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Responding to their Voice:
The Needs of Postsecondary Students with Intellectual and/or Developmental Disability

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of the requirements for the degree of the
Doctorate of Education
in Educational Leadership

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Abstract

Young adults with intellectual and/or developmental disabilities (IDD) enter postsecondary education (PSE) at increasing rates. Many continue to demonstrate persisting adaptive behavior needs that impede academic and employment outcomes. This qualitative case study explored one Northwest PSE program educating students with IDD regarding persisting adaptive behavior needs and whether the needs fell under the purview of occupational therapy (OT). It was the researcher's assumption that gaining an understanding of student needs would provide cognizance of potential OT services. Thirty-two participants were recruited through both purposive and snowball sampling including: administrators; instructors; related services providers; parents or guardians; and students. In depth interview served as the primary data collection method. Supportive methods included: demographic survey, class observation, document review, the *Vineland Adaptive Behavior Scales-II* (Sparrow, Cicchetti, & Balla, 2005), and researcher reflections. Data were organized, coded, then analyzed in relation to research questions. Findings were organized by five analytic categories derived from relevant text and research questions. The research revealed adaptive behavior skills were persisting areas of challenge falling within the scope of practice of OT yet nearly half the participants were unfamiliar with the profession. Participants described the importance of an open and accepting campus community with program success attributed to student personal characteristics and interaction with naturally accommodating faculty. All participants desired student attainment of optimal independence, employment, relationships, and community acceptance. Recommendations are offered to the profession of OT and to post-high school programs regarding the role and function of OT to serve students with IDD in PSE.

Responding to their Voice:

The Needs of Postsecondary Students with Intellectual and/or Developmental Disability

Students with intellectual and/or developmental disabilities¹ are entering postsecondary education settings at increasing rates (Garrison-Wade, 2012; Newman, Wagner, Cameto, Knokey & Shaver, 2010). Yet many of these students come underprepared to handle the academic rigor or demonstrate the necessary adaptive behavior skills to be successful within the setting (Garrison-Wade, 2012; Oslund, 2014; Webb, Patterson, Syverud, & Seabrooks-Blackmore, 2008). For many students with intellectual and/or developmental disabilities (IDD), the historical and on-going marginalization of their abilities and low expectations for their contributions fostered a societal view that they were incapable of benefitting from postsecondary education (Arnold & Rybski, 2010; Garrison-Wade, 2012; Oertle & Bragg, 2014; Thoma et al., 2011; Webb et al., 2008; Yamamoto, Stodden, & Folk, 2014). Thus academic readiness skills were often not included in the secondary education plan (Garrison-Wade, 2012; Oertle & Bragg, 2014; Thoma et al., 2011; Webb et al., 2008; Yamamoto et al., 2014). Postsecondary education programs are responding to this issue by using a variety of supports, services, and interventions (i.e., note-taker, enlarged print, audio text, etc.) typically suggested for students with learning disabilities or attention deficit disorder (Grigal & Hart, 2010; Winkle & Cobb, 2010). Despite increased attention, the specific needs of the students with IDD and the most effective intervention strategies, supports and services to promote postsecondary education success have yet to be clearly identified (Carter, Brock, & Trainor, 2014). Listening to student voices

¹ Intellectual disability is defined as an IQ of ≤ 70 , and may include developmental disability (e.g., Autism spectrum disorder; Down syndrome, etc.). See Appendix A for full definitions of intellectual disability and developmental disability.

regarding their perceived needs is critical to understanding the most effective interventions, strategies, supports, and services to promote PSE success.

A Growing Challenge in Postsecondary Education Settings

In a review of the National Longitudinal Transition Study-2 (NLTS-2), Newman et al. (2010) reported the number of students with disabilities entering postsecondary education² (PSE) rose from 26% to 46% between the years of 1990 and 2005. Within the past decade, a small percentage (7%) of young adults with IDD have also entered PSE (Grigal & Hart, 2010; Newman et al., 2010). This is due, in part, to the 2008 passage of the Americans with Disabilities Act Amendment Act [ADAAA] (Americans with Disabilities Amendments Act of 2008, Pub. L. No. 110-325, 42 U.S.C. §§ 12101 *et seq.* [2008]) that broadened the definition of disability, and the reauthorization of the Higher Education Opportunity Act [HEOA] (Higher Education Opportunity Act of 2008, P. L. 110-315) that included parameters for increasing education opportunities for individuals with IDD. This legislation came about because of the importance of young adults, 18-22 years, attending PSE as a means to obtain higher status jobs and competitive wage employment (Grigal, Hart, & Weir, 2012; Mettler, 2014). As shared by Grigal and Hart (2010) “going to college is and always has been connected to greater rates of employment and higher wages” (p. 2). In a study comparing employment outcomes for students with IDD who attended PSE and those who did not, those with some PSE had a 73% higher income (Migliore & Butterworth, 2008). As well, individuals who are employed tend to have a higher quality of life (Grigal & Hart, 2010).

² Postsecondary education is defined as education beyond secondary school within a college setting. May include: vocational-technical colleges, 2-year or 4-year colleges.

The benefit of a PSE is true for neurotypical young adults as well as for those with a disability (Grigal & Hart, 2010). Students who are able to manage adaptive behavior and academic needs have demonstrated higher rates of post-high school success including attaining and sustaining competitive-wage employment (Sanford et al., 2011; Yamamoto et al., 2014). As well, Taylor and Seltzer (2011) found that a student's intelligence quotient (IQ) and adaptive behavior skills impacted the type and level of employment offered to the young adult with IDD. These are key factors in that individuals with IDD have a higher rate of unemployment than any other disability group contributing to a potentially poor quality of life for the individual and his or her family (Sanford et al., 2011; Yamamoto et al., 2014). Yet not all students are successful in the PSE setting (Garrison-Wade, 2012). In particular, many students with IDD demonstrate challenges with academic preparation, executive function skills (e.g., organization, time management, and prioritization), adaptive behavior³, transportation, and community access (Garrison-Wade, 2012; Kirkendall, Doueck, & Saladino, 2009; Webb et al., 2008; Yamamoto et al., 2014).

Occupational therapy interventions can help students attain adaptive behavior skills (Jirikowic, Campbell, DiAmico, Frauwith, & Mahoney, 2013; Kertcher, 2014a, 2014b; Reitz, Scaffa, & Pizzi, 2010). Occupational therapy (OT) is the “therapeutic use of everyday life activities with individuals, groups, populations, or organizations to support participation, performance, and function in roles and situations in home, school, workplace, community, and other settings” (American Occupational Therapy Association [AOTA], 2011, p. 1). Occupational therapists are well trained in the practice of assessing the needs of the student, including adaptive behaviors, and matching appropriate accommodations, modifications or supports to facilitate

³ Adaptive behavior is defined by the American Association on Intellectual and Developmental Disabilities (AAIDD) as “conceptual, social, and practical skills that have been learned and are performed by people in their everyday lives” (2010, p. 43). See Appendix B for full definition.

optimal daily function and participation in home, school, and community life. Yet, for many students with IDD, OT provided within the public school system is reduced or discontinued once the student reaches secondary school (Juan & Swinth, 2010; Kardos & White, 2005; Wei, Wagner, Christiano, Shattuck, & Yu, 2014). Thus, one service that may help students achieve the adaptive behavior skills necessary to be successful in PSE becomes unavailable when it may be most beneficial (Gangl Neufeld, & Berg, 2011).

Statement of the Problem

Students with IDD are entering PSE settings underprepared to fully benefit from the experience. Identifying the specific areas of challenge and potential intervention supports for students with IDD to be successful in PSE remains relatively unexplored (Pereira, 2012). Several studies have identified the skills of self-awareness, self-advocacy, self-disclosure, and self-determination to be critical factors in a student's ability to successfully complete a PSE program (Aquirre & Duncan, 2013; Crabtree & Sherwin, 2011; Goodman et al., 2011; Grigal & Hart, 2010; Kertcher, 2014a, 2014b; Sheppard & Unsworth, 2011; Stewart, 2013; Wehmeyer & Abery, 2013). Though the impact of the lack of skills and abilities of post-high school students with IDD has been generally discussed in the literature, the specific areas of need in adaptive behaviors or support interventions have not been fully identified (Gangl et al., 2011; Griffin, McMillan, & Hodapp, 2010; Grigal, Hart, & Lewis, 2012; Kardos & White, 2006; Kertcher, 2014a, 2014b; Mankey, 2011, 2012; Taylor & Seltzer, 2011; Winkle & Cobb, 2010). Understanding of the specific needs of the students with IDD is beneficial for determining the most effective intervention supports, accommodations, and strategies including OT.

Justification of Research Focus

Since the reauthorization of the HEOA (2008), 237 PSE programs emerged with the intent to serve the education needs of students with IDD (Grigal & Hart, 2010; Papay & Bambara, 2011; Think College, 2015). In 2011, nearly 600,000 students with varying disabilities graduated from or aged-out (attained adult age of 18 or completed an adult transition program) of secondary school (U. S. Department of Education, 2010) becoming eligible for PSE. Adding to this increase Diament (2015, May 14) reported in *Disability Scoop* that early results from an on-going study by Klinger and Grofer of the University of North Carolina, Chapel Hill, indicated a potential 230% increase of individuals with autism spectrum disorder transitioning to young adulthood by the year 2023. As well, the researchers noted an emerging outcome that adaptive behaviors were strong predictors of adult outcomes regardless of intellectual ability. It was unclear how many of the study participants were also dual-diagnosed with IDD. Regardless, as more students with IDD enter PSE institutions understanding how to best support them on an individual level becomes critical (Carter et al., 2014).

This research addressed the identification of the adaptive behavior needs, skills and/or abilities of young adults with IDD and how those needs fall under the purview of OT. To do this, it was first necessary to identify the challenges and strengths demonstrated by the young adults with IDD. Conducting a thorough exploratory case study of a local PSE program and listening to the voices of the stakeholders of this population provided a deeper understanding of student needs, interventions, and supports.

Theoretical Framework

Research as social justice. Mertens (2010a, 2010b; Mertens, Sullivan, & Stace, 2011) evolved the transformative research for social justice paradigm through a process of questioning

how research was being conducted, who was involved in the research process, whose voice was heard regarding the outcomes, and the resulting social change. With a deep focus on serving, teaching, and researching individuals with disabilities, Mertens and colleagues (2011) explored the influence of the medical model on medical and allied health research. With a tendency to focus on disability as an issue of the person that needed to be ameliorated, the medical model influenced the *othering*⁴ of the disabled as a research entity. Individuals with disabilities were to be cured or cared for and disability was to be feared and avoided (Mertens et al., 2011).

With the advent of the disability rights movement of the 1960s and 1970s, a social model of disability evolved to counter the medical model. The theoretical assumption of the social model was that disability was socially constructed and that, “people have impairments and disability is the negative social response to impairments in terms of the exclusion of impaired people from political, economic, and social organizations of their communities” (Mertens et al., 2011, p. 228). This attitude influenced the perception of disability or impairment away from the individual and more toward the environmental or contextual challenges that prevent an individual’s participation. This model was considered to be a more socially just focus of research for a number of years. However, the social model received criticism from the Critical Disability Studies movement that it did not effectively address social oppression (Mertens et al., 2011).

Critical Disability Theory. Combining the key aspects of Critical Race Theory (Delgado & Stefancic, 2012) and Disability Studies, Critical Disability Theory (Dis/Crit) addresses the issues of the intersection of disability and the social conventions of gender, race, class, sexuality, and ability (Annamma, Connor, & Ferri, 2013). Dis/Crit framed disability as a form of social

⁴ *Othering* is defined as the experience of being other than the dominant group. May include race or ethnicity, gender, religion, sexual orientation, socioeconomic status, and physical or mental ability (Tatum, 1997).

oppression especially in issues related to race and ability (Annamma et al., 2013; Mertens et al., 2011). Special education programs tended to segregate students with disabilities from their peers providing a different educational format and content (Annamma et al., 2013). It was further believed that there was a social, historical, and economic interest in limiting educational equity for disabled students of color (Annamma et al., 2013; Arnold & Rybski, 2010). Dis/Crit addresses the issue of the social construction of normalcy, race, gender, and ability and the impact of these on educational systems (Annamma et al., 2013). Dis/Crit purports that society responds to the inherent differences of the individual with a tendency toward exclusion (e.g., those without impairments tend to create an environment in which they can succeed). The seven basic tenets of Dis/Crit include:

- The ways that racism and ableism function independently and often covertly to uphold notions of normalcy.
- Value multidimensional identities (e.g., race or ability or gender or sexuality).
- Race and ability are socially constructed. The impact of being labeled may set one outside of cultural norms.
- The voice of the marginalized individual is privileged.
- Historically, race and/or ability have been used to marginalize an individual.
- Whiteness and ability are recognized as property. Gains made for individuals with disabilities have been as a result of interest convergence of White individuals.
- Dis/Crit requires activism. All forms of resistance are supported (Annamma et al., 2013, p. 11).

Researchers using Dis/Crit focus on emancipatory and non-alienating practices (Mertens et al., 2011). Mertens and colleagues (2011) shared that the process of sustaining the inclusion of the

Dis/Crit theory in a research study was challenging to effectively fulfill. Many researchers were left questioning both the research process (how to effectively honor the tenets of the theory) and resultant outcomes (were the voices of those studied truly included and was the outcome emancipatory) and thus limited its inclusion in research.

Transformative paradigm. The challenge with Dis/Crit led Mertens (2010a) to formulate the Transformative paradigm that includes principles that provide “a framework allowing a researcher to consciously situate her work as a response to the inequities in society with a goal of enhancing social justice” (Mertens, 2010a, p. 470). The principles include: enhancement of social justice; furtherance of human rights; and respect for cultural norms. These axiological assumptions drive the ontology, epistemology, and methodology of research (Mertens, 2010a, 2010b). For the Transformative Paradigm, Mertens (2010a, 2010b; Mertens et al., 2011) suggested the ontological assumption: social construction is one reality with multiple meanings. Understanding that social injustice and inequity are contextually dependent and socially constructed, the researcher is charged with clearly understanding whose meaning takes privilege. The epistemological assumption raises the question of the relationship of the researcher and participants within the process, and the researcher’s biases. Finally, the methodological assumption considers the most appropriate means for acquiring the sample population, collecting and analyzing the data, and interpreting the outcome in the most socially just and ethical manner. For Mertens et al. (2011), “the researchers need to have sufficient grounding in the culture of the communities in which they work, as well as recognize the limitations of their grounding” (p. 231) in order to conduct effective transformative research.

Thus, the theoretical lens for this research interwove the influences of Dis/Crit (Annamma et al., 2013) within the Transformative Paradigm to conduct socially just research.

The voices of the key stakeholders (e.g., instructors, administrators, occupational therapists, parents and/or guardians, but most specifically, the young adults with IDD) were included in the various aspects of the research process. Thus in order to identify the needs of young adults with IDD attending a PSE institution, how these needs were being supported, and how the identified needs fall under the purview of OT, required listening, with intention, to the voices of all stakeholders within the research setting.

Key Research Questions

DePoy and Gitlin (2005) suggested that research questions should be framed using three primary keys: professional relevance, personal interest, and selection of appropriate methodology. Creswell, (2012) further suggested that a good qualitative research question should consist of a *central phenomenon* (the central concept being explored), the participants related to the central phenomenon, and the research site (p. 130). Thus, for young adult students with IDD attending the Triumph⁵ program, a local Transition and Postsecondary Education Program for Students with Intellectual Disabilities (TPSID) funded PSE program, the research explored the following two primary questions:

1. What are the needs of PSE students with IDD to participate in and complete program requirements?
2. How are the identified needs currently supported?

Two sub-questions related to OT as a profession that has potential to address these needs, but is currently underutilized, were also explored and included:

⁵ The Triumph program is a pseudonym for an existing program within the Pacific Northwest. This name will be used throughout the Capstone Project.

- (a) How are the identified needs of young adults with IDD falling under the purview of the profession of OT?
- (b) What are the perceptions of young adults with IDD and their parents regarding OT intervention to prepare for PSE?

Literature Review

A Brief Historical Context for Postsecondary Education for Young Adults with IDD

In a comment regarding the case of *Brown v. Board of Education of Topeka, 1954* (*Brown v. Board of Education of Topeka, 347 U. S. 483{1954}*), Supreme Court Chief Justice Earl Warren warned, “In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education”. The *Brown* (1954) decision also paved the way for inclusive public education for individuals with disabilities within the United States (Chandler, 2013). Just 30 years ago many students with disabilities were marginalized and denied the right to an education (Chandler, 2013; Johnson, 2012). The impact of the civil rights movement, the disability rights movement, and litigation regarding the right of an education for disabled citizens (Chandler, 2013; Johnson, 2012; Smith Lee, 2009) helped to make primary and secondary education available to all children in the United States. This process was a clear representation of the tenets of Dis/Crit regarding racism, ability, marginalization, and activism (Annamma et al., 2013). Yet an issue persisted. Postsecondary education remained a distant reach for many students with IDD. Societal views continued to reflect the perception that students with IDD were incapable of benefitting from PSE (Yamamoto et al., 2014). It took key legislation to pry open the doors of PSE.

Legislation and mandates related to public school education. The Education of all Handicapped Children Act of 1975 (P. L. 94-142) provided a free and appropriate public

education for children ages 6-21 years within the least restrictive environment, and required an Individual Education Plan (IEP) to be completed annually on each child receiving special education services (Asher, 2014; Chandler, 2013; DeLany & Pendzick, 2009; Johnson, 2012; Smith Lee, 2009). This law included the profession of OT to provide educationally relevant intervention services and supports. However interventions tended to follow the medical model focusing on remediation of impairment to promote academic skill attainment and primarily as an early intervention service. In 1986 the Education of the Handicapped Act Amendment (P. L. 99-457) was enacted mandating special education services, and related intervention services⁶ for students from birth to age 21. This started the process for early intervention supports and services to academically prepare the birth-to-three and preschool age student population.

A critical point for young adults with IDD who wanted to progress toward PSE with their same age peers came in 1990 when Congress passed the Individuals with Disabilities Education Act (IDEA) (Pub. L. 101-476, 20 U.S.C. 1400 *et seq.*). Services were mandated for preschool through age 21. This act also required transition services for qualified students who aged-out of secondary school. As defined by the IDEIA (2004), *transition* is a:

results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including postsecondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services independent living, or community participation; [it] is based on the individual child's needs, taking into account the child's strengths, preferences, and

⁶ Related services included nursing, occupational therapy, physical therapy, speech and language pathology, mobility and vision specialists, and other support services deemed necessary.

interests (§ 1401 [34][A][B]). (Crabtree & Sherwin, 2011, p. 275; IDEIA, 2004; Orentlicher, 2013).

The process for transition was to begin by the age of 16 years and include a meeting with the relevant school personnel including general and special education teachers, related services, community partners, medical professionals, the family, and the student (Orentlicher, 2013, 2015; Orentlicher & Olson, 2010; Smith Lee, 2009). The primary purpose of the transition planning meeting was to develop measurable post-high school goals that relate to the student's needs, preferences and interests in five specific areas: domestic, employment, education, leisure, and community (IDEA, 1990; Shogren & Plotner, 2012; Spencer & O'Daniel, 2005). If identified as an intervention service, OT could be included on the Individual Transition Plan through age 21.

The IDEA was revised in 1997 as P. L. 105-117, then again in 2004 as P. L. 108-446 changing the name to the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA, 2004). The 2004 revision maintained all previous provisions, added the expectation that students would have access to the general education curriculum in a general education classroom, and aligned with P. L. 107-110, No Child Left Behind (NCLB) Act of 2001. Thus legislation, starting with Public Law 94-142, opened the door for students, birth to age 21, to receive the supports and services to succeed academically. Yet as viewed through the lens of Dis/Crit these legislative gains may have been made as a result of interest convergence of White individuals with disabilities (Annamma et al., 2013).

Entitlement versus eligibility. For many young adults with disabilities the transition to adult-based services posed a challenge (Yamamoto et al., 2014). Throughout public school the student was entitled to supports and services under the IDEIA of 2004 (P.L. 108-446, 20 U.S.C. §1400 *et seq.*). Once the student attained age 18, he or she must be deemed eligible for supports

and services per requirements of the ADA of 2008 (P.L. 110-325, 122 Stat. 3553) and the Rehabilitation Act of 1973, (P.L. 93-112, 29 U.S.C. § 701 *et seq.*). Eligibility required the student to self-disclose a disability and self-advocate for accommodations. Students were often unaware of their disability or, if aware, reluctant to disclose due to past issues with stigma (Yamamoto et al., 2014). As well, many young adults with IDD and their parents or guardians were uncertain what relevant adult-based support services were needed or how to obtain them (Aron & Loprest, 2012; Crabtree & Sherwin, 2011; Garrison-Wade, 2012; Griffin et al., 2010; Yamamoto et al., 2014). Thus young adults with IDD often went underserved.

