services	0.41**
Usefulness of pre-ETS services	0.61**
<b>Self-stigma</b>	
Perceptions of stigma by others	-0.57**
Disability match with VR counselor	-0.21*
VR counselor spoke Spanish	0.06
Gender match with VR counselor	-0.08
Ethnicity match with VR counselor	-0.06
Autonomy	0.15
Competence	0.26**
Relatedness	0.51**
Vocational outcome expectancy	0.13
Number of pre-ETS services received	0.09
Quality of pre-ETS services	0.25*
Relevance of pre-ETS services	0.50**
Usefulness of pre-ETS services	0.56**
<b>Perceptions of stigma by others</b>	
Disability match with VR counselor	-0.02
VR counselor spoke Spanish	-0.19*
Gender match with VR counselor	0.04
Ethnicity match with VR counselor	-0.11
Autonomy	0.19*
Competence	-0.02
Relatedness	-0.38**
Vocational outcome expectancy	0.03
Number of pre-ETS services received	0.16
Quality of pre-ETS services	-0.25*
Relevance of pre-ETS services	-0.34**
Usefulness of pre-ETS services	-0.49**
<b>Disability match with VR counselor</b>	
VR counselor spoke Spanish	0.34**
Gender match with VR counselor	0.15
Ethnicity match with VR counselor	0.42**
Autonomy	-0.25**
Competence	-0.18*
Relatedness	-0.12
Vocational outcome expectancy	-0.08
Number of pre-ETS services received	0.10
Quality of pre-ETS services	-0.24*
Relevance of pre-ETS services	-0.32**
Usefulness of pre-ETS services	-0.30**
<b>VR counselor spoke Spanish</b>	
Gender match with VR counselor	0.20*
Ethnicity match with VR counselor	0.50**

	Autonomy	-0.28**
	Competence	-0.09
	Relatedness	0.10
	Vocational outcome expectancy	-0.13
	Number of pre-ETS services received	-0.04
	Quality of pre-ETS services	0.02
	Relevance of pre-ETS services	-0.09
	Usefulness of pre-ETS services	-0.08
<b>Gender match with VR counselor</b>		
	Ethnicity match with VR counselor	0.17*
	Autonomy	-0.14
	Competence	-0.09
	Relatedness	0.05
	Vocational outcome expectancy	-0.01
	Number of pre-ETS services received	0.00
	Quality of pre-ETS services	-0.22*
	Relevance of pre-ETS services	-0.22*
	Usefulness of pre-ETS services	-0.24*
<b>Ethnicity match with VR counselor</b>		
	Autonomy	-0.28**
	Competence	-0.04
	Relatedness	0.03
	Vocational outcome expectancy	-0.19*
	Number of pre-ETS services received	-0.03
	Quality of pre-ETS services	-0.12
	Relevance of pre-ETS services	-0.30**
	Usefulness of pre-ETS services	-0.30**
<b>Autonomy</b>		
	Competence	0.58**
	Relatedness	0.33**
	Vocational outcome expectancy	0.61**
	Number of pre-ETS services received	-0.03
	Quality of pre-ETS services	0.32**
	Relevance of pre-ETS services	0.20
	Usefulness of pre-ETS services	0.25*
<b>Competence</b>		
	Relatedness	0.47**
	Vocational outcome expectancy	0.64**
	Number of pre-ETS services received	0.19*
	Quality of pre-ETS services	0.50**
	Relevance of pre-ETS services	0.44**
	Usefulness of pre-ETS services	0.50**
<b>Relatedness</b>		
	Vocational outcome expectancy	0.46**
	Number of pre-ETS services received	-0.18*
	Quality of pre-ETS services	0.58**

	Relevance of pre-ETS services	0.47 <sup>**</sup>
	Usefulness of pre-ETS services	0.63 <sup>**</sup>
<b>Vocational outcome expectancy</b>		
	Number of pre-ETS services received	0.04
	Quality of pre-ETS services	0.56 <sup>**</sup>
	Relevance of pre-ETS services	0.30 <sup>**</sup>
	Usefulness of pre-ETS services	0.49 <sup>**</sup>
<b>Number of pre-ETS services received</b>		
	Quality of pre-ETS services	-0.22 <sup>*</sup>
	Relevance of pre-ETS services	-0.07
	Usefulness of pre-ETS services	-0.13
<b>Quality of pre-ETS services</b>		
	Relevance of pre-ETS services	0.41 <sup>**</sup>
	Usefulness of pre-ETS services	0.58 <sup>**</sup>
<b>Relevance of pre-ETS services</b>		
	Usefulness of pre-ETS services	0.61 <sup>**</sup>

*Note.* SSOSH scale was inverted. Pre-ETS services = pre-employment transition services. <sup>\*</sup> $p < .05$ . <sup>\*\*</sup> $p < .01$