The impact of the 2008 reauthorization of the Higher Education Opportunity Act. A tipping point was created by the passage of the HEOA of 2008 (P. L. 110-315) a reauthorization of the Higher Education Act of 1965 (HEOA, 2008; Smith Lee, 2009). This reauthorization included federal guidance for the provision of higher education opportunities for students with IDD with a primary focus on academic, vocational, social, and independent living domains (Smith Lee, 2009). Thus self-determined (Wehmeyer, 2013) students with disabilities began seeking PSE, and higher education institutions began opening programs to accommodate the students (Grigal & Hart, 2010; Shogren & Plotner, 2012). Programs varied by requirements for admission, academic content, and support services provided (Grigal & Hart, 2010). Recognizing the student needs for supports in adaptive behaviors, occupational therapists began to be involved on an individual student basis or through development of separate programs to support specific individual needs (Asher & Frank, 2013; Kirkendall et al., 2009; Orentlicher, 2013, 2015; Ratzon, Alon, Schejter-Margalit, & Cahill, 2012; Sheppard & Unsworth, 2011; Taylor & Seltzer, 2011; Winkle & Cobb, 2010). As an example, Asher and Frank (2013) participated in the Launch Transition Program located on the campus of the University of Cincinnati.

Transitioning young adults with disabilities participated in work-study experiences, obtained practical life skills within the community, improved on personal daily and home care, and academic coursework with same-age peers. Eligible participating students continued to receive related services supports through their respective school districts. The authors' reported improved student independence and increased self-esteem.

Postsecondary education programs for students with IDD. Partially in response to the proliferation of PSE programs for students with IDD, the HEOA (2008) called for the creation and definition of a model comprehensive transition program (CTP) (Grigal & Hart, 2010; Grigal, Hart, & Weir, 2012; U. S. Department of Education, 2014). In 2010, the U. S. Department of Education (USDoE), Office of Postsecondary Education implemented the Transition Postsecondary Education Program for Students with Intellectual Disability (TPSID) which awarded five-year grants to 27 U. S. institutions of higher education to create comprehensive transition programs or expand access to higher education for students with IDD (Folk, Yamamoto, & Stodden, 2012; Grigal et al., 2014; Grigal & Smith, 2014; Office of Postsecondary Education [OPE], 2010). To ensure credibility of the programs, the legislation called for the creation of a National Coordinating Center-the Institute for Community Inclusion University of Massachusetts Boston, to oversee the coordination and evaluation of all TPSID programs (Grigal & Hart, 2010; Grigal et al., 2014). The focus of each TPSID program was to serve students with IDD in the pursuit of a PSE in the four primary areas indicated by the HEOA (2008). Upon program completion, students received a meaningful credential as established by each sponsoring institution (Grigal & Smith, 2014; U. S. Department of Education, 2014).

Comprehensive transition programs for students with IDD. Each TPSID program functioned as a CTP that included the guidelines required by the HEOA of 2008 (Moore &

Schelling, 2015). TPSID comprehensive transition programs were typically housed within two-year community colleges or two or four-year colleges or universities (Grigal & Hart, 2010; Kertcher, 2014a, 2014b). Students could be dually enrolled in the public secondary school transition program while attending a TPSID-funded CTP thus maintaining eligibility to receive the supports and services indicated on the IEP (Gangl et al., 2011; Grigal & Hart, 2010; Weir, Grigal, Hart, & Boyle, 2013).

Students at comprehensive transition programs attended courses with non-disabled same-age peers as well as specially designed courses with disabled peers (Grigal & Hart, 2010; Weir et al. 2013). Integrated work experiences (e.g., paid employment, volunteer, or internship opportunities) were incorporated into the program. Faculty and instructors experienced in teaching students with differing learning abilities instructed all courses. However the process for evaluation of student adaptive behaviors or how support services were determined was inconsistently reported in the literature. As well, it remains unknown if OT was a member of any TPSID CTP teaching or support team for students with IDD.

Occupational Therapy as a Related Service

Meaningful participation in life. The OT profession was built upon the founding vision of the value of therapeutic occupations as a means for remediation of illness and a return to health and well-being (AOTA, 2014). However, it is the *Occupational Therapy Practice Framework: Domain and Process* (3rd ed.) (AOTA, 2014), [hereinafter referred to as the *Framework*] that officially guides OT practice (see Appendix C for a listing of the areas of occupation within the *Framework*). The *Framework* (AOTA, 2014) reflects the core belief of the profession that there is a “positive relationship between occupation and health and...people as occupational beings” (p. S3). As stated by Hooper and Wood (2014),

A core philosophical assumption of the profession, therefore, is that by virtue of our biological endowment, people of all ages and abilities require occupation to grow and thrive; in pursuing occupation, humans express the totality of their being, a mind-body-spirit union. Because human existence is, in essence, occupational by nature (p. 38).

Thus, the profession of OT values the importance of a client choosing and participating in a meaningful occupation (AOTA, 2011). This, in turn, affects the physical and mental health, well-being, and quality of life of the client no matter the level of ability. Thus OT collaborates with the client to attain maximal independence or interdependence in all relevant areas of occupation.

Occupations as identified by the *Framework* (AOTA, 2014) include: activities of daily living (ADL), instrumental activities of daily living (IADL), rest and sleep, education, work, play, leisure, and social participation. Within each of these occupations are sub-categories (e.g., sub-categories for ADL include: bathing and showering, toileting and hygiene, dressing, swallowing and eating, feeding, functional mobility, personal device care, personal hygiene and grooming, and sexual activity; AOTA, 2014; see Appendix C). To promote maximal participation in life, occupational therapists serve the specific client needs in any or all of the areas of occupation from newborn to end of life. This is reflected in the profession's vision to advance OT as "the preeminent profession in promoting the health, productivity, and quality of life of individuals and society through therapeutic application of occupation" (AOTA, n.d.). Through the use of relevant and meaningful occupations, occupational therapists seek to collaborate with the client in attaining, retaining, or regaining essential skills and abilities to fully participate in life (Arnold & Rybski, 2010). This is inclusive of adaptive behaviors as defined by the AAIDD (2010; see Appendix B).

Perception of OT as remedial therapy. Over one-fifth of OT practitioners work within public school settings (AOTA, 2010; Bureau of Labor Statistics, U. S. Department of Labor, 2014). School-based occupational therapists were initially trained under the medical model (i.e., reductionist view of disability) and thus tended to provide remedial interventions (Chandler, 2013; Juan & Swinth, 2010). Therapy focused on the impairments of the child using techniques to habilitate or remediate educationally related skills (Chandler, 2013). As a result, special education teachers and administrators viewed OT as a remedial therapy to address the physical needs of the birth to age 13 population with limited interventions provided for students ages 14-21 (Chandler, 2013; Juan & Swinth, 2010; Kardos & White, 2005; Kertcher, 2014a, 2014b; Mankey, 2011, 2012; Sample, Bundy, Lane, & Cordier, 2012; Spencer, Emery, & Schneck, 2003). To counter this misperception, researchers within the OT profession began to argue “the objective of therapy services is not to remediate impairments in body functions and structures, but to ensure that a student can access and participate effectively in school activities of choice and benefit from learning opportunities” (Laverdure & Rose, 2012, p. 349).

Barriers to OT involvement. The concern regarding the misperception of OT within the school setting was reflected in the outcomes of several research studies over the past decade (Gangl et al., 2011; Kardos & White, 2005; Mankey, 2011; Spencer et al., 2003). More recently, Gangl et al. (2011) used a multi-method qualitative research design consisting of semi-structured interviews and a focus group of school professionals (e.g., occupational therapists, special educators, and administrators) to gain a deeper understanding as to their perceptions of OT. Gangl et al. (2011) noted that respondents indicated a lack of occupational therapist involvement in the secondary transition process, and a decreased awareness of the general role and function of OT. Multiple barriers for the involvement of OT within the secondary setting and the secondary

transition process were reported. These barriers included: a decline in parental request for OT as a related service within the secondary setting; and a tendency for occupational therapists to utilize drop-in consultations as adolescents age thus decreasing the frequency of exposure and awareness of the potential supports and interventions (Gangl et al., 2011). Gangl et al. (2011) encouraged occupational therapists to advocate for the significance of service delivery options, promote service utilization, and participate in the Individual Transition Plan process.

A call to the OT profession. Crabtree (2014) effectively argued that “as greater numbers of youth with IDD transition out of secondary school and enter adulthood, OT practitioners need to be prepared to use their expertise in observation, assessment, task analysis, and environmental accommodations to support the successful community participation of such young adults” (p. 96). Students with IDD transitioning out of secondary schools continue to demonstrate persisting challenges in many areas of occupation including adaptive behaviors, executive functioning, safety, and transportation and community mobility (Gangl et al., 2011; Griffin et al., 2010; Grigal et al., 2012; Kardos & White, 2006; Kertcher, 2014b; Mankey, 2011, 2012; Taylor & Seltzer, 2011; Winkle & Cobb, 2010). OT as a service intervention for the post-high school student with IDD may help to identify specific adaptive behavior skills that need to be acquired, and integrate effective supports or adaptations to promote successful education and employment goal attainment (Hällgren & Kottorp, 2005; Jirikowic, et al., 2013; Pereira, 2012).

With an increasing number of students with IDD attending PSE programs (Papay & Bambara, 2011), and the continued demonstration of challenge in the areas of occupation outlined by the *Framework* (AOTA, 2014), OT at the PSE level is warranted (Crabtree, 2014; Kertcher, 2014a, 2014b; Spencer & O’Daniel, 2005). There remains a paucity of literature regarding the role and function of OT serving the post-high school student population with IDD

(Kertcher, 2014a, 2014b; Pereia, 2012; Stewart, 2013). As well, the voices of the young adults with IDD regarding their needs within the post-high school setting have remained relatively silent (Furgang, 2013).

Purpose Statement

In order to optimize the PSE experience and subsequent successful employment for young adults with IDD, it was necessary to identify the prevailing needs of the students. As well, to better understand the role that OT may provide for young adults with IDD attending PSE the identified needs were viewed in relation to the *Framework* (AOTA, 2014). Therefore the purposes of this case study were to:

1. Identify the adaptive behavior needs, skills, and/or abilities demonstrated by the young adults with IDD that are required for successful program completion, and how these were supported within the PSE institution.
2. Explore the Triumph⁷ Program, a local TPSID funded CTP in the Pacific Northwest, as a bounded case for an exploratory, instrumental case study to identify the specific areas of need and available supports for PSE students with IDD.
3. Identify how the identified student needs match the *Framework* (AOTA, 2014) to determine areas of occupation that fall within the purview of OT.
4. Understand the perceptions of Triumph Program stakeholders regarding OT as a service intervention to prepare the student with IDD for PSE.

⁷ Pseudonym used for the purpose of ensuring anonymity. This pseudonym will be used throughout the Capstone Project.

Methods

Historical Perspective of Qualitative Case Study Research

Case study as a methodology has its origins in anthropology, sociology, and psychology with a strong influence from the University of Chicago School of Sociology (Creswell, 2013). It is a type of ethnographic study that focuses more on an in-depth exploration of a bounded case involving individuals using multiple sources of information (Creswell, 2012; Plano Clark & Creswell, 2010). Case study as research method may be conducted using one of a variety of approaches as established by contemporary researchers and foundational writers Robert Yin, Sharan Merriam, and Robert Stake.

Yin (2014) provided a two-fold definition of case study consisting of its scope and features:

- 1) “an empirical inquiry that investigates a contemporary phenomenon in depth and within its own real-world context, especially when the boundaries between phenomenon and context may not be clearly evident”; and
- 2) “a case study inquiry copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result benefits from the prior development of theoretical propositions to guide data collection and analysis” (pp. 16 & 17).

Yin (2014) classified case study in three ways, explanatory, exploratory, or descriptive. In explanatory case study, the purpose is more to explain the phenomenon or issue. For the exploratory case study, Yin suggested that the researcher’s purpose is to identify specific research questions for subsequent study. In descriptive case study, the researcher describes a

phenomenon in the real-world context. Yin's view of case study is very specific and rigorous in terms of the method of definition of the case, the data collection process and procedures including multiple sources of evidence, and the strategies used for data analysis and interpretation. He purported that case study research is a "linear but iterative process" (p. xxii).

Merriam (1988) viewed case study as a means to gain a deeper understanding of a situation where the process of inquiry is the key. She emphasized the importance of establishing the boundaries of the case to provide a clear understanding of the unit of study. Merriam classified case study as particularistic (the focus of the case), heuristic (to increase awareness of the case and potentially discover new meaning), or descriptive (very prescriptive and literal). Emphasis is placed on the interview as the method of data collection. Observations also received a level of importance for data collection with the researcher clearly defining his or her role as "participant, participant as observer, observer as participant, complete observer...or collaborative partner" (Brown, 2008, p. 4). For Merriam, data analysis followed the process established by Yin (2014) with an emphasis placed on the "richly interpretive narrative" (Brown, 2008, p. 4).

Stake (1995) placed an emphasis on the understanding gained from the case study. He divided case study into intrinsic (a particular deep interest in a case), instrumental (a need for a general understanding of a case), or collective (a combination of several related cases) with the identification being the stated purpose of the study. He further defined case study as an issue that may have been brought in from the outside of the case by the researcher (etic) or emerged from within the case from the participants (emic). Great emphasis is placed on the concept of thick description of the case, the issue(s) of the case, and the context. The researcher is to be ever vigilant throughout the process maintaining a reflexive awareness of the role of the researcher, the context of the case, and the participants. For Stake (1995), "analysis is a matter

of giving meaning to first impressions as well as final compilations” (p. 71). He utilized direct interpretation of the data as well as categorical aggregation. Sitting with the data, reading then re-reading the data for emerging meaning and purpose were keys for Stake’s method of analysis.

Finally, Creswell (2013) synthesized the concepts gleaned from Yin, Merriam, and Stake stating that “case study research is a qualitative approach in which the investigator explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time through detailed, in-depth data collection involving multiple sources of information...and reports a case description and case themes” (p. 97). It is through this lens that a single, instrumental exploratory case study of the bounded system of the Triumph Program was conducted.

Researcher’s Background

For the past 31 years, the researcher worked as a pediatric occupational therapist serving individuals from birth to age 21 presenting with a wide-variety of illnesses, disabilities, and/or impairments. The researcher worked long-term in a neuromuscular outpatient clinic; intermittently in a variety of public school settings; and as an adjunct instructor within a graduate-level OT program. Most recently, the researcher completed a practicum experience at the Triumph Program at Sound View College⁸ in the Pacific Northwest teaching a course on communication and self-advocacy for students with IDD. These experiences encouraged the researcher to inquire how OT may best serve young adults with IDD. The primary focus of the researcher’s work has been seeking occupational justice (Arnold & Rybski, 2010; Whiteford & Townsend, 2011) with regard to equitable inclusion of young adults with IDD within the workplace and local communities.

⁸ Pseudonym used for the purpose of ensuring anonymity. This pseudonym will be used throughout the Capstone Project.

Case Study

Berg and Lune (2012) suggested that an instrumental exploratory case study design permitted the researcher to develop a deeper understanding of the phenomenon of study. In line with the transformative paradigm (Mertens, 2010a, 2010b), case study is a way of knowing the experience of the participants on a deeper level, and may be used as a method to systematically generate data to illuminate a particular issue (Berg & Lune, 2012; Creswell, 2012, 2013; Hamilton & Corbett-Whittier, 2013; Merriam, 1998; Stake, 1995). Thus, using case study permitted the researcher to further explore the informative and contextual data obtained from the participants. As well, the case study method provided a richer understanding of the issues related to young adult students with IDD attending PSE that may not have been collected from other research methods.

Research Site and Access. Plano Clark and Creswell (2010) stated that the case study research design typically explores a bounded system in depth. The bounded system is an entity that has clearly defined boundaries that specifically limits the participants, the context, and the timeframe for what is to be studied related to the issue (Brown, 2005; Creswell, 2013; Salminen, Harra, & Lautamo, 2006; Stake, 1995; Yin, 2014). As well, Yin (2014) suggested utilizing a site where the researcher has access to key informants. Considering these points, the researcher selected the Triumph program at Sound View College (SVC) as the bounded system due to an established relationship resulting from a yearlong practicum experience.

Within the Pacific Northwest, the Triumph program at SVC was the recipient of one of the 27 TPSID grants to create a PSE program for adult students with IDD (Triumph⁹, 2014; Weir

⁹ These documents may contain confidential information as protected by the Family Educational Rights and Privacy Act (FERPA), 20 USC § 1232g, or are institutional data

et al., 2013). Sound View College (SVC) serves over 17,000 students and has received the *Education Excellence in Diversity* award from INSIGHT into Diversity (Sound View College¹⁰, 2014). Professing a mission statement “As a public institution of higher education serving a diverse community in a multicultural world and global economy, SVC promotes student engagement, learning, and achievement, integrates diversity and globalism throughout the college, and practices sustainability in human resources, operations, and teaching and learning” (Sound View College, 2014). Admission to Triumph requires the student to have a diagnosis of IDD, the ability to attend to personal care needs, apply for adult-based services, and the desire to participate in postsecondary education (Triumph, 2014). At the time of this research study, OT was not included within Triumph for students with IDD.

Selection of Triumph at SVC permitted the researcher to have access to key informants at the site as well as access to documents, opportunities for class observations, and relevant participants. The primary key informants at Triumph included the Triumph Director and Assistant Director. Both key informants identified initial participants including: pertinent SVC administrators, instructors, and occupational therapists serving the Triumph catchment area. The timeframe for the case study included both autumn quarter 2015 and winter quarter 2016. Following approval by the University of Washington Human Subjects Division, permission from SVC and Triumph was granted for access to the site, relevant documents, and participants.

Participants. Creswell (2012) suggested that sampling for a case study should be intentional and purposeful. Sampling as such would permit the researcher to “select people or

sources which, in order to maintain confidentiality, will not be provided by full citation nor documented as references herein.

¹⁰ These documents may contain confidential information as protected by the Family Educational Rights and Privacy Act (FERPA), 20 USC § 1232g, or are institutional data sources which, in order to maintain confidentiality, will not be provided by full citation nor documented as references herein.

sites who can best help to understand the phenomenon under study” (Creswell, 2012, p. 206).

Purposive homogeneous sampling was initially used to permit the researcher to select participants that provided a more detailed understanding of the case and the primary concern as well as provided access to the site and select participants (Creswell, 2012; Plano Clark & Creswell, 2010).

The key informants permitted the researcher to attend a Triumph staff meeting consisting of Triumph instructors, advisors, and staff. A verbal presentation regarding the purpose of the research study and potential for volunteer participation was provided. Attendees were permitted an opportunity to ask questions or seek clarification regarding the study and time commitment related to volunteer participation. To prevent a sense of coercion, the researcher left the premises after providing the key informants with a sign-up sheet for permission to contact any interested individuals via email. One week later, the key informants provided the completed sign-up sheet listing seven potential participants. Using snowball sampling, the key informants identified other relevant participants including:

- One SVC instructor teaching Triumph students a minimum of one course per academic year, and
- Two SVC upper-level administrators having key knowledge of the Triumph history and evolution.

As well, the key informants, instructors, and an occupational therapist assisted with identifying occupational therapists working within the Triumph catchment area serving young adult students with IDD attending either the Triumph or an adult-transition program.

Purposive sampling was initially used to secure Triumph students. Once consent was obtained from volunteer participants who served as Triumph or SVC instructors, the researcher

was granted permission to attend classes taught by two consenting instructors to provide an overview of the research and research process to the Triumph students. During each presentation, students were provided the opportunity to obtain clarification or ask questions regarding the research process. To prevent a sense of coercion, the researcher left the classroom after providing the instructor with a sign-up sheet for permission to contact any interested individuals via email. One week later, the instructors provided the researcher with the completed sign-up sheet listing three potential participants. Snowball sampling was utilized to seek out an additional seven Triumph students. Student participants who initially contacted the researcher encouraged other cohort peers to participate in the study. Finally, snowball sampling was utilized to seek out parents/guardians of Triumph students. An email seeking parent/guardian volunteers for the research study was sent out to the ten Triumph student participants requesting, if they agreed, to speak with their respective parent/guardian regarding potential participation in the research. The researcher's contact information was also provided in the email. As well, the Triumph key informants sent out a blast email to all parents/guardians of Triumph students seeking volunteer participants for the research study. Five parents/guardians responded to the initial request sent out to the Triumph student participants. No responses were obtained from the email blast.

Once consent to contact was attained, all identified participants were contacted by the researcher to discuss the purpose and intent of the study. Consent and permission to participate in the study was obtained from each participant.

Human Subjects and Ethical Considerations

Due to the potentially sensitive nature of this case study, careful consideration of the ethics involved in research and human subjects review was conducted. Because of the multiple aspects of this research design, multiple permissions were sought prior to conducting the

research. Review and approval from the Human Subjects Division-Institutional Review Board (IRB) of the University of Washington (UW) was initially obtained and received. The IRB proposal included content addressing the purpose of the study, the potential participants and key contacts, a statement regarding the assessment of risk, how confidentiality and secure storage of data was to be maintained, and the process for securing participants and consent. Following UW Human Subjects Board approval, a review from the SVC Ethics Department was completed with approval granted.

Assessment of risk. Overall, the study content and research methodology posed minimal risk. No interventions or undue psychological procedures were conducted. All research participants were given permission to end the interview sessions or retract access to the research site. The research study had a minimal level of risk regarding content shared by the Triumph participants or the OT participants. Public school districts are mandated by IDEIA (2004) to provide related services for students who have been identified as eligible and appropriate for the interventions. Occupational therapy participants took care in sharing any information that may place them at risk for not fulfilling the mandate of the law. In addition, the Triumph students were considered a vulnerable population and great care was taken to ensure that coercion and deceit were not used in this study. The researcher conducted a semi-structured interview regarding Triumph student adaptive behaviors. As well, the researcher sought all participants' voices to describe the needs that young adults with IDD demonstrated when attending PSE and any related supports and services required to promote successful program completion.

Confidentiality. To maintain confidentiality, the researcher described participants by a number (from 001 through 039) or a group composite was created (Creswell, 2012). No names or other identifying information were documented on field notes, observation notes, *Vineland*

Adaptive Behavior Scales-II (VABS-II; (Sparrow, Cicchetti, & Balla, 2005) survey response forms, or transcribed interview content. All documents were numbered according to the number associated with the participant. A key with the association between participants, the identifying number, and any pseudonyms was kept separate and stored within a locked drawer at the researcher's home. All other data was also stored in a locked drawer separate from that housing the key, within the researcher's home. Care was taken to ensure privacy of the participants. Whenever possible, information was compiled to form an aggregate or composite profile, or a pseudonym was used. Any identifying information that was not agreed upon for type and purpose of use following the study was removed and destroyed.

Consent to participate. Following approval from the UW Human Subjects Board, approval was also sought from the SVC IRB to conduct the case study of the Triumph program. Consent forms were provided to and obtained from each identified participant. The process for consent included providing an initial general presentation to the participant in a 1:1 format regarding: statement of researcher, and statement of research purpose and proposed study. An opportunity to ask questions and clarify intent of the study was provided for each participant. When consent was obtained, care was taken to prevent any sense of coercion to participate in the research process. Those participants who completed and returned the informed consent were included within the case study. At the time of the 1:1 interview, participants were again fully informed about the project and their rights as informants, after which the interview session officially began.

Data Collection

Many of the key authors of qualitative case study research suggested data collection to include a combination of observations, interviews, documents, and/or audio-visual materials to

provide a deeper understanding of the case under study (Creswell, 2012, 2013; Hamilton & Corbett-Whittier, 2013; Merriam, 1988; Plano Clark & Creswell, 2010; Salminen et al., 2006; Stake, 1995; Yin, 2014). These multiple data points provided an opportunity to triangulate findings and decrease potential researcher subjectivity. As well, the multiple data points permitted the researcher to not only fully understand the case, but to develop a depth of knowledge in order to provide a rich description of the case for the reader. The current research study used a combination of data collection methods including: brief demographic survey, 1:1 semi-structured interview, structured interview for students only using the VABS-II (Sparrow et al., 2005), document review, and course observations.

Participant interviews served as the primary source of data collection due to the potential to collect rich description of the individual perspectives (Creswell, 2013). A semi-structured interview protocol (see Appendix D for an example of a semi-structured interview protocol) was created for each participant group as a means to facilitate more reflective responses regarding the key topic areas (Bloomberg & Volpe, 2016). Examples of two recent research studies provided support for using questionnaires, interviews, and/or focus groups as a means of data collection. In 2009, Mill, Mayes, and McConnell conducted a study on the experiences of young adults with intellectual disabilities in negotiating autonomy. For this study, a sample of convenience was sought to conduct a life story approach using semi-structured interviews and focused in-depth interviews of the young adults with intellectual disabilities. Rens and Joosten (2014) used a two-phase approach to investigate the experiences regarding OT within a school-based program. Phase one included responses, from occupational therapists and educators, to a structured questionnaire with open and closed-ended questions regarding school-based roles and perception of OT. Phase two included focus-group interviews of select participants within the professions

of OT and education and included occupational therapists, educators, principals, and OT supervisors. Both studies found that the in-depth interviews, in particular, provided a deeper understanding of participant experience.

Data collection methods and procedures. For the current study, the researcher conducted the following data collection methods and procedures:

Demographic survey. The use of a brief survey with closed-ended questions was used to obtain relevant demographic information on all participants. The survey was completed at the time of the 1:1 interview (see Appendix E for an example of the demographic survey). The researcher assisted with reading questions or writing responses if indicated by the participant.

Triumph program document review. Document review was conducted as a means to discover relevant background information or key insights regarding the Triumph program or Triumph students. Only those documents connected to the Triumph program or consenting student participants were accessed. Document review served as a method of discovery and/or confirmation of information on emerging themes. The case study process began with an in-depth review of the Triumph program documents since inception of TPSID funding status in 2010. Program evaluations, student files of consenting Triumph program students, and other relevant documents, videos, or Triumph program course content was reviewed. Documentation related to consenting Triumph program students dually-enrolled in public high school and SVC was accessed. Documents included a student's individual education plan (IEP) or individual transition plan (ITP); application to PSE program; accommodation letter(s); review of records (number of students on IEP receiving OT as related service during the adult transition program); and other key artifacts that were considered important. Field notes were taken regarding purpose for, amount, and type of support services and accommodations, previous or current OT

intervention supports and services, and student's stated goal(s) for attending PSE. All notes were numbered according to the number associated with the participant.

Triumph program and Sound View College class observation. Observations of specific Triumph program or SVC classes were conducted. Class observations provided the researcher with the opportunity to note participant engagement and to discover themes, patterns, or behaviors that may have evolved from the interviews or document review (Bloomberg & Volpe, 2016). Six Triumph program and two SVC classes were observed with field notes, observation notes, and researcher reflections completed at the time of or shortly following each observation. Only those classes identified by the Triumph program director, and consenting instructors, were observed. The researcher served in a researcher-observer role sitting in the back of the classroom to permit full view of instructor and student engagement. Field notes were taken during these class observations regarding purpose for, amount, and type of support services and accommodations, any noted spontaneous accommodations or supports provided by the instructor, student requests for accommodations, modifications, or supports within the class setting, and behaviors associated with in-class participation. No names or other identifying information were documented in the notes. All notes were numbered according to the number associated with the participant(s). Care was taken to ensure confidentiality of the participants. Whenever possible, information was compiled to form an aggregated profile.

Triumph program class instructor interview. Each consenting class instructor (some of whom also served as advisors but will be stated only as instructors herein) was interviewed as a form of triangulation of observation notes and field notes. Using the semi-structured interview protocol, class instructors were asked about use of universal design for learning, use of accommodations and supports within the classroom, and any on-going issues or challenges noted

with Triumph program student learning or ability to participate within the classroom setting. In addition, instructors were asked about his/her awareness of the profession of OT and its role and purpose in serving the young adult students with IDD in PSE. As much as possible, interviews were conducted in a private setting and audiotaped. Field notes were documented during the interview process. Audiotapes were transcribed verbatim. To ensure accuracy and meaning, all participants received a copy of the transcript for review.

Triumph program student with IDD interview. The researcher was granted permission to attend two classes taught by consenting instructors to provide an overview of the research and research process to the Triumph program students. An opportunity to obtain clarification or ask questions regarding the research and time commitment was conducted. To prevent a sense of coercion, the researcher left the classroom after providing the instructor with a sign-up sheet for permission to contact any interested students via email. One week later, the instructors provided the completed sign-up sheet listing three potential participants. Initial contact was made via email to set-up a meeting to sign the consent form and schedule a session to complete the survey, the VABS-II (Sparrow et al., 2005), and 1:1 interview. At this initial meeting, the research purpose and intent was fully explained to the student with opportunity to once again ask any questions related to the purpose of the study. The participant was reminded of the option to opt out of the study at any time and for any reason. Following signed consent, each participant completed a brief demographic survey, received a 1:1 interview regarding participation in the Triumph program and use of any required supports or accommodations, and responded to questions from the VABS-II (Sparrow et al., 2005). Information regarding past participation in OT programs within school-based or outpatient settings was sought, along with the participant's perception of OT services and supports within the PSE setting. Field notes were documented

during the interview process. Audiotapes were transcribed verbatim. To ensure accuracy and meaning, all participants received a copy of the transcript for review. Participants were provided the opportunity to seek assistance with reading the transcript from the researcher, the student's advisor, or the student's parent/guardian. In the email regarding transcript review, the student was also provided a two-week timeline for which to return the transcript. As well, a statement suggesting that a no-response regarding the review request would be understood as no corrections were necessary.

Vineland Adaptive Behavior Scales-II. In addition, a VABS-II (Sparrow et al., 2005) was administered to each student participant as a means of establishing current adaptive behavior skill level. The VABS-II (Sparrow et al., 2005) is an assessment tool to be used with individuals from birth to age 90. The VABS-II (Sparrow et al., 2005) assesses adaptive behaviors in four domains: communication, daily living skills, socialization, and motor skills, with a fifth optional domain of maladaptive behaviors. For the purpose of the present study, only the communication, daily living skills, and socialization domains were used. Each domain consists of sub-domains to further encapsulate each domain. Subdomains for the communication domain include: receptive (i.e., a person's ability to understand what is said via verbal or non-verbal means), expressive (i.e., a person's ability to say what he or she means and how he or she gathers information), written (i.e., the ability to read and write). The subdomains for daily living skills include: personal (i.e., how a person manages meals, personal hygiene, dressing); domestic (i.e., a person's ability to manage household tasks and routines); and community (i.e., time management, transportation, money management, job skills). Subdomains for socialization include: interpersonal relationships (i.e., a person's ability to interact with others); play and leisure (i.e., how a person uses play and leisure time); and coping skills (i.e., a person's

responsibility and sensitivity toward others) (Manohari, Raman, & Ashok, 2013; Matson, Rivet, Fodstad, Dempsey, & Boisjoli, 2009; Sparrow et al., 2005).

Though responses are typically provided by a careprovider or other person with intimate knowledge of the individual, for the purpose of this study, the researcher used student participant self-report for all assessed areas of the VABS-II (Sparrow et al., 2005). Voelker et al. (1990) used self-report with a population of 48 adults presenting with mental retardation [now otherwise known as intellectual disability] as a means to access personal information not otherwise accessible by caregiver or other third party reporter. Voelker et al. (1990) conducted a study comparing self-report to counselor responses on the Vineland Adaptive Behavior Scales (VABS; Sparrow, Balla, & Cicchetti, 1984). Results indicated strong relationships between self-report and counselor responses on all VABS (Sparrow et al., 1984) domains with the exception of maladaptive behaviors which were consistently under-reported during self-report. The authors suggested that for the scores on the maladaptive behaviors, the self-report tended to bias toward the desired socially accepted behaviors. In all, Voelker et al. (1990) suggested that self-report on the VABS (Sparrow et al., 1984) might have a strong utility for interviewing individuals with IDD considered relatively higher functioning. Thus, the current study used student participant self-report for the three assessed domain areas of the VABS-II (Sparrow et al., 2005).

When administering the VABS-II (Sparrow et al., 2005), the interviewer established a basal and ceiling level for each domain. Items for each domain and subdomain were scored using a frequency scale of 0 denoting never, 1 denoting sometimes or partially, or 2 denoting usually. Using the principles of universal design (Center for Universal Design, 2008), a visual cue of score responses was placed in front of the respondent for ease of recall and an opportunity to physically point or verbally state the response. When a respondent was unsure of a response or

had no knowledge regarding performance of an item, a label of DK (don't know) was given (Sparrow et al., 2005). An Adaptive Behavior Composite was indicated for the individual via a sum of scores for all domains. This composite provided a standard score, percentile rank, and an adaptive level that indicated the individual's current functional level as compared to the norming population (Sparrow et al., 2005). The Adaptive Behavior Composite and scores for each domain were used as a means to identify current adaptive behavior skills, abilities, and needs.

An advantage of using the VABS-II (Sparrow et al., 2005) to assess adaptive behavior skills is the widespread use of the tool for the purpose of identifying adaptive behaviors that may require intervention (Gleason, & Coster, 2012; Manohari et al., 2013; Matson et al., 2009; Sparrow et al., 2005). This is due, in part, to the tool's strong reliability and validity. In a review of the VABS-II (Sparrow et al., 2005), researchers in the Community-University Partnership for the Study of Children, Youth, and Families (2011) conducted a split-half reliability test and determined an internal consistency ranging from .77 to .97 across domains. Test-retest reliability correlations ranged between .76 and .92 across domains. Concurrent validity comparing the VABS-II (Sparrow et al., 2005) to the VABS (Sparrow et al., 1984) reported a correlation of .70 (Community-University Partnership for the Study of Children, Youth, and Families, 2011).

Triumph program administrator interview. A 1:1 interview was conducted with the Triumph program Director, Assistant Director, and two key SVC administrators (as identified by the program director) regarding the Triumph program, students attending the Triumph program and any required supports or accommodations. Information regarding student participation in OT programs within school-based or outpatient settings as well as the potential for OT services and supports within the PSE setting were explored. As much as possible, interviews were conducted in a private setting and audiotaped. Field notes were documented during the interview process.

Audiotapes were transcribed verbatim. To ensure accuracy and meaning, all participants received a copy of the transcript for review.

Triumph program student's parent/guardian interview. A 1:1 interview was conducted with the Triumph program student's parent/guardian(s) regarding her student's participation within the Triumph program, current needs, and any required supports or accommodations. Information regarding student participation in OT programs within school-based or outpatient settings as well as the potential for OT services and supports within the PSE setting were explored. As much as possible, interviews were conducted in a private setting and audiotaped. Field notes were documented during the interview process. Audiotapes were transcribed verbatim. To ensure accuracy and meaning, all participants received a copy of the transcript for review.

Occupational therapist interview. A 1:1 interview was conducted with school-based occupational therapists serving young adult students within the Triumph program catchment area regarding services provided to students attending the Triumph program or another adult transition program, and any required supports or accommodations. Information regarding young adult student participation in OT programs within school-based settings or PSE settings was explored. As much as possible, interviews were conducted in a private setting and audiotaped. Field notes were documented during the interview process. Audiotapes were transcribed verbatim. To ensure accuracy and meaning, all participants received a copy of the transcript for review.

Researcher's self-reflective journaling. Self-reflective journaling included field notes garnered following any observations or interviews. Creswell (2012) suggested that using researcher reflexivity assisted the researcher in being "aware of and openly discussing his or her

role in the study in a way that honors and respects the site and participants” (p. 474). Journaling was also conducted following 1:1 interviews to help capture the narrative or stories of those interviewed.

Data Analysis

Numerous authors of qualitative research discuss the importance of making the voluminous amount of collected data manageable (Auerbach & Silverstein, 2003; Bloomberg & Volpe, 2016; Creswell, 2013; Merriam, 1998; Miles, Huberman & Saldaña, 2014; Saldaña, 2009, 2016; Stake, 1995; Yin, 2014). To this end, collected data was initially reviewed to select relevant text related to the specific research focus (Auerbach & Silverstein, 2003). Any text considered unrelated to the primary research questions and sub-questions was set aside for potential future review. Relevant text was selected based upon the initial holistic coding process (Miles et al., 2014). According to Saldaña (2009), a code may be a single word or short phrase “that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute” (p. 15). Through the holistic coding process, relevant text was identified and highlighted. Selected text was then reviewed using *invivo* coding (Saldaña, 2016) seeking participant words or phrases meaningful to the key research questions and sub-questions. Though this process provided an opportunity to improve the manageability of the collected data, a sizable quantity of data still required careful analysis.

Due to the large amount of data collected, as suggested by Yin (2014), the researcher maintained a highly organized process for storing and retrieving relevant data. Use of an Excel spreadsheet for all quantitative and quantifiable qualitative data permitted cross-referencing of data. All collected data were stored in a locked and secured drawer within the researcher’s home.

Quantitative data obtained from the VABS-II (Sparrow et al., 2005) were scored per administration manual criteria. Scores were entered into an Excel spreadsheet for descriptive analysis. As well, quantitative data obtained from the brief survey were entered into an Excel spreadsheet for descriptive analysis. Descriptive statistics were conducted and included measures of central tendency, and frequency of responses.

Qualitative data were initially analyzed using the six-step approach suggested by Creswell (2012, p. 237): 1) Prepare and organize the data for analysis, 2) Explore the data through the process of coding, 3) Generate descriptions and themes, 4) Create narratives and visuals, 5) Interpretation of meaning through personal reflection and support from the literature and, 6) Validate accuracy of the findings. As well, suggestions for data analysis provided by Auerbach and Silverstein (2003), Bloomberg and Volpe, (2016), Miles et al. (2014), and Saldaña, (2009, 2016) were included. Each step of the process outlined by Creswell (2012) is briefly described below.

Prepare and organize data. All interviews were audiotaped and then transcribed verbatim. To ensure accuracy, transcripts were crosschecked with the audiotaped interviews with any notes regarding the content written in the margins. All interviewees were provided the opportunity to review the transcript and provide necessary changes. All other data were organized in preparation of exploration and coding.

Explore and code data. The transcripts and documents were analyzed by hand to permit reading, coding, and categorizing of the data into manageable segments (Auerbach & Silverstein, 2003; Miles et al., 2014; Saldaña, 2009, 2016). Following initial review, a list of codes was compiled and a framework constructed to identify content that may reveal the essence of the

findings (Bloomberg & Volpe, 2016). Similar code words were combined and redundant codes eliminated. A final list of 24 codes was established (see Appendix F).

Generate descriptions and themes. Codes were then combined to establish five key themes or categories. Themes were identified and classified in relation to the key research questions and sub-questions until saturation was achieved (Bloomberg & Volpe, 2016; Creswell, 2012).

Create narratives and visuals. Review of the data and relevant themes and categories was conducted as a means of seeking out key content narratives and potential visuals to augment or expand upon meaningful outcomes. Visuals included a coding schema, Tables, or content displays as a means to stress key points or content areas. Data summary tables were created as a means to quantify pertinent aspects of the qualitative data. When possible, frequencies of responses were noted. Data summary tables reflected the content in the coding schema from all participants (see Appendix G).

Interpretation of the data. Interpretation of the data included the researcher's personal reflections regarding perceived meaning and value of OT for the young adult students presenting with IDD. The researcher also noted key content areas that evolved related to meaning and relevancy of experiences for the participants. To provide support regarding key outcomes, views were compared and contrasted with those identified in relevant literature (Bloomberg & Volpe, 2016; Creswell, 2012).

Validate findings. To assess accuracy and credibility of findings, Luborsky, Lysack, and Dillaway (2006) suggested that results be validated using member checking with a select group of participants (occupational therapists, Triumph program administrators, Triumph instructors, parents/guardians, and students). At the end of each interview, the researcher discussed having

the participant review the transcript to note if descriptions were complete and as intended. Participants provided verbal assent to transmit the transcript via email. The researcher requested participants to highlight any content of concern then write corrections in ALL CAPS for ease of item location within the transcript. As well, the email included a statement that should the participant not return the transcript within a two-week time period then the assumption would be made that no corrections were required. Student participants were also encouraged to have the researcher, his/her advisor, or his/her parents and/or guardians assist with the transcript review process. To ensure accuracy of data analysis the process of triangulation was used between: the various data collection methods (Yin, 2014); participants and the researcher; and the researcher and local content experts to conduct an independent analysis.

Finally to Yin (2014) quality research follows four principles: (1) the analysis must attend to all the evidence, (2) all rival plausible explanations or interpretations must have been explored, (3) the most significant aspects of the case study must be explored, and (4) the researcher should use his or her expert knowledge regarding the case. Yin professed the critical importance of being faithful to the data collection and data analysis, and to truthfully report what the data reveals.

Combining the data altogether. The final aspect of analysis was the culmination of combining all data to effectively triangulate and interpret the results of each component. All aspects of the data were considered throughout the process of data interpretation. Data were reviewed with respect to the *Framework* (AOTA, 2014) to determine areas of occupation served by OT.

Findings

The analysis of the collected data revealed a number of key findings related to the needs of PSE students with IDD and how these needs fell under the purview of OT. Following a brief introduction of the case study site and student decision to attend, the demographics of the respective groupings of participants are presented. As well, the results from the VABS-II (Sparrow et al., 2005) are reported. Finally, the analysis of the key findings from the document review, class observations, and all participant interviews are presented in relation to the research question and sub-questions.

Sound View College

Situated in a picturesque region of the Puget Sound, Sound View College is spread across 80 acres of hilly landscape supporting 35 buildings and serving nearly 17,000 students annually (About Sound View College¹¹, 2014). Sound View College (SVC) has remained open to innovative and diverse learning opportunities. The current student population represents nearly 70 different countries and 100 languages. As noted by Triumph instructors and SVC administrators, diversity is about more than just race and religion and universal campus acceptance of the Triumph students is driven from the modeling of the administration,

...there is also the institutional acceptance here that when your top down is saying this is what the value is—this is probably the most significant value—the diversity values—the most significant value of this college—and that the president exhibits that by including this population himself. (Participant 033-administrator)

¹¹ These documents may contain confidential information as protected by the Family Educational Rights and Privacy Act (FERPA), 20 USC § 1232g, or are institutional data sources which, in order to maintain confidentiality, will not be provided by full citation nor documented as references herein.

A values-based management philosophy, SVC demonstrated the values of access [“we believe education should be available to all who seek it”], diversity [“we respect the rights and perspectives of the diverse populations who live, learn, and work in our community”], and internationalization [“we value a global perspective and respect cultural diversity”] throughout the campus community (About Sound View College, 2014). It was this sense of true values-based management that many of the instructors and administrators were initially attracted to working for SVC,

This is a little piece of society that is special and different...this is a campus that is way into social justice, [which is typically] all but this population. Diversity equals race, gender, sexual orientation—and oh yeah, them [students with disabilities]. But it is really never included [in other institutions]. This campus is the furthest along that I have ever seen in including that population. (Participant 033-administrator)

Acceptance of diverse learners was demonstrated throughout the campus community noted in the frequency of articles (eight over 12 selected issues) within the school newspaper. Article topics included Triumph program students and/or events, the participation in Unified Sports events, and inclusion of all students in on-going campus clubs and activities. As well, SVC and Triumph fostered the belief that “intelligence is a growth mindset...not a fixed mindset...everybody has a different contribution that makes us all better (Participant 033-administrator). It is within this campus environment that the Triumph program evolved to serve young adults with IDD pursuing a PSE experience.

The Triumph program. In the mid-seventies, SVC supported a program to educate young adults with developmental disabilities to attain the necessary parenting skills in order to retain their children within the home (Participant 035-administrator). Over time, the program

evolved into a community integration program for young adults with developmental disabilities to provide post-institutional transition training (Participant 035-administrator). Employment readiness skills were taught along with the necessary skills for maximal independent living. Noting the potential for supporting a growing diverse student population, the college President encouraged Triumph to emerge from under the radar of the earlier bureaucratic control,

At that time...[the current college president] said, 'Let's move it over to your area because there is an understanding there, there is a partnership there....' Part of the story I always have to tell was it was one of those situations where, you know, let's just keep this program hidden over here in the corner, and nobody really knows, because it really doesn't fit on a college campus...[the previous administration stated] there is no room for these dull normal here on campus...they don't belong here. (Participant 035-administrator)

It was the foresight of the current President who brought Triumph to the forefront,

...I understood that my predecessors did not see it academically in the way I saw it academically. They didn't see it as a program of access and student success in working with students with different abilities to get a successful outcome for them....I have inherited this jewel...as far as I could tell no other community college [in the state] was doing this work. And this was really good work—really productive work, really serves the community. So if you are about access and trying to serve the community, I mean, this was a kind of unique-not just in the sense of having a program, but actually getting successful results....So for me it was, wow, we have got this great program, why wouldn't we highlight it, you know? In fact, why wouldn't we grow it? (Participant 034-administrator)

As well, the SVC President encouraged the expansion of the program to serve a broader spectrum of students with diverse learning needs. In 2010, SVC applied for and received one of the 27 grants funded through the Department of Education (U. S. Department of Education. (2014) to provide PSE for young adults with IDD.

Being the only TPSID funded college program in the Pacific Northwest, Triumph began to attract eligible students from an area representing over 40 zip codes. Annually, thirty students are accepted to participate in the program. Since its inception, Triumph has served 129 students with a 94% completion rate (M. Howland, personal communication, 3-11-2016). According to the *Academic Advisor's Procedure Manual* (Triumph¹², 2014), Triumph presents an academic program inclusive of gaining experiences in the campus (student clubs, leadership, social events, recreation), the classroom (courses, intensive advising, access to resources), and career (internships, interviewing, job placement, on-the-job training). Two certificate pathways were offered: Fast Track to Employment, and Comprehensive Transition. Fast Track to Employment Certificate is a one-year option to include:

- 18 clock hours participation in academic and career development coursework at SVC
- 9 clock hours participation in SVC activities, events, or programs, and
- 6 clock hours of internships (one required).

The two-year option, Comprehensive Transition Certificate, is a 72-clock hour option to include:

- 36 clock hours participation in academic and career development coursework at SVC
- 18 clock hours participation in SVE activities, events, or programs

¹² These documents may contain confidential information as protected by the Family Educational Rights and Privacy Act (FERPA), 20 USC § 1232g, or are institutional data sources which, in order to maintain confidentiality, will not be provided by full citation nor documented as references herein.

- 12 clock hours of internships (two required)
- 6 clock hours of capstone project outlining progress toward goals.

Courses are open to all SVC students. Triumph students take SVC courses along with non-disabled peers. Students are supported through intensive weekly academic advising, an employment consultant, access to an educational coach and peer navigator, as well as access to campus-wide support services (Triumph, 2014).

Eligibility. To be eligible for the Triumph program, students must have documentation from their school district or supporting agency regarding diagnosis of intellectual disability. In addition, students must be 18 years of age, motivated to pursue a PSE experience, be willing and able to apply for adult-based services, be independent in managing personal care needs, safely navigate the campus, access public transportation, and be willing to remain an active participant for the duration of the program (Triumph, 2014). Following program enrollment, students are scheduled to meet weekly with their academic advisor to reflect upon progress, collect documents for the capstone portfolio, and complete a weekly plan. The weekly plan included discussing activities to reach student goals and related supports, resources, or accommodations. The intensive advising sessions persisted throughout the student's participation within the Triumph program.

Making the choice to attend. Still considered a relatively new PSE option for young adults with IDD, the pathway for finding out about Triumph varied. Nearly all students reported that his/her mother or female guardian helped in identifying potential PSE options,

[We wondered] how does this continue after high school? And, I think a mindset that many parents get into is that you get into the flow of school—the IEP teams, and you get, you almost develop a routine with the people you interact, the expectations, the teaching,

all that and then it ends. And your child is not prepared...for life in society without the umbrella of families, that tightly controlled environment of school...I did some extensive, um, researching about different options...[and we asked our daughter] ‘What do you want to do after high school?’ She says, ‘I want to go to college.’ Well we realized that’s because she has seen five other people go to college...We narrowed down to Triumph after talking to people here, doing some research how [she] would be supported... (Participant 014-parent)

with a few reporting that a high school teacher or counselor suggested the program. Students were encouraged to attend an informational session about Triumph and tour the SVC campus. Some students immediately connected with the program, “...it was the right one for me...I could picture myself here...” (Participant 001-student), “...it really caught my eye...it was an excellent program for me...” (Participant 003-student), others were more reticent about venturing into college or uncertain that they belonged in the Triumph program,

It was kinda difficult. I wasn’t sure if the Triumph program was for me or not and I felt like I can, I can use the program as a benefit because they can help me find a job and help me uh, find my way around college...I think it was a good idea for me to come here because I felt like I wouldn’t have improved as the person I am today...I know I have a disability but sometimes I don’t think that I do. And...when I see other people who has major disabilities I feel like I’m taking advantage of the Triumph program...[but] I’m no different than any body else in this school so why should I be in this program?

(Participant 002-student)

or were frustrated with being placed in a program with other students with disabilities, “All my friends went to BYU and I got stuck in this low crap.” (Participant 008-student).

Students dually-enrolled in their respective high school concurrent with the Triumph program remained on an IEP for specially designed instruction, related services, or supplementary aides and services. Understanding how and when school-based services were provided was unclear to nearly all participants,

...it is one of those [issues] we are all trying to figure out how do we serve students and how are we communicating with each other. It is a different setting for the occupational therapist in the K-12 system who is not used to the college system, as well as the student who has a relationship with that therapist and what information does that student or therapist are working with need to share or ask for supports within Triumph. So I think that is something we are still figuring out. (Participant 028-instructor and advisor)

Being accepted. Understanding if a student was accepted into the program was subdued and anticlimactic. Unlike the experience of many neurotypical students who anxiously await acceptance cards in the mail, Triumph students receive a confirmation of funding and are scheduled for an intake session, “So I don’t know that there was, like—it is different than my 17-year-old now who is getting letters that say you are accepted” (Participant 015-parent). However, some students expressed excitement over being accepted into college just as their neurotypical peers, or siblings were accepted, “I had to fight to get in...because I have a passion for marine biology...and it seemed like a really good fit” (Participant 006-student). For all student participants college became a positive option for PSE and the Triumph program at SVC was a viable opportunity. Listening to all the voices regarding PSE for young adults with IDD was critical to this case study.

Participant Demographics

The 32 participants each consented to be involved in the research case study. The participants were divided into five groups: Triumph program students, parent or guardians of Triumph program students, Triumph and SVC instructors, SVC administrators, and school-based occupational therapists serving young adults with IDD. The descriptions that follow present the participant demographics for each group.

Triumph program students. Through the process of both homogeneous purposive sampling and snowball sampling, ten Triumph program students consented to participate in the study. Nine students were enrolled in the Triumph program. One student was a 2015 graduate of the Triumph program yet continued to serve the program as a peer navigator and took SVC courses. Student participants represented nine different cities within the Triumph program catchment area. Though all students must have the diagnosis of intellectual disability to be accepted into the program, only four self-identified as such. Five of the students self-identified as learning disabled. Other self-reported diagnoses included: autism, cerebral palsy, Down syndrome, hearing impairment, and other health impaired. One participant reported having no disability. The participants had attended the Triumph program an average of 1.05 years [range=0.50 to 3.00]. The average age of the student participants was 21 years 4 months. Six students were female and five identified a racial classification of White. Table 1 presents results from the responses of the brief demographic survey. All students spoke English as their primary language. Due to potential speech intelligibility, one student used an augmentative communication device in addition to verbal output during the 1:1 interview. One participant requested her advisor be present during the 1:1 interview due to concern regarding speaking to

an unfamiliar adult. All other participants completed all components of the research process independent of another adult.

Parents/guardians of Triumph program students. Emails requesting potential parent/guardian participation in the research study were sent to all ten Triumph program student research participants. As well, the key informants sent out an email blast to all parents/guardians of the 31 enrolled Triumph program students seeking interested participants for the research study. Five parents/guardians (two of whom were the guardians for one Triumph student) responded to the initial email request to the student participants yielding a 40% response rate. All parent/guardian participants were female. Four identified racially as White, one identified as White and Latina. All participants were college educated with four attaining a Master's degree, and one a Bachelor's degree. The average age of the participants was 48.5 years. Three participants served as guardians to their adoptive son or daughter, whereas two were the natural mothers of their young adult student. In all, four student participants were represented (001, 005, 007, 010) by their parents/guardians—three female and one male. All parents/guardians identified their young adult student as intellectually disabled. Three of the students were also diagnosed with other disabilities including: autism, speech impairment, hearing impairment, or other health impaired.

Triumph program or Sound View College instructor. Purposive homogeneous sampling was used for the initial identification of Triumph program instructors following a brief research presentation. Six out of eight instructors responded to the initial request. Snowball sampling was used to include two additional instructor participants referred by the key informants. In all, four of the instructors identified as female, three identified as male, and one identified as transgender. Participants identified racial classification as follows: White-six,

Black-one, and other-one. Instructors ranged in age from 26.6 years to 52.4 years with an average of 36 years. Number of years teaching at SVC ranged from 0.5 years to 22 years with an average of 4.38 years. All instructors had some college with four attaining a Master's degree, two attaining a Bachelor's degree, one attaining an Associate's degree, and one attaining some college. Of interest, three of the participants had a personal experience with disability, and one had a life-long career working with individuals with disabilities. The majority of instructors were comfortable serving students of varying abilities and disabilities with learning disability, intellectual disability, and multiple disabilities most commonly reported. Half of the instructors were moderately familiar with OT, two were moderately unfamiliar, one was very unfamiliar and one was neither familiar nor unfamiliar with OT. The instructors also served in a variety of roles including: advisor, job coach, educational aide, employment specialist, ACCESS counselor, and peer navigator.

Triumph program administrators/Sound View College administrators. Purposive homogeneous sampling was used to identify the key informants of the case study. Following the 1:1 interview with the key informants, snowball sampling was used to identify two additional administrators who had relevant information pertinent to the study. In all, four administrators were included in the case study—three were female, one was male, and all identified White as their racial classification. Ages of administrators ranged from 43.25 years to 67.58 years with an average of 55.37 years. Length of service to the college ranged from five years to 38 years with the average of 19.75 years. Roles within the college were high-level administrative positions. All participants had college degrees ranging from Associate's degree to Doctorate degree. All participants stated a comfort level in serving individuals with varying abilities and disabilities. All administrators have had careers with social justice as a chief focus, and two of the

administrators had a personal family member with a disability. Three administrators reported moderate familiarity with OT, whereas one administrator reported moderate unfamiliarity. All four administrators were involved in the process for securing the initial TPSID grant.

School-based occupational therapy practitioners. Purposive homogeneous sampling and snowball sampling were used to identify potential school-based OT practitioners. Inclusion criteria consisted of current school-based practice serving young adults with IDD within the catchment area of the Triumph program. One person responded to the initial email request with four other individuals identified through Triumph program instructors or a research committee member serving on a school-based special interest section. One participant was later reported to be a transition specialist. However, content from the interview with this participant was retained due to pertinent information regarding the transition needs of young adults with IDD as related to the profession of OT. In all, five individuals were identified and consented to participate in the study. All participants were female, four identified as White with one identifying as Hispanic/Latina. All participants had Master's degrees. Length of time serving young adults with IDD ranged from 5-31 years with an average of 23.8 years. Three of the participants served Triumph students. Two of the occupational therapists provided consultation support to Triumph students at the time of the case study.

Vineland Adaptive Behavior Scales-II (VABS-II)

As noted by Sparrow et al. (2005), when considering adaptive functioning as measured by the VABS-II (Sparrow et al., 2005), scores of at least two standard deviations below the norm population (≤ 70 for Domain scores) are viewed as a significant limitation for the respective domain. Please refer to Table 1 for individual and group VABS-II (Sparrow et al., 2005) Subdomain scores and Table 2 for individual and group Domain and Adaptive Behavior

Composite scores. For the purpose of this study, VABS-II (Sparrow et al., 2005) Domain and Subdomain scores were aggregated to provide a group composite (see Tables 2 and 3). As a whole, the student participants received an Adaptive Behavior Composite mean of 67.30 (-2.3 SD) with scores ranging from 23-90. Sixty percent of the students received scores at or below 70 suggestive of significant limitations in overall adaptive behavior skills. The scores for the Communication ($M=72$; -1.9 SD) and Socialization ($M=71.3$; -1.9SD) Domains demonstrated greater variability across students. Forty percent of the students received scores falling within significant limitations for the Communication Domain, yet only 30% did so for the Socialization Domain. The Daily Living Skills Domain ($M=65.6$; -2.5 SD) posed the greatest level of limitation with 80% of students receiving a score of 70 or below. As an aggregated group, all Domain scores hovered near or greater than minus two standard deviations suggestive of significant limitations.

However, as can be noted in both Tables 2 and 3, the range of scores varied considerably between the students. Two areas of strength were noted. As an aggregated group, receptive communication fell within normal limits of age level expectations ($M=12.6$; -0.8SD). Coping ($M=12.10$; -1.0SD) fell just outside of age level expectations and demonstrated the least variability in scores (range of 9-14). Notable areas of challenge were demonstrated in the Daily Living Skills Domain where participants received domain scores ranging from 31-107. The Community Subdomain ($M=8.2$; -1.8SD) presented as the most significantly limited with individual scores ranging from 3-18 ($M=8.2$; -2.2SD). These lower overall scores may be reflective of the participant challenges with community access and mobility. As well, issues related to financial management, problem-solving, and personal safety related to public transportation were also indicated. It should be noted that a number of questions within this

subdomain related to employment including attaining and sustaining a job. Many of the Triumph program students were only emerging into internships or job experiences at the time of the study.

Key Findings from Interviews, Document Reviews, and Class Observations

The purpose of this exploratory, instrumental case study was to ascertain the needs of young adults with IDD attending PSE and how these needs fell under the purview of OT. Key findings related to the primary research question:

- *For young adult students with IDD attending PSE, what are their needs to participate in and complete program requirements?*

and sub questions:

- *For young adult students with IDD attending PSE, how are their needs to participate in and complete program requirements currently supported?*
- *How are the identified needs of young adults with IDD falling under the purview of OT?*
- *What are the perceptions of young adults with IDD attending PSE and his/her parent/guardian regarding OT interventions to prepare for PSE?*

are reported. The researcher surmised that a better understanding of the needs of students with IDD and the current perceptions of OT in relation to serving those needs would help foster further discussion and action within the OT profession and move toward a positive transformation. In particular are the key findings obtained from the 31 in-depth participant interviews, eight classroom observations, and reviewed documents. Five major findings emerged from the study:

- (1) All participants indicated that adaptive behavior skills were persisting areas of challenge for the young adults with IDD in relation to participating in PSE.
- (2) A majority of participants reported that the faculty and staff of Triumph and SVC supported the students at his/her level of need.
- (3) Nearly all areas of occupation as noted on the *Framework* (AOTA, 2014) were represented as areas of need.
- (4) Nearly half of the participants were unfamiliar with OT, and a majority of participants shared that they were uncertain what role OT would provide for students within a PSE setting.
- (5) All participants expressed a desire for the student to attain optimal independence, employment, relationships, and community acceptance.

This section provides a discussion regarding the germane details that elaborate each key finding. As shared by several of the case study researchers (Merriam, 1998; Stake, 1995; Yin, 2014) the use of thick description was emphasized to provide the opportunity for the reader to be acutely immersed in the data. To the greatest extent possible, participant voice was used as a means to best demonstrate an understanding of perceptions and the aggregate groups' sense of reality. As a means to portray participant voice, emphasis was placed on an aggregation of voices or individual voices per participant group through the use of illustrative quotations taken from interview transcripts. Where appropriate, essential content from the document review and classroom observations were interwoven with the findings from the interviews.

Finding 1. All participants (n=31 [100%]) indicated that adaptive behavior skills were areas of challenge for the young adults with IDD in relation to participating in PSE. As noted by a transition specialist,

So when they come to me, they are really green. And we work so much on those soft skills. So we are talking about hygiene is huge. Communication is huge. Those social skills. And traveling -- how to use the city bus, how to get from point A to point B. All those things are parts of transition. Also leisure. I call it ...so I call it intentional leisure, because you have to teach that to these young folks. Self-advocacy is another thing that we really work on in here. Nutrition, fitness, community access...(Participant 029-transition specialist)

Conceptual skills. An overwhelming majority of participants (n=30 [97%]) indicated that conceptual skills (language, reading, writing, time and number concepts, executive function skills [inhibition, initiation, self-monitoring, emotional control, working memory, planning and organizing, organization of materials]) were the greatest area of challenge and thus need for the students. Of these skills, reading, writing, comprehension of directions and executive function skills were the areas most frequently reported as challenges. As noted by one administrator,

I think you could sum it up with executive functioning, but maybe just strategy instruction about you are responsible for this -- the students know how to plan for and do the work. Know how to understand that read the instructions or understand the expectation of the assignment. Because there has always been -- it is someone else's responsibility always. (Participant 033-administrator)

and an occupational therapist serving a Triumph student,

...the volume of information that they need to come to terms with...knowing how to access and obtain class related items. So whether it's books or supplies.... how to organize materials you know how to organize things in your notebooks. Some students have those skills after they graduate from high school but not all do. The volume of work

can go up significantly once a student starts college and so how do you make adjustments in your time management to be able to handle an increased workload. (Participant 024-occupational therapist)

In particular, time management and timeliness were observed issues for students when attending classes or even when scheduling the research interviews. As a whole, student participants required moderate to maximal support to schedule then attend the interview session. Frequent cues or reminders were provided including verbal in-person or email reminders. For one student, meeting in the classroom was necessary due to persisting challenges with attending scheduled sessions,

008 did not show up for the appointment nor did he send me an email, note, or phone call regarding cancelling the appointment. An instructor for 008 stated, ‘This is typical of him.’ This instructor shared that this student can be quite difficult and does frequently miss meetings. The instructor suggested that I schedule one more interview opportunity with 008 and do it during her course. She also suggested that I send 008 an email and cc it to the adviser (025) and to her. (Personal reflection, 15 January 2016)

All student participants indicated requiring support for reading,

“I might need someone to read it to see what it says first before I sign it or something.”

(Participant 005-student)

which was also reflected by the instructors, “And then reading. I mean, reading and reading comprehension are always -- you know, students being...or getting to the place where you can understand the material.” (Participant 033-administrator). Some participants reflected on the reasoning for the challenges with transitioning to PSE,

Well, a lot of our students have come from special ed, and they weren't challenged at all, they weren't held accountable for things like homework. So kind of having students come in for the first time and have real expectations. You know, we are not treating them like they are special in a special ed class, you know, we will do your homework for you, you get a high five and a hug at the end. You are in college, there is real expectations, and if you are not meeting those expectations, there is consequences. So I think the biggest challenge, particularly for new students, is for the first time having real expectations which, you know, students tend to meet once they realize they are there, it is just kind of a shock for a lot of them when they are working through this -- you know, trying to understand that they are actually having to do stuff. (Participant 036-instructor)

“I think organization -- being able to manage going between different classes and making sure assignments are turned in on time, and time management I feel like is a big piece...”
(Participant 031-occupational therapist)

Not only did the participants share the issue of increased expectations, but also the challenges associated with preparing for adult transition, and self-awareness regarding needs,

...kind of really raising the bar.... because I think we have had -- our expectations have been too low, and we haven't had strong enough transition programs for those kids. A lot of them they are just like, OK, well, we kept you until you are 21, time's up. Good luck.
Oh, it just breaks your heart. (Participant 030-occupational therapist)

The experience of persisting adult support throughout primary and secondary schooling impacted the development of self-awareness and thus identification of needs and supports. As noted by one administrator,

I think students by and large are still coming in -- I don't know what percentage it would be -- but they don't know themselves, and they don't know what they need. They have been under that invisible cloud of special ed, or that thick cloud of special ed, where there is a whole team of people doing things about you and for you, but you don't know. And I think about one of our students (008) this year who didn't know he had a disability and is really upset about this part of it, and only saw the negative pieces of it, but has significant things going on around him to support his behavior... (Participant 032-administrator).

Yet, some students demonstrated strong self-awareness "...I'm a visual learner and a hearing learner as well, I love taking notes"(Participant 006-student), and the ability to seek support.

Practical skills. A majority of participants (n=23 [74%]) indicated practical skills (personal care, occupational skills, use of money, safety, health care, travel/transportation, schedules and routines, and use of the telephone) as an area of challenge and thus need. Attending to personal care routines such as hygiene, toileting, grooming, and other self-care routines, were noted areas of concern expressed by all parents/guardians, "He still has adaptive skills that need to be worked on. He still has executive function skills to be worked on." (Participants 016 a & b-parents/guardians). As well, a majority of occupational therapists (4 of 5), reported on the barriers related to self-care and personal hygiene, "we do a lot about hygiene - - you know, we talk a lot about that -- like knowing how to present yourself when you show up to work. I think that is a big piece." (Participant 031-occupational therapist), "...toileting is a huge one...one barrier right there" (Participant 030-occupational therapist). Of interest, only one instructor and none of the students or administrators commented on personal care routines.

Yet technology was reported as an area of strength. A majority of students and instructors discussed on the importance of technology and especially the use of the smart phone for staying

in contact with peers, parents/guardians, advisors or instructors, and mapping transportation routes,

I keep my calendar in my phone um, I keep my employment-my job coach number in my phone, my advisor's number in my phone, their um emails, um, my phone helps me, I use it to get onto the bus to get to school, so yeah. (Participant 007-student)

I think the most important tool that most of my students have is their smart phone and their Google calendar, because oftentimes it is more about the executive functioning piece than anything else. It is remembering to do your homework and understanding that it is no longer your parents' responsibility. (Participant 033-administrator)

Social skills. A majority of participants (n=26 [84%]) indicated that social skills (interpersonal skills, social responsibility, following rules and obeying laws, avoidance of victimization, social problem-solving) were an area of challenge and thus need for the students. Notable issues of trust, safety, and/or communication, were reported by all participants. Parents shared a particular concern regarding safety related to their young adult's demonstrated naiveté,

She appears normal in terms of she has no physical disabilities. She is very high functioning and very adaptive when it comes to her intellectual disability and she is an easy target for the wrong kind of person. (Participant 013, guardian),

or potential misunderstanding with law enforcement officers,

But given the degree of violent outbursts, I mean, there were times when he was violent, and he holds grudges, and he has a quick temper, and I fear for him. You know, I fear additionally, because he is African American and he has big long dreads, and he is twitchy because he is on the spectrum. He is twitchy. He is kind of a sensory mess. And anxiety presents as twitchy. So when I think about him in a situation where he looks

shifty and law enforcement might approach him, and then he gets nervous, and his language processing reduces, and his ability to understand the question and not answer it from a wise-ass or rote statement -- you know. (Participants 016 a & b, parents/guardians)

Understanding how to navigate relationships outside of the special education environment was shared by all instructors and parents, three administrators, and four students in the following ways:

[It is difficult]...not having my circle of friends around. (Participant 001-student)

...if I were to find something that gets in the way as a commonality that is related to disability, it is communication. It is the ability of students to take their experiences and shape them in a way that lets others understand where they are coming from. (Participant 026-instructor)

“...learning how to turn to new people, you know, non-related people, in your life to get the support that you need.” (Participant 024-occupational therapist)

[Triumph is] a good introduction to the real world...in terms of you are not going to be in the classroom with the same 20 special needs people every day. (Participant 013, guardian)

The most challenging for them, based on my experience, is to take a step forward to do something new. Very often, I see how they want to go somewhere, but they just need somebody who will ask them what they want or will tell them ‘Let’s go together’. They need someone who can help them to start to do that. I had students who were starting to attend some clubs with me, and later on, they were attending them by themselves.

(Participant 038-peer navigator/instructor)

Navigating the hidden curriculum. Included within the concept of adaptive behavior skills was the notion of navigating the hidden curriculum. Defined by *About Education* (2016) as “a concept that describes the often unarticulated and unacknowledged things that students are taught in school” the hidden curriculum of PSE is often unexplored by students with IDD. A majority of participants (n=26 [84%]) shared that student understanding of the hidden curriculum of PSE was a critical personal characteristic for successful outcome. This was reported by parents, instructors, administrators, and occupational therapists exemplified as follows:

Well, provided the student has bought into they want to be here, and provided that they are motivated, I think what we have provided is what we figure that they need. On the one hand, they need someone to kind of walk with them to help them navigate and learn an entirely new system. Many of them -- many of the students -- I will say majority of the students who -- well, they are all coming -- whether they are dually enrolled or not, they are all coming from K-12, because there is a younger population. Many of them were not engaged at all in being high school students or K-12 students. They didn't necessarily learn the system there. The system was just delivered to them, and they didn't have to do much navigation. I mean, everything came to them. (Participant 032-administrator)

Navigation included maneuvering around the physical campus,

“Just trying to get to your classes on the first day and looking for those rooms” [was difficult]. (Participant 010-student)

“...being able to navigate all over campus... just knowing how to navigate between buildings there are in our area often weather issues as well and so for any students that use assistive devices for mobility you know being able to get to the point where you're comfortable getting in and out of buildings and knowing where to go, knowing where

restrooms are all those components that can oftentimes be more of a challenge if you have special needs.” (Participant 024-occupational therapist)

the social aspects of being part of the campus community,

“...they feel overwhelmed and they don’t want to go to campus experiences or take classes outside of the Triumph program” (Participant 025-instructor)

[Fostering experiences outside of Triumph] “we are getting a lot better at supporting the students taking classes and pursuing education that leads to skills outside of the Triumph program.” (Participant 026-instructor)

“... I call this place “Bird Squad” [team mascot] and at first it was kind of, ‘Where do I go for..’ since this was my first year, who do I communicate with? So I have to do my bubble, how to fill in with the people I got comfortable with towards the people I didn’t have comfort with.” (Participant 009-student)

and understanding the support systems of PSE,

“Knowledge about the resources around campus. There is a lot of places that they can get help, depending on what they need...tutoring center, writing center, math center all in one location.” (Participant 027-instructor)

Personal characteristics that promote successful outcomes. A majority of participants (n=25 [81%])--six students, three administrators, four parents/guardians, seven instructors, and all OTs) shared that students demonstrating the personal characteristics of self-advocacy, initiative and motivation to succeed in college,

“I think the number one factor for success is their motivation and determination on their own....they want to be here and they know that they want to be here, and they are aware

that it is going to take some work. So I think the students that are the most successful at Triumph are the ones that decided that they want to go here themselves..." (Participant 033-administrator)

"Well, I had to fight to get in here because...I was doing some community service hours so I had to hold back some of my hours to get in to SVC." (Participant 006-student)

as well, the characteristics of empathy and respect,

"Safe space...it's the only way people can learn is within a safe space.... We talk about respect. Respect is like the golden rule in our classroom....I respect you, you respect me, and we respect each other." (Participant 039-instructor)

and finally self-awareness, were more successful in attaining their goals.

For some students, initiative was an on-going and historical challenge for their personal learning, "...she just kinda waited for people to tell her what she needed and...where to go or what to do..." (Participant 014-parent), which was also reflected in the classroom observations,

"2:25 pm. A male student enters the room, drops his backpack to the floor, then adjusts a nearby chair at the front of the room next to the instructor's desk and sits down. It appears as though he is waiting for the instructor but he says nothing. He also looks upset or mad.... [The instructor] comes to the front of the room to talk with the student. He is upset and trying to explain to the instructor that he just found out he is not registered for courses and is now considered dropped from the program as of 10-21-15. The instructor talks with the student to help him figure out what happened and how to get him re-enrolled." (Excerpt from classroom observation of participant 028)

Known for being a naturally accommodating campus, instructors considered how to effectively foster self-initiation including problem-solving and help-seeking behaviors,

And I have kind of changed how I help students think about not just -- not just giving them options, but having them think about how they have been successful in some of their other classes, and what they -- and how they came to completing a project and what they could do better. So helping them reflect and helping the student kind of come to a solution rather than me saying do this. And I would never say, "Do this." I might say, "Why don't you try this?" Or, "Would you like to try this?" Or why don't you think about or I can model this and if you would like to try this next time, let me know. So kind of planting the seed sometimes. (Participant 028-instructor)

Disability awareness and disclosure. A related concern focused on disability awareness and disclosure and the impact each had on whether or not the student was able to receive the needed supports and accommodations. The challenges associated with the stigma of disability were revealed in the following ways:

I find that the students when they come to me really don't know what their disability is, and I am very open about their disability. And I want them to know what their disability is. So I try to bring that into the classroom as much as possible. (Participant 029-transition specialist)

I think, honestly --there could be a lot of disabled people that disagree with me on this, but I think we just need to be way more open about the diagnoses. We need to be open about -- you know, if we keep it secret from the student, then the student would feel like I have to keep everything a secret, I can't ever talk about my disability because that's a secretive thing. But for me -- finally talking about my disability and finally getting to know about it and studying it, and honestly building a relationship with that part of my identity actually healed me in a lot of ways, and it actually made me able to be a self-

advocate because I couldn't advocate for myself when I didn't know why I was getting sensory issues. I didn't know I was autistic. I couldn't tell anyone why I was having issues I was, because I thought I was just whining. You know, everybody was saying, you are just whining. And I would feel like I don't know what to do. And I felt like I was just a lazy piece of crud, and that -- and when I found out about my diagnosis and people started talking to me about my diagnosis and I started having open conversations about it, and I learned more about it -- that's when I started to feel self confidence, that is when I started to feel self worth, and stand up for myself. Because I thought, no, as a disabled person, I have rights. And you shouldn't get to trample on my rights, because being disabled is not a bad thing. And I started valuing that, and started valuing myself. And I am sad when my students say to me they don't want to talk about their disability, they don't want to be disabled -- like I am -- that saddens me because society taught that, because society is what taught that being disabled is bad. And I wish that we could take a society that we could be open about it, and have it be part of our identity and have it be something that could be looked at as a good thing, as a positive, and be honest about it so that people can feel open and safe to disclose. Because I think a lot of it is they don't feel safe. And if we can make a world that we try to end the stigma and the negativity that so much surrounds disability, and we start saying more positive things about it, and talk about the unique aspects of all the different types of disabilities and helping people understand why a person may need supports in a way that is, hey, this is just an every day thing, some people need more supports than others. (Participant 037-instructor)

Acknowledging or labeling disability was met with uncertainty as noted by one Triumph administrator:

I don't think we should be so hung up on disability as a bad thing. Hiding it from people. We have had parents say, 'My daughter doesn't know she has a disability, so could you not talk about that?' Why? Is it a dirty word? I think people are ashamed. So I don't think necessarily the way it is done is the best way. I think people should own all the things about themselves -- their strengths and limitations. I see that students outside of Triumph -- because in disability services, you know, generally I think there are people who maybe are older who have never been diagnosed, but have always struggled in learning. And I have seen them go and get the testing done as adults, or as older adults, and be so empowered by that information, 'Yeah, I have always thought something was wrong -- learning was hard. And this says this about me, but it also says this.' So I think owning that is important. I think it is part of the picture. I don't think I necessarily need to know someone's label to make a decision about how -- if they are going to be successful in college though. I think yes and no. (Participant 032-administrator)

Though all Triumph students take a course on communication and self-advocacy, only a few students were comfortable about disability disclosure,

"It's important so I can get more help like extra time for tests, and get like double time to take for tests and I can do all the work and I have to work hard to put effort into it and put my heart into it so I can do what I'm doing right now." (Participant 006-student)

Other students chose not to disclose, "I just don't feel comfortable talking about it to anyone.... cuz I don't like telling anybody that and what does it mean anyway?" (Participant 005-student) or denied disability altogether, "Wait. What, what's that?...I don't have a disability at all because this is, I told you, something happened to my brain. That's it!" (Participant 008-student)

And I think about one of our students (008) this year who didn't know he had a disability and is really upset about this part of it, and only saw the negative pieces of it, but has significant things going on around him to support his behavior... (Participant 033-administrator)

Finding 2. A majority of participants reported that the faculty and staff of Triumph and SVC supported the students at his/her level of need. For young adults with IDD who attend PSE, understanding how their needs were supported to foster program completion was important to all participants. As noted previously, most participants shared that possessing self-awareness regarding needs and support was an important personal characteristic for the student with IDD. This may include disability awareness and how to seek the necessary help and supports, and understanding how to establish supportive relationships throughout life. As discussed in an earlier finding, for many of the participants, the process for developing strong personal characteristics began with a motivated student, then continued with the encouragement of a parent or guardian. Within the PSE context, it was also the influence of an open and accepting campus community and instructors who were accommodating and supportive that fostered personal growth.

Open and accepting campus community. Some participants (n=13[42%]) reported on the importance of the open and accepting campus community to promote inclusion and belonging. Inclusion was demonstrated throughout the campus from the top administrators to the SVC students. As shared by one administrator,

“...our population -- everyone is struggling in a different level of transition. We are high poverty, high basic skills. So people are all here on a day-to-day -- there are more people here on a day-to-day survival and everyone is more diverse...and I think that because of

who the campus is and who our students are, we can get there in a more organic way than maybe some other places.”(Participant 033-administrator)

Knowing that the top administration supported Triumph and believed that students with IDD belonged within the PSE setting was critical as noted by another administrator,

“And so we have the head up here, you know, who -- he is making it happen just from his total -- disability is part of diversity in our campus. It is diversity. So yes, that's what is making it happen is the total acceptance from the upper administration...” (Participant 035-administrator)

Even the SVC mission, values, and strategic plan reflected the importance of having an open and accepting campus,

“...very early on we -- one of our strategic initiatives was very much around diversity and looking at that as a values driven enterprise -- the relationship to social justice and serving and community and what access meant in an increasingly diverse community. And for us, one of the things when I got here that was very unusual for a community college... is we had this program that worked with adults with intellectual disabilities. ... And it was very focused on trying to help people be autonomous and have employment and was, in a sense, part of our diversity. And it was a really good program. So it was kind of an example of connecting the values to being mission driven, to something that was about community, and yet it was about supporting individual students and their success in a particular context.” (Participant 034-administrator)

Finally, it was the students who felt a sense of belonging,

“It was the right one for me...I could picture myself here.” (Participant 001-student)

“I’m no different than anybody else in this school...” (Participant 002-student)

Learning about one's self as a college student. A majority of participants (n=28[90.3%]) shared that students require a moderate amount of support to participate in and complete program requirements. The following areas were most frequently reported as requiring support: identifying needs, orientation to college and college-level expectations, scheduling, organization skills, communication including written and verbal, understanding assignment directives and process required to complete assignments, reading, writing, asking for help and understanding when to ask and where to go for help, time management, requesting accommodations, transportation, navigating social relationships, problem-solving, and participating in campus activities and events. All advisors meet with their respective students weekly to review schedules and assignments, and create a weekly plan. A majority (n=9 [90%]) of students shared that these meetings were of value to them. This was a time that faculty used for supportive learning for problem-solving as well as monitoring academic progress. As noted by one instructor,

“...all of a sudden you are looking through the course with them and they are missing a bunch of assignments...so kind of starting the conversation, well, you don't know how to do it. What should you do? Who should you ask? Who is in your circle of support that you can talk to about that? And then a lot of times when they are in that situation, it is going through syllabus with them and looking for instructor's office hours, and then going to them with the student and kind of setting up regular office hours meetings so they can touch base back and forth.” (Participant 036-instructor)

Support also came in the form of knowing that an instructor or faculty member was going to be present for the student and non-judgmental regarding student requests for help. The student participants overwhelmingly shared positive regard for the faculty and staff of both Triumph and

SVC: "...they were like right behind my back 100% of the way...went out of their way for me." (Participant 002-student); "My adviser. She led me down the good path in Triumph...all those wonderful staff and faculty that helps me when I needed them." (Participant 009-student), and "Just having all the support I need. A lot of help with homework if I need it and if I need to talk to someone I can go and talk to them." (Participant 010-student). Instructors also shared the importance of remaining non-judgmental during student interactions,

And I think that's something that I think my Triumph students really relate to me. It is like, oh she sees me. She really sees me. No judgment. Just I see you. I am going to push you, you know? But push you in a place that is for your own personal growth, not something to push you to feel like, oh my goodness, I don't feel safe here. (Participant 039-instructor)

This instructor also shared a unique method of visual and auditory support that was welcomed by her students,

...when we are doing speeches in the classroom, I use a form of support from poetry, like slam poetry, where we kind of rub our hands together if someone is having a time struggling within their speech and you are kind of sending those good energy vibes, you know, to say, hey, we are here. We are here. We have been here with you from the beginning. And you hear us rubbing our hands, and we know that, hey, keep going, keep pushing, you are almost there. That moment is almost up, so that's really cool.

(Participant 039-instructor)

which was inclusive of all students not just Triumph students. Yet, it is also equally important to understand how much support to provide and when to permit the student to identify his or her

needs. As shared by one administrator, permitting students to make mistakes is also part of the learning process,

I think a lot of us have to catch ourselves, because we too -- you know, you want so bad or you see it so clearly the student could be -- if they would just do this, you know? But I have done that before and I have seen the student never really fully embrace it like it is theirs. (Participant 032-administrator)

It takes a village. A majority of participants (n=29 [94%]) reported that the faculty and staff of Triumph and SVC supported the students at his/her level of need. Support was provided by 100% of instructors and peer navigators. All instructors stated that they were naturally accommodating through the process of creating assignments and grading rubrics dependent upon student skills and abilities, and anticipating and supporting student needs. Participants reflected this individual support,

And thinking about what it is that -- thinking about supporting individual students -- what do we need to do in our individual roles to help students identify what their goals are, reach their goals, develop the strategies and tools they need to do to get where they are going. (Participant 033-administrator)

...my initial feeling, being a first generation college student myself, like I just thought, wow, somebody sees them...and I felt like being a first generation college student, I can relate—that empathy of just someone seeing me. Not making me feel like I am a token, or making me feel as if I need to meet somebody's status quo...that's really cool that they are seen, and they have support here...Affirmations are powerful. I use that a lot. I use an affirmation I have been using since I served in AmeriCorps...the affirmation is in Spanish. It is 'creo en tu mente' and it means, 'I believe in your mind'. And so I start

that off in the beginning of the classroom...so I think that has been powerful for students. Because I think at the end of the day being able to give people affirmations and to say that I see you is very powerful. Then they have more courage to say I can do math, or I can do this speech, or I can do whatever it may be. So I think that helps a lot with affirmations. And also the power of witnessing. (Participant 039-instructor)

as well as the importance of being a support to one another within the classroom setting,

...build community in the classroom, is that people own each other's learning. And everybody has something to teach other people. And for them to be an additive part of the learning environment at the college is the best of what we are, you know? That is the ideal. You know, people talk about diversity in lots of ways, but the reason diversity is so important is because it is fundamentally part of the excellence in education. It is the mixture of ideas and experiences, and perspectives that is the richest part of education. And having students from Triumph be an integrated element of what we are as a campus is just one aspect of that, that helps the whole educational environment. It is not -- the irony is that it is not just that it advances their own student success, it advances other student success. (Participant 034-administrator)

Support also came in the form of campus wide services and events,

First Friday Leadership would probably be toward the top. So that is a leadership institute held by CLS, which is Campus Leadership Services or something like that. But what they do there is the first Friday of every month they hold a two, sometimes three, hour institute where there is a variety of things going on. But the whole idea is you are building your leadership capabilities. You are learning to meet other people. ... But the incentive for students to go is if you attend enough of them, which I believe is 5 or 6, you get a

certificate saying that you completed this leadership training... I think from most student's perspective through trying to get this leadership certificate, you know, something you can put on you resume that you can see as useful and tangible you end up meeting a lot of people on campus, you get connected, you figure out what's going on, on campus. You realize, hey, there is these other clubs. Oh, these are new friends that I have met, they want me to do this on campus. So it really opens doors for students. It gives them a chance to really start to be part of the campus community. (Participant 036-instructor)

and the use of peer navigators,

I help Triumph students to navigate in the college system. I explain them how to find campus support services. Also, I support and involve students in different campus activities such as movies, clubs, events, where they can express themselves.... I supported a student who has difficulties to trust people. At the beginning, on all my questions or comments she answered 'f*** you!' That's it. It was very difficult for me to find a right way to make a good contact with her. We went together to the First Fridays Leadership Institute, Cooking Club, Chess Club, and other events. And one time when we were at the leadership retreat, she said that I am her best friend and she stopped use rude language when she was talking with me. She started to ask me to attend together one or another event. She was giving me ideas, not as it was before when I was trying to find something interesting for her. (Participant 038-peer navigator/instructor)

As noted by the transition specialist, "...I think it takes a village. So I think that the classroom teacher, of course, then the OT, the PT, the SLP..." (Participant 029-transition specialist). It was also the inclusion of the student in all decisions that helped to promote program completion.

Finding 3. Nearly all areas of occupation (see Appendix C) as identified in the *Framework* (AOTA, 2014) were represented as continued areas of need for the students with IDD. Specific areas of occupation noted by the participants included the following coded categories:

- **ADLs:** Included within this category were self-care and daily care routines, fine motor skills related to fasteners, writing, or keyboarding, hygiene, nutrition, and sexuality.
- **IADLs:** Included within this category were safety, communication, money and financial management, executive function skills, home care, meal preparation and clean up, transportation and community navigation, and technology.
- **Socialization:** Included within this category were conflict resolution, empathy, understanding feelings and emotions, social community or circle of support, relationships and sexuality, understanding rights, dealing with societal stigma, and navigating the social world outside of special education.
- **Other:** Included within this category were personal characteristics such as executive function skills, initiation, motivation, problem-solving, overcoming fears, disability awareness, understanding performance expectations, and awareness of needs.

Parents and guardians were most concerned about the persisting ADL and IADL needs that were not being specifically addressed by Triumph. Life skills continued to require focus as some students remained, “very dependent in daily care routines” (Participant 013-guardian). But confusion regarding under whose domain the noted needs should be addressed was prevalent: “There continues to be life skills that we work on at home. But in schools it was more like it needs to be kind of fit in with at school.” (Participant 015-parent) As well, the results from the VABS-II (Sparrow et al., 2005) reflected that the majority (n=7[70%]) of students continued to

rely on parents or guardians for home management, financial management, shopping, and meal preparation and cleanup.

Within the college setting, students required on-going support for organization, task management, communication management, time management, and social participation. Navigating the natural supports within the college setting often required the assistance of a peer navigator, educational aide, instructor, or advisor. Issues related to low student understanding of expectations of the K12 system versus those of the college systems were also reported as areas of concern by the majority of instructors and administrators. As shared in the previous finding, students came to the PSE setting requiring assistance with seeking help and supports because, “...they didn't necessarily learn the system there [in K12 system]. The system was just delivered to them, and they didn't have to do much navigation. I mean, everything came to them” (Participant 032-administrator). The instructors and administrators addressed more of the academic related skills of reading, writing, seeking help, and navigating the hidden curriculum. As well, occupational therapists serving Triumph students reported primary focus on the areas of social participation,

So the student I am currently working with -- I feel like his biggest barrier is really his ability to interact with others. His social skills are pretty impacted, and his overall awareness. He really is driven to go to college, because I think he kind of grew up in more of an affluent area where all of his friends went off to college and his parents have these high expectations of college, and so that's always been his dream. And so him going off to college -- he has a really difficult time being able to interact with his peer group and associate himself with a disability. So I think at least for him, particularly, his biggest barrier is his awareness and his social skills -- his ability to follow directions or work

with others. And those are huge skills at a job setting. (Participant 031-occupational therapist)

some executive function skills,

So I am really helping to shift to looking at vocational preparation with the kind of tasks they need following a multi-step schedule with the task providing visuals and showing the teacher how to provide the visuals -- whether it is just picture support, laminated picture support, or using iPads and assistive technology such as (pictello) and another app called *First-then*, to program in those steps -- you know, visual schedule planners, so students can have something mobile... (Participant 030-occupational therapist)

and written communication through the use of technology. As noted by another occupational therapist, focus was primarily on access to technology including,

...keyboarding and accuracy with keyboarding so that um emails and uh communication is you know professionally ready to send off to someone else. Um so being able to access the keypads accurately um and same with the phone. Being able to use phones and transmit emails um and access emails. (Participant 024-occupational therapist)

Thus, many of the identified areas of need fell within the areas of occupation of the *Framework* (AOTA, 2014) yet remained unaddressed.

Finding 4. In response to the research sub-question regarding the perceptions of young adults with IDD attending PSE and his/her parent/guardian regarding OT to prepare for PSE, nearly half (n=14[45%]) of all participants were unfamiliar with OT including seven students (two of whom were continuing to receive OT services on an IEP). Confusion about OT was pervasive as noted by student responses to the question regarding any experience with OT: “What’s that? Is it like a speech thing? I don’t know what occupation is.” (Participant 009-

student); “They worked on my private area...to do a check-up...” (Participant 004-student).

Even parents and instructors reported some confusion over the role of OT, “Now do you mean occupational therapy for preparing for a vocation or as in fine motor skills?” (Participant 014-parent)

I get a little bit confused, still, between OT and PT services in the schools. And some schools -- well, they are doing similar and different things in different schools. And sometimes it seems like the PT or the OT is doing the OT and the PT....it is very rare for a student to still be receiving OT services by the time that they come to us...(Participant 033-administrator)

Yet the majority of occupational therapists stated a clear understanding of their role in preparing students for success in PSE and the work place:

My role is to, number one of course um, to define and explore and evaluate the needs of the students at that level, and to help the team uh develop a program that will help the students to reach their highest level of independence uh educationally and preparation to be able to hold a position of uh work related position or just simply a position in the community that would allow them to access as many resources as they can to meet their necessary um, meet their needs. (Participant 023-occupational therapist)

...some of my work involves helping students access the curriculum. Um, having modifications made, perhaps, in their curriculum uh so that they are able to um participate...has to do with you know consulting with instructors and helping them to understand what is appropriate. You know where it's appropriate to modify an assignment um and to to provide the education and understanding that um students students that are in Triumph may process differently. Um it can be things like placement

in the classroom uh to help the student be more successful... (Participant 024-occupational therapist)

Perceptions of the value of OT varied from deep appreciation for the early intervention services provided:

One of the many people that we bow [to]-- and disciplines that we are so appreciative to... We have had wonderful OTs who have made a really big difference -- now that could make me cry too. Our OT really early on, [around age] 8 or 9 months... was just wonderful. She was great with 001 and great with me in helping me understand 001 and allowing me to not as much be a PT for 001, but just be 001's mom because I had this incredibly competent OT... (Participant 015-parent)

to frustration about the focus of service intervention:

Like when I was in occupational therapy in elementary school, the stuff they helped me with was handwriting and keeping my coloring in the lines, and that kind of stuff... Yeah. I remember this lady yelling at me every time I colored outside the line... and I was told that was occupational therapy, and I was like, oh. (Participant 037-instructor)

...school-based services exited him much earlier from both speech and OT because he spent a year learning to cut in a line and once he mastered cutting in a line he was dismissed from OT (Participants 016a&b)

A majority of participants (n=24 [77%]) shared that they were uncertain what role OT would provide for students within a PSE setting. Challenge in understanding the role of OT in PSE settings was reported by nearly all administrators and instructors:

And I think about one of our students (008) this year who didn't know he had a disability and is really upset about this part of it, and only saw the negative pieces of it, but has significant things going on around him to support his behavior -- has consults with his district on his IEP -- 15 minutes a month with speech and OT where he has never been at the IEP and we were just all going to talk about him for 15 minutes, and they have all these things we need to be doing and ways we need to be supporting him... (Participant 033-administrator)

In part, issues with OT related to the type of service provision and lack of open communication.

As noted by one instructor:

...we are all trying to figure out how do we serve students and how are we communicating with each other....The occupational therapist that I met with did say when the student is getting -- you know, I would like to be part of the conversation. So I think we -- I think looking back, we would like to include everybody who helped support a student, but conversations are not as formal, maybe, so that -- I kind of was thinking about that later, like what would that look like, and how often do they want to meet and how will that communication happen. It is not just an IEP or a check-in, and being that we are here on the college campus and we are not -- and the student is just -- you know, they can't just pop over and observe and see the student as frequently as maybe they would have had access to. (Participant 028-instructor and advisor)

Another instructor shared skepticism on the role of the consulting OT, "...how could they possibly know how to support students if they have never been in a classroom that supports the students they are working with?" (Participant 026-instructor). Whereas an administrator shared hope, "...I feel like of any of the therapies that the students qualify -- I feel like occupational

therapy would be the most important one, as students are transitioning from being a child into an adult world.” (Participant 032-administrator)

The occupational therapists reported on the challenges with the profession understanding the potential of OT for students in PSE and the type of service provision:

I don't think OTs have really focused on our role there. Like I said, I think for so long the focus was on early intervention and those younger kids -- I think the high school -- in fact, it is kind of a joke that in some districts it is like everyone -- you know, who wants to take these high schools -- not it. I mean, nobody wants to even work with high school kids....So I think people figure that's vocational counselors, that's teachers, that's somebody else's business, and we haven't really taken -- more of that responsibility. I don't think we have taken an active interest in really making that our territory. But the irony is that, you know, what's the most common misconception of what OTs do? We help people find jobs, right? But here is a real way we can take an occupation in its true sense and help these students with disabilities actualize being occupied in something meaningful for the rest of their lives. (Participant 030-occupational therapist)

Yet, as noted in the previous finding, students continue to demonstrate challenges in nearly all areas of occupation. As one parent reported, “There continues to be life skills that we work on at home.” (Participant 015-parent), or an instructor shared, “So, employment should be the measure and gaining the skills that can lead towards employment...” (Participant 026-instructor). As shared by the occupational therapists serving Triumph students, OT was on a consultative basis to provide “suggestions for the teachers, maybe, of also how to serve a variety of students with that self-advocacy piece. And also with just their ability to manage their schedules. They are learning vocational skills, how to interact with other people at the job setting...” (Participant

031-occupational therapist). The overall perception of OT serving young adults with IDD in PSE remained indeterminate.

Finding 5. All participants expressed a desire for the student to attain optimal independence, employment, relationships, and community acceptance. Hopes, dreams, and goals were a challenge for parents/guardians to vocalize with anxiety and fear, as well as concerns for safety expressed. They reflected upon their parenting role and launching their young adult into society, “So you hold your breath and hope you have laid a foundation and you have hooked him up with the right people out there” (Participants 016 a&b-guardians). This topic brought forth much emotion with several of the parents or guardians tearing up while sharing their hope for their young adult. Yet they also expressed hope for their young adult to attain a life like everyone else that includes community, employment, and loving relationships as poignantly shared by one parent:

<crying> I want very much for 001 to always have meaningful relationships in her life. I think I envision her as being a life long learner, so I like to imagine that she would feel comfortable to come take classes here or at other places ongoing in life. I want for her -- I hope for her meaningful work, because that matters a lot to her, like things with purpose and meaning -- I mean, that matters to her. I think she is going to, at some point -- it will be her choice to -- I want -- I guess I always want her to feel like she has community and that matters to her a lot. But I envision her -- I don't quite know what the living arrangement will be, but I envision her living with, you know, I don't know two other roommates or something. Like some set-up where she is together with other people that may not need to be her best friends. I would love it if it was a really primary relationship for her of some kind. I don't know if that will be the case. But it would be more than just

a roommate. It would be somebody that she cares about and cares about her, I think. I don't imagine her ever being alone-alone. I mean, that -- that actually probably feels like a big one is that she is part of community and being involved in that is fun and play, and joy, and learning, and meaningful work. And love, I hope, is in there too. (Participant 015-parent)

The students were hopeful, excited about the future, and trusted that they would receive good employment and the needed skills to pursue an independent life. Student participants expressed this hope in the following ways:

My hopes...are to go to Renton Tech. and hopefully use the skills that I have here towards Renton and um my goal is to to hopefully succeed in achieving a welding certificate or general science degree and then coming back maybe to SVC for my business and hopefully have a make a business of my own start off small and hopefully get big. (Participant 002-student)

“My hope is to have some friends, had a job, and also to learn more about myself and keep learning.” (Participant 001-student)

“...ever since I was a baby, I've always wanted to be a leader...I don't really know. It just hit me and that, just like that. I came to this world to be a leader. And I'm here now and I'm still a leader.” (Participant 006-student)

Hopes and goals. Get life long friends; leave with a job that pays; um, graduate <laughs> that should be my number one. Graduate, life-long friends, leave with a job that pays, and leave here with enough knowledge that can help me be successful in the real world.

Whether it be knowledge that I learned from classes or just knowledge in general. Like

leave here a different person, a better person hmm, not a worse person. (Participant 007-student)

To have them help me look for a job that I like, but also to help me realize that I can be independent without people around me... To me [being independent] means that if I need them [parents] I can ask for their help but I can live alone and then I can do what I try to do what I need. (Participant 010-student)

Reticence on the part of the instructors rang throughout noting the challenge with providing a strong, supportive community within the PSE setting, then wondering what happens to the young adults as they graduate and return to their own living communities.

My hopes and goals for them is that they could leave the class being able to self-advocate, and better to voice what they want in their lives. And I want them to feel more comfortable about who they are, and every aspect of who they are...because my dream for some of these students is they continue their college education, and they go on to get their bachelors some day. That is -- you know, I want that for IDD students. I want them to be able to have the same academic access as anyone else. And people that don't have -- I have heard so many arguments saying, oh, well, these people just don't understand academics. They will never understand academics. You can't force them to take academics. And I am just like these students are missing out on so much when you deny them academics. (Participant 037-instructor)

In summary, the data analysis provided an in-depth description of the bounded case of the Triumph program at SVC, demographics of the 32 participants, results from the student responses on the VABS-II (Sparrow et al., 2005), and five key findings from the semi-structured interviews, classroom observations, and document review. The primary finding included the

revelation that all participants indicated that adaptive behavior skills continued to be an area of need for the students with reading, writing, executive function skills, and some daily living skills the greatest areas of need. This was also reflected in the aggregate VABS-II (Sparrow et al., 2005) Adaptive Behavior Scale and in particular the aggregate Daily Living Skills Domain score. Non-student participants perceived that the noted areas of need may be related to the persisting low performance expectations within the K12 system with a potential over-reliance on para-educator support. As a result, PSE students continued to rely on advisors, instructors, educational aides, and peer navigators to assist with course work completion. As well, analysis revealed that nearly all areas of occupation as identified on the *Framework* (AOTA, 2014) were identified as persisting needs. Yet OT focus was primarily as a consultation in the areas of technology, sensory regulation, or fine motor skills. Most ADLs and IADLs were being addressed by parents/guardians. A final finding revealed hopes, dreams, and goals related to the young adult with IDD having a life similar to his or her non-disabled peers. A synthesis of these findings follows.

Interpretation

The purpose of this case study was to discern the needs of young adults with IDD attending PSE, how these needs were supported, and whether they fell under the purview of OT. Participants included four key SVC administrators and eight instructors, five school-based related service providers, ten Triumph students, and five parents/guardians of Triumph students. The amalgamation of data, including document review, participant demographic survey, 1:1 in-depth interviews, classroom observations, and VABS-II (Sparrow et al., 2005) for students only, were used to create codes, themes, and analytical categories regarding participant perception related to the research questions (see Appendix F for the coding schema). Four primary themes

and analytic categories emerged including: (1) Evolving strengths and persisting challenges; (2) It takes a village; (3) OT, what is that?; and (4) Life like everyone else. Understanding that there are multiple ways to make meaning of the collected data (Bloomberg & Volpe, 2016), the researcher offers the interpretation that follows as a means of data synthesis related to the research questions and relative to the available literature.

As suggested by Merriam (1998), Stake (1995), and Yin (2014) a brief vignette is provided as a means to set the tone of the interpretation story:

As a senior in high school, Salina Gomez¹³ joined her friends in the anxious lunchtime chatter about post graduation plans. Intermittent bursts of excited talk to share news about college acceptance broke through the uncertain pall. Getting accepted to college seemed important and Salina wanted to be with her friends during the transition to become an adult. Each day she would rush home from school and ask her mother if a letter from college came. But each day no letter came. Salina assured her friends that the letter was coming. She never saw the quizzical exchanges between her friends. She didn't understand the awkward smiles and pats on the shoulder they always gave as they left the lunchroom.

As the weeks toward graduation passed, Salina began to wonder why most of her friends had acceptance letters and she didn't. Maybe the college didn't have the right address—that happened sometimes. Or, maybe it was because she was the first person in her family to be born in the U.S.—she heard things on the news about people from Mexico trying to cross the border to get an education. It never occurred to Salina that she wouldn't go to college. So, when a high school peer teased that no college would let a retard in, Salina was stunned. She didn't know what he meant. Sometimes she didn't understand what the teachers wanted for the assignments. But, with the help of the para-educator, she always turned something in and got a good grade.

¹³ Pseudonym and fictional representation only.

Thinking that maybe the counselor forgot to contact the college, or that she was mad at Salina for forgetting to attend the last couple of appointments, Salina scheduled an appointment to clear things up. With her new iphone and the help of her para-educator to schedule the appointment on the calendar, Salina was certain to make the session.

Arriving a few minutes early like the para-educator suggested, Salina noticed that both her mother and a favorite teacher were already waiting with the counselor. She was excited. Maybe this was a surprise to tell her about the college acceptance. Rushing into the office, Salina chose a chair next to her mother then grasped her hands. No one was smiling. As the counselor made her way around the desk to squat in front of Salina, she felt her mother's grip tighten. The counselor looked up at Salina then shared that she wasn't going to college after all. The counselor said something about an intellectual disability and that colleges did not accept students like her. Instead, there was a program that she could go to that would help her learn things to get a job and maybe even live with some friends in an apartment. The counselor handed Salina a tissue---her face was wet and she couldn't see clearly--- she didn't know she was crying. All she thought was that her dream of college was gone. What did intellectual disability mean anyways? Why did it keep her from college? The questions kept coming inside her head only to be interrupted by her mother's voice asking the teacher if there were any other opportunities. Smiling, the teacher talked about a new program she had just heard about that was at a local community college. She suggested that they go together to an information session and see if the program fit Salina's needs. Though it wasn't the college her friends were getting letters from, Salina felt a sense of hope. Possibly this was the program that would let her go to college just like her friends.

Evolving Strengths and Persisting Challenges

Triumph students entered the program with a wide array of skills, abilities, and needs. A concern emerged regarding the socialization of adult independence occurring too late for young adults with IDD. This concern was also shared in a commentary by Laverdure and Rose (2012) suggesting that the process for adult transition should start in Kindergarten. Specifically responding to the primary research question regarding student needs, the data revealed a number of key factors including persisting challenges with adaptive behavior skills, understanding how to navigate the hidden curriculum of higher education, crucial personal characteristics, and disability awareness.

Persisting challenges with adaptive behavior skills. As a whole, the participants perceived persisting challenges in student adaptive behavior skills. Using the AAIDD (American Association on Intellectual and Developmental Disabilities [AAIDD], 2010) definition of adaptive behavior skills, conceptual skills (inclusive of VABS-II [Sparrow et al., 2005] Communication Domain) were noted as the greatest area of need, with practical skills (inclusive of VABS-II [Sparrow et al., 2005] Daily Living Domain) and social skills (inclusive of the VABS-II (Sparrow et al., 2005) Socialization Domain) closely following. The conceptual skills of reading, writing, and executive function were noted to be the most impacting regarding student performance as reflected by one of the student participants, “I have a hard time with reading, writing, hearing, math, and my speaking” (Participant 001-student). This often necessitated a moderate level of 1:1 support for writing, reading, understanding syllabi and assignment directives, and executive function tasks. As well, navigating the social world outside of the special education program was perceived as a challenge. This was particularly noted for students taking courses outside of the Triumph program where understanding how to work

through conflict resolution was a concern. As shared by one guardian: “Like the issue that is happening in her volleyball class right now. She is getting bullied, basically. She is the only special ed kid there. She wants to quit, and I am like no, this is a really good analogy for the rest of your life” (Participant 013-guardian). Supporting the findings of Cheak-Zamora, Teti, and First (2015), perceived challenges regarding practical skills of daily personal (such as toileting) and home care routines may greatly impact the young adults’ employment persistence. Many of the students remained dependent on his or her parent or guardian to support daily routines. These areas of challenge were not a focus of the Triumph program. Whereas perceived strengths of coping, transportation and technology were a program and OT focus for most students.

Participants reflected upon the potential barriers to adaptive skill acquisition acquired through the K12 system. A combination of low performance expectations, over reliance on adult support (teachers or para-educators), a marked reduction in OT service provision, and limited variety in classroom student population may have fostered a sense of dependency on other adults that persisted into PSE (Garrison-Wade, 2012; Wei et al., 2014). Results supported those obtained from the study by Garrison-Wade (2012), in which acquisition of skills for time management, task organization, and comprehension of assignment directives were inconsistently attained. As a result, students had limited opportunities to independently problem-solve a challenging situation including understanding when and how to request help or a letter of accommodation. This inadvertently led to the issue of being underprepared for navigating the adult-based higher education and employment systems. Thus, the current study reinforced the work of numerous authors over the past decade who commented on the persisting challenges in adaptive behavior skills of young adults with IDD that negatively affected performance

outcomes (Cheak-Zamora et al., 2015; Gangl et al., 2011; Garrison-Wade, 2012; Grigal et al., 2012; Kardos & White, 2006; Taylor & Seltzer, 2011).

Navigating the hidden curriculum. Connected to the limited opportunities in the K12 system for active learning of many adaptive behavior skills was the challenge with understanding how to independently navigate a system. Within the constricted social world of the K12 system, learning how to interact with unfamiliar peers and adults, or maneuver through new classroom environments appeared to be a limitation. As well, accommodations in the K12 system were a mandate of laws and policies. Thus learning how to process through a conflict whether academic, social, or physical would have been of minimal concern: “They didn’t necessarily learn the system there. The system was just delivered to them, and they didn’t have to do much navigation” (Participant 033-administrator). As a result, students learned to wait to be directed for any next steps, “...she just kinda waited for people to tell her what she needed and ...where to go or what to do...” (Participant 014-parent). This process disempowered the young adult’s ability to not only learn how to effectively navigate the confined system of the high school, but also how to broaden that skill to the greater community and thus the context of PSE. This resulted in the young adult student with IDD relying on the advisors, instructors, educational aides, and peer navigators to learn to maneuver through the PSE setting.

A major asset of the Triumph program was the use of peer navigators to provide the social exemplars for maneuvering through the college campus systems including social integration. This reflected the outcomes from the qualitative study conducted by Cheak-Zamora et al., (2015), whose participants shared in the importance of having a social mentor to help a young adult appropriately navigate the adult social world. Similar to the outcomes from the study by Asher and Frank (2013), peer navigators developed trusted relationships with Triumph

students that assuaged any fears and, in turn, promoted development of the skillset to safely explore the campus community. Some Triumph students emerged with such strong personal characteristics that they were hired as peer navigators for the in-coming cohort: "...I got chosen because I set good examples like I know where everything-I'm connected with the Hip-Hop Club; and I set good resources like if you have any questions about Triumph and where things are at on campus I can lead you straight to the person so-and-so..." (Participant 009-student). Strong personal characteristics also set the student up for successful internship and employment opportunities.

Crucial personal characteristics. As noted in the literature, the associated personal characteristics of self-determination including: self-advocacy, self-awareness, motivation, and initiation, were important for optimal PSE outcome (Crabtree & Sherwin, 2011; Grigal et al., 2012; Thoma & Getzel, 2005; Webb et al., 2008; Wehmeyer & Abery, 2013). Self-advocacy alone played a powerful role for many of the Triumph students. The sense of being valued, respected, and heard was clearly demonstrated by one young woman:

Well, I have two things that actually did really impact me the most was speaking at the U.N. in New York City. That was my biggest impact on myself because I never done that before so it was my first time going to the U.N. and I can't believe I was speaking to the audience and also it was live stream like it was streaming live, like it was amazing. I felt good about myself. It felt amazing! And my other thing was going to the White House as well. (Participant 006-student)

Beyond the consistently acknowledged characteristics often associated with self-determination (Wehmeyer & Abery, 2013) was the need to have a strong knowledge of basic skills. As poignantly shared by one instructor who was educated through the public special

education system, limited academic exposure may necessitate students requiring support for foundational skills in PSE settings:

I want them to be able to have the same academic access as anyone else. And people that don't have -- I have heard so many arguments saying, oh, well, these people just don't understand academics. They will never understand academics. You can't force them to take academics. And I am just like these students are missing out on so much when you deny them academics. (Participant 037-instructor)

Equally important was the need for self-regulation. Managing behaviors, sensory needs, and physical needs were critical for both academic and employment success (Champagne, 2014; Orentlicher, 2015). Within Triumph, instructors utilized naturally occurring events (class disruptions) as a means to discuss and explore appropriate behaviors or responses. Yet behavior is relative to context. As one instructor shared, "...all of us have funky behaviors sometimes we have learned to channel it into a context that is valued by people around us or we are not still in that context" (Participant 026-instructor).

Disability awareness. Inconsistency in disability awareness and disclosure were major factors in student ability to identify need for essential accommodations and supports. Often inadvertently created by long-term concealing of disability on the part of many stakeholders, students lacked an understanding of performance skills and abilities. As shared by Crabtree and Sherwin (2011),

"the unsubstantiated perception of professionals that students with disabilities are incapable of making their own decisions propagates a lack of opportunities for students to practice self-determined behaviors. This cycle leads to learned helplessness, decreased

motivation, and poor decision-making and, overtime, sabotages any opportunity for self-determined behaviors at home or in the community” (p. 274).

Though some students expressed the importance of self-disclosing to attain the needed help, other students expressed the need for privacy regarding disability. The impact of stigma associated with disability may have been a factor in reticence to reveal (Cheak-Zamora et al., 2015; Getzel & Thoma, 2008; Monteleone & Forrester-Jones, 2016; Oslund, 2014). The experiences within the K12 public school system may not have provided opportunity for the student to practice identifying needs and requesting supports and accommodations (Crabtree & Sherwin, 2011). Students may actually be entering PSE unaware of specific supports and accommodations provided within the K12 system. Supportive staff may have anticipated student needs as a means to promote positive interactions and program success. Thus a consequential factor of student uncertainty regarding what accommodations or supports to request within the higher education setting occurred through the means of just wanting to help.

To counter the societal view that disability should be a “secretive thing” (Participant 032-administrator), disability advocates promoted the importance of owning and disclosing one’s disability (Oslund, 2014). However this remains a challenge for young adults with IDD in PSE as many were reluctant to identify with or discuss disability. Monteleone and Forrester-Jones (2016) noted the challenge with self-image and identification with disability,

Without a clear comprehension of disability and associated terms and diagnoses, one is forced to develop one’s own notions of disability based on tangible manifestations, external pressure from others and pejorative self-degradation. (p. 11)

The authors further contend that promoting awareness of disability and understanding of vocabulary related to intellectual disability may help the individual facilitate a process for improved self-acceptance and participation.

It Takes A Village

In response to the first of the secondary research questions regarding how student needs are supported in PSE to promote participation and program completion, the resounding voice was “it takes a village” (Participant 029-transition specialist). The village was inclusive of: the student attaining personal characteristics to persist in life, parent or guardian support within the home environment, an open and accepting campus community, and instructors who believe intelligence is a growth mindset.

It begins at home. Students overwhelmingly responded to the importance of a parent or guardian who assisted them within the home environment. Whether for skill acquisition with daily care routines, home management, or transportation, or for discernment regarding major decisions such as attending Triumph, students reflected upon the importance of parental support. Reflective of Cheak-Zamora et al. (2015), it was through parental or guardian example that many students learned key personal characteristics including motivation, self-awareness, relationship development, and many adaptive behavior skills. Yet, as also noted by Cheak-Zamora et al. (2015), it was also within the home environment that some students continued to demonstrate over reliance on other adult support for daily routines. Parents and guardians reported on the importance of seeking outside help (occupational therapy, speech therapy, physical therapy, and psycho-social services) to develop key skills including bus training, employment readiness skills, and home management. It was through the strong support provided by the parents/guardians that students felt encouraged, not only to pursue PSE, but that they were deserving of competitive-

wage employment in a preferred job. In all, motivation of the student to attend PSE was key along with a strong scaffold of support within the home.

An open and accepting campus community. Not only was support within the home environment critical, but also the presence of an open and accepting campus community. Brown and Broido (2015) discussed the importance of establishing a welcoming and supportive campus from upper level administration to supportive campus policies and procedures. Thus the historical impact of SVC administration that focused on diversity as inclusive of all and the construction of a values-driven strategic plan, created an inviting context for the Triumph program. Campus events, activities, and courses were open to all eligible students. Students expressed this inclusiveness through feelings: belonging, included, fit, just right, as did some of the parents,

We had a wonderful first meeting interview with them and I remember we walked out of the office and shut the door, and 001 just looked at me and she just had this expression on her face, and she just said, ‘Wow! I think it’s a just right fit.’...it was really wonderful to see how excited she was. Like I was thinking all of that—like ‘Oh my god. This is the place we need to go.’ But the fact that this came from within her was really cool.

(Participant 015-parent)

This parent also reflected the importance of personal choice as a key motivating factor for PSE success. Choice, self-determination, self-advocacy, responsibility---characteristics encouraged by the Triumph program faculty to reflect the open and accepting SVC campus community.

Creo en tu mente. As eloquently shared by one instructor, “affirmations are powerful” (Participant 039-instructor). Students were supported on many levels from: using the principles

of universal instructional design¹⁴ (UID, Center for Universal Design, 2008) for course design, transportation training through the local public bus system; neurotypical peers sharing in Unified Sports programs; naturally accommodating instructors and advisors; to the open and accepting campus community sharing in the college experience. Students shared in that sense of belonging stating, “I’m not no different than anybody else in this school...” (Participant 002-student) or “I could picture myself here” (Participant 001-student). For some of the Triumph students, this was the first time they were seen as belonging in the world of academia. Being seen as belonging was an important point for one instructor in particular:

...my initial feeling being a first generation college student myself, like I just thought, wow, somebody sees them...and I felt like being a first generation college student, I can relate—that empathy of just someone seeing me. Not making me feel like I am a token, or making me feel as if I need to meet somebody’s status quo...that’s really cool that they are seen, and they have support here. (Participant 039-instructor)

As a whole, the campus community believed in the minds of the Triumph students and their right to receive a post-secondary education. Having the affirmation of belonging was important for student growth as shared by an instructor,

...at the end of the day, being able to give people affirmations and to say that I see you is very powerful. Then they have more courage to say I can do math, or I can do this speech, or I can do whatever it may be. So I think that helps a lot with affirmations. (Participant 039-instructor)

¹⁴ Universal Instructional Design (UID) is inclusive of three principles: multiple means of representation of information; multiple means of expression of knowledge; and multiple means of engagement in the learning process. Reference: Brown and Broido, 2015.

Inclusion came with many supports to foster program participation and completion. Being a highly diverse campus community--whether racial, ethnic, religious, sexual or gender orientation, ability, or visiting visa status—contributed to the presence of natural accommodations for all students. Students other than those from the Triumph program also needed support from the writing center, math center, reading center, library, and technology help desk. The fact that Triumph staffed an educational aide at the academic support center eased the anxiety associated with seeking out help and support. As also noted by Oertle and Bragg (2014), having a known person within a support system who understood the students' reticence to speak with unfamiliar adults was a boon.

Reflective of suggestions from Brown and Broido (2015) a respectful safe space for learning and instruction was available to students as needed. Though Triumph also provided a safe space for learning within its own academic program, students were encouraged to utilize the campus-wide support systems whenever possible. If necessary, instructors, advisors, educational aides, or peer navigators would go with the student to support him or her through the process of seeking and receiving help. This was a critical aspect of the program since, as discussed in a previous section, experiences within the K12 system often promoted mandated accommodations that set the student up for success even without the involvement of the student in the process. As an adult, the student needed to learn to independently request accommodations, modifications, and supports (Oertle & Bragg, 2014). So having accessible support centers and nourishing staff to foster experiences that led toward more independent help-seeking behaviors was paramount for student learning.

Yet, a concern arose regarding whether students understood their own needs when they were frequently provided with mandated accommodations and supports. To prevent Triumph

from becoming a continuation of the system experienced within K12, many instructors and advisors began to consider how they provided supports for the student:

I think a lot of us have to catch ourselves, because we too—you know, you want so bad or you see it so clearly the student could be—if they would just do this, you know? But I have done that before and I have seen the student never really fully embrace it like it is theirs. (Participant 032-administrator)

It was taking the time to foster the student's independence in recognizing a need to seek help that fostered growth in understanding personal skills, abilities, and needs. The question remains as to why this awareness did not occur earlier in the students' academic and/or life history. Thus, rather than understanding personal needs and required supports and accommodations as a student enters PSE (Garrison-Wade & Lehmann, 2009), the student often required learning about his or her own needs through participation in Triumph program courses, internships, or activities.

OT. What is that?

In response to the secondary sub-questions regarding how student needs fell within the purview of OT and the perception of OT, the analytical content from findings two and three were combined. The consideration of OT serving young adult students with IDD attending PSE was novel with a paucity of literature reporting on the subject (Pereira, 2012). As a result, much uncertainty was apparent when discussing a potential role for the profession within the PSE setting. In part, this may stem from the prevalence to discharge from OT in primary school or early secondary school as expressed by participants from both the parent/guardian group and the occupational therapist/transition specialist group,

...we joked about having therapists that were really good at discharging kids and the rest that would hang onto everybody. And I think there was just kind of a mentality of, you

know, early intervention. You make the changes, and then the kids kind of plateau -- so it comes from that medical model of, you know, the skill might not improve any...

(Participant 030-occupational therapist)

This focus on the medical model was also reflected within the literature (Laverdure & Rose 2012). Thus participants questioned whether OT would be an appropriate intervention service for young adults with IDD in PSE when the reported history was that OT was no longer a viable related service during secondary schooling.

Of fervent interest was the unfamiliarity with OT across nearly all participants. Students were often unaware of ever having received OT services including those who received it while in Triumph. As well, instructors and advisors were also uncertain if OT was included on the student's IEP. This supports the outcome noted by Rens and Joosten (2014) regarding lack of familiarity of the role and benefit of OT amongst educators in particular. Parents, instructors, and administrators expressed confusion over physical therapy versus occupational therapy,

I get a little bit confused, still, between OT and PT services in the schools. And some schools -- well, they are doing similar and different things in different schools. And sometimes it seems like the PT or the OT is doing the OT and the PT. (Participant 033-administrator)

and understanding the role of OT within a PSE setting:

But I think that I would like to learn more about how I could support -- how services could support students. But also looking at those students that we do have that have physical needs -- like figuring out -- I think that there is probably a role and something more that could be done to help better prepare students for getting here, or think about

what they need. What do you need once you are transitioning out of that environment, and how do you do it? (Participant 033-administrator)

This was especially pertinent considering that persisting adaptive behavior needs of the students fell across the areas of occupation in the *Framework* (AOTA, 2014).

Thus, it became apparent that advocacy of the profession across contexts was critical (Rens & Joosten, 2014). As noted by one occupational therapist,

I think there's still a long ways to go in terms of educating people um about our role and what we're able to do and so I think um as an OT I have um a responsibility for that and I think part of the education educational piece that OTs can deliver has to do with um collaborating with the staff um in programs like Triumph. So the more they know about what we're able to assist with and provide um the better for everybody concerned, particularly the student. (Participant 024-occupational therapist)

The OT profession requires a systems change (Laverdure & Rose, 2012) to establish professional relevance within the PSE setting to better support the needs of students with IDD:

...when you come in with a new set of ideas that -- well, and they are within the scope of OT, but maybe someone else hadn't been doing it that way -- it takes a while to change the culture. It takes several years to get into a high school, educate people on what you can do, show them here is an example, let's try it, hey that worked, and then they start accepting that piece of your role, so you can have a big idea for change and using your skills in a different way, but you have to kind of change the culture and get people to pull you in with them, and understand, and buy into your role. So it is a systems change thing, too...I think there is so much we can do, and that really who we are as OTs is so well suited to supporting transition. I think it is just a matter of whether we can put the time

and energy into trying to make that happen, and again, advocate for why it should happen... (Participant 030-occupational therapist)

The Framework relative to perceived student needs. Nearly all areas of occupation in the *Framework* (AOTA, 2014) were reported to be persisting areas of need for the students as a whole. Though the noted persisting challenges fell within the purview of OT, the most frequently reported interventions were for IADLs and Socialization including: keyboarding, technology, campus navigation, and social participation. Parents and guardians expressed concern regarding on-going challenges in life skills, relationships, and daily care routines. As well, results from the VABS-II (Sparrow et al., 2005) indicated continued dependency upon parents or guardians with home management, meal management, financial management, and major decision-making. Yet it was unclear if any program or service agency focused on development of necessary adaptive behavior skills.

The uncertainty regarding which service should be working on adaptive behavior skills was shared by one occupational therapist, “So I think people figure that's vocational counselors, that's teachers, that's somebody else's business...” (Participant 030-occupational therapist). Thus, as noted by Cheak-Zamora et al. (2015), it appeared as though adaptive behavior skill development was relegated back to the parents or guardians who, in turn, scrambled to figure out how to advance the needed skills. A researcher reflection following an interview with a guardian brought to light an unwritten expectation regarding acquisition of adult-level adaptive behavior skills, “...what's so special about turning 18-21 years of age? What makes the person suddenly capable of managing him or her self, a household, employment, relationships, transportation, finances, and a family once one becomes the age of adult?” For students with IDD attending PSE, many adaptive behavior skills remained areas of challenge and thus an unmet need. The

majority of these needs fell within the purview of the *Framework* (AOTA, 2014), yet OT addressing these needs remained indeterminate.

As shared by Laverdure and Rose (2012), it is important to challenge the current view of educationally relevant school-based OT service delivery within the K12 system. Ignoring unmet adaptive behavior needs fosters continued dependence on other adults or supports services and, potentially employment outcomes. A transformation of service delivery is required with a stronger focus on what is compulsory to participate in an activity rather than remediation of impairments.

The presence of OT. Typically, OT services for eligible students were conducted monthly using a consultation model with faculty, staff, and/or students. Consultations were completed via telephone, email, or brief group meeting at Triumph. Though the involved occupational therapists reported positive outcomes from service interventions, instructors and administrators shared uncertainty regarding the role of OT within the PSE setting:

...how could they [OT] possibly know how to support students if they [OT] have never been in a classroom that supports the students they [OT] are working with? And clinical practice is a very limited perspective on supporting students with intellectual disabilities, because the goals that you see or that I perceived to be seen in the clinic are a very small subset of the goals that are actually leading towards where they [the students] want to be.
(Participant 026-instructor)

A sentiment acknowledged by Asher and Frank (2013) who commented on the importance of getting out into the communities with the young adults in order to understand task demands. This point was also clearly indicated in the outcomes of the study by Rens and Joosten (2014) where participants indicated that occupational therapists needed to spend more time in the context in

which the student was educated prior to offering intervention suggestions. As well, participants shared a concern that occupational therapists often perceived themselves as experts rather than as a collaborative team member. In the study by Gangl et al. (2011), the consultation model was also noted as a potential impediment for stakeholder understanding of the role and function of OT. Limited direct interaction with the student or instructor created a sense of ambiguity regarding offered recommendations. Thus the noted authors suggested that being present to the functional needs and abilities of the young adults and working as a collaborative team member, fostered trust in treatment suggestions shared with stakeholders (Asher & Frank, 2013; Crabtree, 2014; Gangl et al., 2011; Rens & Joosten, 2014).

Life Like Everyone Else

The final theme was not tied to any research question. However, the presence of hope and the dream of a positive future became a powerful resounding voice across all participant groups. As with their neurotypical peers, young adults with IDD also wanted to experience the joys and wonders of life. The interview transcripts were brimmed with comments about friendships, being paid well at a job they enjoyed, celebrating family, and experiencing loving relationships. As shared by one parent:

My goal for her is to have a happy and successful and joyful life. Um, this, you know, I don't know what that looks like for her. For me, it would mean having a very inclusive um community. That she was able to provide a job and feel needed. Um, to have an active social group that included her in, you know, going to the movies, or grocery shopping, or whatever. Maybe even getting to the point where she's somewhat independent in living. Um, she, she will never, uh, and maybe I'm setting some limitations. But I don't ever see her living totally, 100% independent, um some kind of

support to help her with the finances or um, you know, just some logistical planning or meal planning, you know, things like that. Stuff that people could easily support her in... I want her to have the same kind of life my other kids have. You know, where, you know, she feels needed and loved and she's contributing. (Participant 014-parent)

The dream of an education that led to preferred employment was keenly shared by the young man seeking a welding degree (002), and by the young woman realizing a dream of working in the field of marine biology (006). As a society, who are we to determine which jobs young adults with IDD are best prepared for? Yet, also as a society, we must look at how we are setting up the young adults with IDD for successful post-high school transition. It is no wonder that parents and guardians expressed fear and anxiety as they launched their young adult into adult life (Dwyre, Grigal, & Fialka, 2010). They understood that even though their young adults with IDD had many of the necessary skills and abilities to attain post-high school success, there were still so many adaptive behavior skills and abilities that needed to be attained. Instructors shared this concern as they deliberated about how the highly supportive environment of Triumph and SVC did not always carry-over post-graduation into the community of the young adults. But hope for the future was preeminent overall. As tearfully shared by one parent, community inclusion and belief in her daughter's abilities were an optimistic consideration, "...that she is part of a community and being involved in, that is, fun and play, and joy, and learning, and meaningful work. And love, I hope, is in there too" (Participant 015-parent). The young adults with IDD wanted to be seen as capable of experiencing an amazing life just like their neurotypical peers. They wanted to know that *creo en tu mente* (Participant 039-instructor) was a sentiment for them as well.

Conclusion

Postsecondary education (PSE) is an option for young adults with disabilities and increasingly so for those with IDD (Grigal & Hart, 2010). Department of Education funded programs such as the TPSID grant-funded programs have incrementally increased the numbers of young adults with IDD entering and completing PSE certificated programs (Papay & Bambara, 2011). Young adults with IDD are benefitting from these PSE experiences as noted by increased wages and benefits, and employment persistence rates (Migliore & Butterworth, 2008; Newman et al., 2011). This research responded, in part, to the suggestion by Oertle and Bragg (2014) to “assess student support and disability services and identify promising practices and areas of need” (p. 65). Adaptive behavior and life skill needs persisted for a number of the students, many of which fell within the purview of the *Framework* (AOTA, 2014) for the profession of OT. Though numerous supports, accommodations, and strategies for success were provided for the students, the question remained regarding which professional entity was responsible for progressing the persisting adaptive behavior and life skills needs. Of concern was the paucity of stakeholder awareness regarding the role and function of OT.

The motto of occupational therapy (OT) is to “live life to the fullest” (AOTA, 2016). The profession of OT provides many avenues for promoting skill attainment to achieve or return to independence in life. Yet, how the young adults with IDD entering into PSE were receiving support to attain the necessary life skills remained uncertain. If, as indicated by Klinger and Grofer (Diament, 2015), adaptive behavior skills were a key indicator of PSE and employment success for young adults with IDD, OT may be a critical service for students merging toward adulthood. Yet OT focus was primarily consultation on technology access, writing, socialization, and mobility. For the profession of OT, clarification of the role within the PSE setting was

indicated. Understanding how to serve a growing population of young adults with IDD in PSE presented as a surmountable challenge. It is important to move beyond listening to the voices of the stakeholders and respond with socially just service provision. Following the courageous paths of occupational therapists such as Chandler (2014), Kertcher (2014a, 2014b), Orentlicher (2013, 2015), and Stewart (2013) who are seeking to respond to the needs of the young adults with IDD is critical.

In order to support PSE students with IDD the OT profession must advocate for laws and policies that support programs that foster successful transitions for students and their careproviders. As well, practicing occupational therapists will need to consider how best to provide, not only service interventions for the young adult students, but on-going communication with faculty, staff, students, and parents or guardians (Asher & Frank, 2013; Gangl et al., 2011; Laverdure & Rose, 2012; Rens & Joosten, 2014). Most importantly is understanding how OT may reduce the barriers of participation, and support the well-being of PSE students with IDD, such as Salina Gomez, to “live life to the fullest” (AOTA, 2014). This research served as an exploratory step toward that process.

Generalizability

The generalizability of results obtained from this study were limited due to the nature of case study research and the specific focus of the bounded case for this study. The non-probability sample reduced the ability to generalize these findings to the broader college population, however it was deemed appropriate considering the exploratory nature of this research case study. Regardless, this case study contributed to the literature known about OT for the population of young adult students with IDD attending postsecondary institutions. As well, the study has the potential to be of value for practicing OT clinicians, postsecondary institutions educating

young adults with IDD, and especially for the young adult students presenting with IDD pursuing postsecondary education.

Limitations

The issues noted about generalizability may also be study limitations due to the small number of participants included in this study. Other considerations included: self as researcher through all phases of the research process, and the nature of the Triumph program being unique. As well, the researcher relied on student self-report on the VABS-II (Sparrow et al., 2005) meriting caution in interpreting the findings.

Though the researcher made every effort to consider the participant population, UID (Center for Universal Design, 2008) was not incorporated into the research design thus the consent forms, interview schedules, and contact with students to ensure full understanding of the process was not done considering the principles of UID (Center for Universal Design, 2008). This may have resulted in participant misunderstanding of the research process. This was a particular concern for the student participants who later revealed challenges with reading and comprehension of verbal instructions. Clearly, considering the type of research that was conducted with the inclusion of critical disability theory and the transformative paradigm, the researcher should have taken more time to develop a process that was clear and coherent for any participants. As well, some of the questions used for the interview transition specialist and administrators were too focused on Triumph and not the young adults with IDD. Thus responses to the questions may have been somewhat convoluted.

Future Research

Though many avenues of research may come from the outcomes of this study, within the OT profession, focusing on the perceptions of occupational therapists in serving young adults

with IDD in PSE would be of great value. This would suggest the use of either a state-specific or nationwide survey of occupational therapists practicing within school-based arenas or within settings serving pediatric and/or young adults. Inquiring into who is serving the young adults with IDD and the focus of service intervention may help to advance the work done by Mankey (2011, 2012) regarding occupational therapists and educators' beliefs on the perceived role of OT involvement in the secondary transition. As well, results from such a survey may foster future research into the recurring adaptive behavior needs of young adults with IDD and the role of OT to support skill acquisition.

Considering a qualitative component to the research, conducting in-depth interviews and focus groups on the types of service provisions for secondary and post-secondary students with IDD would be insightful. In particular, gaining a deeper appreciation for how school-based OT interventions are conducted and supported may direct the profession toward new avenues of intervention. As well, qualitative research may help to open a dialogue about who is responsible for developing and enhancing life skills as students merge into young adulthood. Lastly, the consideration of race and ethnicity of young adult students with IDD attending PSE in relation to those providing instruction, supports, and services needs to be fully explored.

Implications to Practice

This study identified persisting adaptive behavior needs of young adults with IDD attending PSE, supports and accommodations promoting student success, and how needs fell under the purview of OT. The profession of OT needs to close the gap in service provision to young adults with IDD merging into PSE. It will be important for practitioners to promote the role of OT in serving secondary and post-secondary students in adaptive behavior skill development as well as employment and life skill development. This will require a systems

change for school-based and clinic-based service interventions. Advocating on behalf of the students for continued OT service provision will be necessary. No longer should this be considered an emerging practice area. Young adults with disabilities are precipitously enrolling in post-secondary education programs. A call to action is warranted.

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It is important to acknowledge the serendipity of this capstone project. Started as an internship, an unfathomable interest developed regarding postsecondary education for students with intellectual and developmental disabilities--a population of students often marginalized and dealing with the persisting societal stigma of what is possible. First and foremost is the deep respect and appreciation for the students who participated in this research study and risked talking with an unknown adult to share their stories. I share my deepest regard to each of you. As well, heartfelt appreciation is shared to each of the parents and guardians who shared a depth of passion, hope, and love for their young adult children. The Triumph program and all participants from administrators to instructors provided an open and accepting venue for this research to be conducted. Grateful appreciation is also given to the occupational therapists and sole transition specialist who shared their expertise, passion for the profession, and especially passion for young adults with IDD to have a hopeful and joyful future. As well, the tireless support of my committee to review an immense manuscript and provide suggestions for improvement: Dr. Ginger MacDonald, chair; Dr. Katie Haerling, member; and Dr. Tracy Jirikowic, member, is appreciatively noted. I must give a special nod to my Saturday support group—you are the best. On a personal note, the importance of my parents' support and encouragement for my own postsecondary education was instrumental in hearing the voices of the parent and guardians for

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Table 1

Aggregated Student Participant Demographics n=10

	Years with Triumph	Age	Gender	Race	Disability Category	OT on IEP	Familiarity with OT
Totals			60% Female	50% White 20% A.A./Black 20% Latina/Hispanic 10% Asian/P.I.	50% c 50% a 10% b, g, h, k, m	20% yes	70% Very unfamiliar 30% Moderately familiar
Mean	1.05 years	21 y 4 m					
Range	0.5-3.0	19y 2 m-27 y7 m					

Note. y indicates years; m indicates months; A.A. indicates African American; P.I. indicates Pacific Islander; a indicates specific learning disability; b indicates speech or language disability; c indicates intellectual disability; e indicates multiple disabilities; f indicates hearing impairment; g indicates orthopedic impairment; k indicates autism; IEP indicates Individual Education Plan.

Table 2

Vineland Adaptive Behavior Scales-II Subdomain v Scaled Scores Aggregated for all Student Participants n =10

	<u>Communication Domain</u>			<u>Daily Living Skills Domain</u>			<u>Socialization Domain</u>		
	Receptive	Expressive	Written	Personal	Domestic	Community	Interpersonal	Play & Leisure	Coping
Totals	126.00	109.00	94.00	94.00	94.00	82.00	95.00	101.00	121.00
Mean	12.60	10.90	9.40	9.40	9.40	8.20	9.50	10.10	12.10
Range	7.00-15.00	4.00-16.00	5.00-13.00	5.00-17.00	3.00-18.00	2.00-13.00	2.00-12.00	6.00-12.00	9.00-14.00

Note. n=10; aggregated v scaled scores (M=15, SD=3). Scores ≤ 9 (-2.0 SD) are indicative of significant limitations.

Table 3

Vineland Adaptive Behavior Scales-II Domain Standard Scores all Student Participants n =10

	<u>Standard Score Scales</u>			
	Communication Domain	Daily Living Skills Domain	Socialization Domain	Adaptive Behavior Composite
Total	720.00	655.00	713.00	673.00
Mean	72.00	65.50	71.30	67.30
Median	74.00	65.00	74.00	70.00
Range	21.00-91.00	31.00-107.00	30.00-84.00	23.00-90.00

Note. Aggregate standard score (M=100, SD=15); scores ≤ 70 indicate significant limitation;

Adaptive Behavior Composite derived from the three domain scores.

Appendix A

Definitions for Developmental Disability and Intellectual Disability

Developmental disability (DD) as defined in the Developmental Disabilities Assistance Bill of Rights Act of 2000 (P. L. 106-402):

“(A) In general-the term “developmental disability” means a severe, chronic disability of an individual that- (i) is attributable to a mental or physical impairment or combination of mental and physical impairments; (ii) is manifested before the individual attains age 22; (iii) is likely to continue indefinitely; (iv) results in substantial functional limitations in 3 or more of the following areas of major life activity; (I) Self care. (II) Receptive and expressive language. (III) Learning. (IV) Mobility. (V) Self-direction. (VI) Capacity for independent living. (VII) Economic self-sufficiency; and (v) reflects the individual’s need for a combination and sequence of special, interdisciplinary, or generic services, individualized supports, or other forms of assistance that are of lifelong or extended duration and are individually planned and coordinated.” (42 U.S.C. 15002, [8][A])

Intellectual disability (ID) is defined from two different sources:

- (1) The American Association on Intellectual and Developmental Disabilities (AAIDD) (2010) defines *intellectual disability* as “characterized by significant limitations both in intellectual functioning and adaptive behaviors as expressed in conceptual, social, and practical adaptive skills. This disability originates before age 18. The following five assumptions are essential to the application of this definition: 1. Limitations in present functioning must be considered within the context of community environments typical of the individual’s age peers and culture. 2. Valid assessment considers cultural and

- linguistic diversity as well as differences in communication, sensory, motor, and behavioral factors. 3. Within an individual, limitations often coexist with strengths. 4. An important purpose of describing limitations is to develop a profile of needed supports.
5. With appropriate personalized supports over a sustained period, the life functioning of the person with intellectual disability generally will improve” (p. 1).

(2) The Higher Education Opportunity Act (HEOA) of 2008, (P. L. 110-315) defined *student with an intellectual disability* as a student: “(A) with mental retardation or a cognitive impairment, characterized by significant limitation in—I. intellectual and cognitive functioning; and II. adaptive behavior as expressed in conceptual, social, and practical adaptive skills; and (B) who is currently or was formerly, eligible for a free appropriate public education under the Individuals with Disabilities Education Act.”

Appendix B

American Association on Intellectual and Developmental Disabilities (AAIDD)

Definition of *Adaptive Behaviors*: “Adaptive behaviors is the collection of conceptual, social, and practical skills that have been learned and are performed by people in their everyday lives” (AAIDD, 2010, p. 43)

- *Conceptual skills* include: language; reading and writing; and money, time, and number concepts (AAIDD, 2010, p. 44).
- *Social skills* include: interpersonal skills, social responsibility, self-esteem, gullibility, naiveté, follows rules/obeys laws, avoids being victimized, and social problem-solving (AAIDD, 2010, p. 44).
- *Practical skills* include: activities of daily living (personal care), occupational skills, use of money, safety, health care, travel/transportation, schedules/routines, and use of the telephone (AAIDD, 2010, p. 44).

Reference

American Association on Intellectual and Developmental Disabilities, (2010). *Intellectual disability: Definition, classification, and systems of supports, (11th ed.)*, (pp. 43-44). Washington, DC: Author.

Appendix C

Occupational Therapy Practice Framework: Areas of Occupation

Area of Occupation	Subcategories of Area of Occupation
Activities of Daily Living (ADL)	<ul style="list-style-type: none"> • Dressing • Bathing • Swallowing/eating • Feeding • Functional mobility • Personal device care • Grooming/hygiene • Sexual activity • Toileting/toilet hygiene
Instrumental Activities of Daily Living (IADL)	<ul style="list-style-type: none"> • Care of others • Care of pets • Child rearing • Communication management • Driving and community mobility • Financial management • Health management and maintenance • Home establishment and maintenance • Meal preparation and clean up • Religious observation • Safety/emergency maintenance • Shopping
Rest/Sleep	<ul style="list-style-type: none"> • Rest • Sleep preparation and participation
Education	<ul style="list-style-type: none"> • Formal education • Informal education and exploration • Informal education participation
Work	<ul style="list-style-type: none"> • Employment interests and pursuits • Employment seeking and acquisition • Job performance • Retirement prep and adjustment • Volunteer exploration and participation
Play	<ul style="list-style-type: none"> • Play exploration • Play participation
Leisure	<ul style="list-style-type: none"> • Leisure exploration • Leisure participation
Social Participation	<ul style="list-style-type: none"> • Community • Family • Peer or friend

Adapted from: American Occupational Therapy Association. (2014). Occupational therapy practice framework: Domain and process (3rd ed.). *American Journal of Occupational Therapy*, 68(Suppl.1), S1-S48. <http://dx.doi.org/10.5014/ajot.2014.682006>

Appendix D

Example of Parent Interview Questions

1. Tell me about your son or daughter.
2. Tell me about how you and your adult student decided to attend Sound View College¹⁵ and the Triumph¹⁶ Program.
 - 2a. PROBE: What happened when you found out that your son or daughter was accepted into the Triumph Program.
 - 2b. Were there any concerns about your son or daughter attending college?
3. What helps your adult student to be successful here at college?
4. What are some things that appear to be easy for your son or daughter?
5. Tell me about the things that appear to be hard or difficult for your son or daughter at college.
 - 5a. PROBE: If something is hard or difficult, what does your son or daughter typically do?
 - 5b. PROBE: Who tends to help your son or daughter when things become hard or difficult?
6. What does self-advocacy mean to you?
 - 6a. PROBE: Tell me about a time when your son or daughter demonstrated self-advocacy while at college.
7. Is a diagnosis an important thing to know and talk about regarding your son or daughter attending college or at the workplace? Why or why not?
8. Tell me about your experience with occupational therapy in relation to your son or daughter.

¹⁵ Sound View College is a pseudonym used for the purpose of anonymity.

¹⁶ Triumph is a pseudonym used for the purpose of anonymity.

9. How would occupational therapy help your son or daughter now while at college or within the work setting?
10. What are your hopes and goals for your son or daughter?
11. Is there anything else that you would like to talk about or share that we have not discussed?

Appendix E

Example Participant Demographic Survey Questions

- 1. What is the HIGHEST level of formal education you have obtained?**
 - a. Elementary school
 - b. Some high school
 - c. High school graduate
 - d. Some college
 - e. Associate, 2 year college degree
 - f. Four year college degree
 - g. Master's degree
 - h. Doctorate degree

- 2. How long have you taught within the ACHIEVE Program?**
 - a. Less than one year
 - b. One year
 - c. Two years
 - d. Three years
 - e. Four years
 - f. Five or more years

- 3. Besides instructor, what additional roles do you perform for the ACHIEVE Program?**
 - a. Advisor
 - b. Counselor
 - c. Job Coach
 - d. Employment Placement Specialist
 - e. Other

- 4. Please list the ACHIEVE Program courses taught:**
 - a. _____
 - b. _____
 - c. _____
 - d. _____

- 5. What is the month, day, and year of your birth?**
Month _____ Day _____ Year _____

- 6. What gender would you classify your self?**
 - a. Male
 - b. Female
 - c. Transgender
 - d. Other

- 7. What racial classification do you MOST identify with?**
- a. American Indian/Native Alaskan
 - b. Hispanic
 - c. Latino-Latina
 - d. African American/Black
 - e. White
 - f. Asian
 - g. Pacific Islander/Hawai'ian National
 - h. Other
- 8. Which of the following disability categories as defined by the federal Individuals with Disabilities Act (IDEA) are you most comfortable working with (circle all that apply)?**
- a. Specific learning disability
 - b. Speech or language impairment
 - c. Intellectual disability
 - d. Emotional disturbance
 - e. Multiple disabilities
 - f. Hearing impairments
 - g. Orthopedic impairments
 - h. Other health impairments
 - i. Visual impairments
 - j. Deaf-blindness
 - k. Autism
 - l. Traumatic brain injury
 - m. Other
- 9. What is your level of familiarity of the profession of occupational therapy in working with young adults with intellectual and/or developmental disabilities?**
- a. Very familiar
 - b. Moderately familiar
 - c. Neither familiar nor unfamiliar
 - d. Moderately unfamiliar
 - e. Very unfamiliar

Appendix F

Coding Schema

1. What are the needs of the students with IDD to complete PSE requirements?

CODE	SUBCATEGORIES
ABSCON	Adaptive Behavior Skills- <u>conceptual skills</u> including language, reading, writing, money, time, and number concepts; may also be known as executive function skills-inhibition, initiation, self-monitoring, emotional control, working memory, planning & organizing, organization of materials
ABSPRAC	Adaptive Behavior Skills- <u>practical skills</u> including personal care, occupational skills, use of money, safety, health care, travel/transportation, schedules & routines, and use of the telephone
ABSSOC	Adaptive Behavior Skills- <u>social skills</u> : interpersonal skills, social Responsibility, follows rules & obeys laws, avoids being victimized, Social problem-solving

2. How do students with IDD participate in PSE to complete program requirements?

CODE	SUBCATEGORIES
MAX	Requires maximal support: parent/guardian, advisor, peer navigator, instructor-initiating 25% or less of opportunities.
MOD	Requires moderate support: parent/guardian, advisor, peer navigator, instructor-but initiating 50% of opportunities
MIN	Requires minimal support: parent/guardian, advisor, peer navigator, instructor-but initiating 75% or more opportunities
INDEP	Independent in participation: considered appropriate amount of support Required by a typical college student

3. What are the requirements for students with IDD to complete PSE program requirement

CODE	SUBCATEGORIES
PC	Personal characteristics to include: initiative, motivation, self-advocacy, self-determination
KR	Knowledge of the requirements: knowing what is needed to complete the program
UHC	Understanding of the process for seeking supports and help including an understanding of the hidden curriculum-navigating the campus & coursework
DA	Disability awareness: awareness of own disability and potential accommodations to support learning

4. What are the supports provided to students with IDD to assist with PSE completion?

CODE	SUBCATEGORIES
ACCESS	ACCESS services-letter of accommodation; request for accommodations, modifications, or help
PN	Peer navigator
FAC/STAFF	Triumph Faculty or staff support
HC SUPPORTS	Sound View College support programs or services: tutoring centers

5. How are the identified needs of PSE students with IDD falling under the purview of OT?

CODE	SUBCATEGORIES
OTADL	OTPF-activities of daily living including: dressing, bathing, feeding, functional mobility, personal device care, grooming/hygiene, sexual activity, toileting.
OTIADL	OTPF-instrumental activities of daily living including: care of others, care of pets, communication management, driving and community mobility, financial management, health management & maintenance, home establishment & maintenance, meal preparation & clean up, safety, shopping
OTEDUC	OTPF-education including: formal education, informal education Exploration, informal education participation
OTWORK	OTPF-work including: employment pursuits & interests, employment Seeking/acquisition, job performance, volunteer exploration & participation
OTSOC	OTPF-social participation including: community, family, peer/friend

6. Perceptions of PSE students with IDD and his/her parent/guardian regarding OT to prepare for PSE.

CODE	SUBCATEGORIES
OT?	Unaware of occupational therapy
OTFACIL	OT facilitated skill acquisition to promote preparation for PSE
OTIMPED	OT was an impediment to or did not help with skill acquisition for preparing for PSE
UNOT	Uncertain about role of OT within the PSE setting

Appendix G

Example Data Summary Sheet

Responses to questions: **What are the needs of the students with IDD to complete PSE requirements?**

Note: X indicates coded content in transcript

Participant	Conceptual skills	Practical skills	Social skills
001-Student	X	X	X
002-Student	X	X	
003-Student	X		
004-Student	X	X	X
005-Student	X	X	X
006-Student	X	X	
007-Student	X	X	
008-Student	X	X	X
009-Student	X		X
010-Student	X	X	X
013-Guardian	X	X	X
014-Parent	X	X	X
015-Parent	X	X	X
016a-Guardian	X	X	X
016b-Guardian	X	X	X
023-OTR	X		
024-OTR	X	X	X
025-Instructor	X	X	X
026-Instructor	X		X
027-Instructor	X	X	X
028-Instructor	X	X	X
029-Transition Sp.	X	X	X
030-OTR	X	X	X
031-OTR	X	X	X
032-Administrator	X		X
033-Administrator	X	X	X
034-Administrator			
035-Administrator	X		X
036-Instructor	X	X	X
037-Instructor	X	X	X
038-Instructor	X		X
039-Instructor	X		X
TOTAL	30/31 [97%]	23/31 [74%]	26/31 [84%]
Students	10/10 [100%]	8/10 [80%]	6/10 [60%]
Parent/Guardian	5/5 [100%]	5/5 [100%]	5/5 [100%]
Instructor	8/8 [100%]	5/8 [62.5%]	8/8 [100%]
Administrator	3/4 [75%]	1/4 [25%]	3/4 [75%]
OTR	5/5 [100%]	4/5 [80%]	4/5 [80%]