Self-Determination Skill Development:

A Qualitative Exploration of College Students with Autism Spectrum Disorders

by

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ABSTRACT

This study explored the influence of how the development of self-determination skills affected college students with an Autism Spectrum Disorder (ASD). Five college students who qualified for a university-based disabilities resource program under the category of Autism Spectrum Disorder (ASD) participated in a five session mentoring program over the course of the first 12 weeks of the fall semester. The mentoring program was designed to develop specific self-determination skills, including, self-awareness, self-advocacy, and confidence. Participants engaged in an interactive dialogue, discussing specific skills and experiences, relative to the development of self-determination skills. Pre- and post-surveys, and a post intervention interview indicated that the students reported positive results in describing that mentoring experience, and found the protocol useful in their development of self-determination skills. Implications identified for further application into practice, include (a) a deeper appreciation and review of the participants' background and experience, (b) the development and implementation of peer-to-peer mentoring, (c) the need for more intentional collaboration with high school partners, (d) the need to expand the skills being developed, and (e), the need to expand the number of services and resources discussed. This study will be used in the exploration of a broader collegiate mentoring program geared towards students with ASD with the purpose of increasing self-determination skills.

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DEDICATION

This work is dedicated to my mother, Linda Harrop.

Your unconditional love, kindness and commitment in support of others through education and life has been the inspiration for this work.

The life you lived and the legacy you left, remains as a lighthouse guiding others in pursuit of their dreams.

Thank you for continuing to inspire by the way you lived your life in service to others.

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CHAPTER ONE

INTRODUCTION

Over the past 40 years, the educational landscape has shifted substantially for individuals with disabilities. It began with Section 504 of the Rehabilitation Act (Pub. L. No. 93-112, 87 Stat. 394, 1973), which was the first civil rights act in the United States designed to protect people with disabilities from discrimination on the basis of disability, followed by the Individuals with Disabilities Education Act (20 USC §1400 et seq., 1975) and the more comprehensive Americans with Disabilities Act of 1990 (Pub. L. No. 101-336, 104 Stat. 328, 1990, as amended in 2008), which further broadened protections for individuals with disabilities in the educational system. As a result, many institutions of higher education have seen substantial increases in the number of students with disabilities enrolling in postsecondary education. For 2008-2009, data from the National Center for Educational Statistics (2011) indicated that 707,000 students with disabilities enrolled in either a two-year or four-year postsecondary education institution. The largest disability group were those with learning disabilities (31%), followed by Attention Deficit Hyperactivity Disorders (ADHD) at 18%, and mental health disorders (15%).

According to the National Center for Education Statistics, 11% of undergraduate students reported having a disability in both 2007–08 and 2011–12. Of those students, 44% were males, while 56% reported as female. Comparatively, this gender distribution was the same as their non-disabled peers (NCES, 2015). For the purposes of this study, the focus will be with students who have identified themselves as having an Autism Spectrum Disorder (ASD). While it is not entirely clear as to the percentage of college students with an ASD, it is estimated that between 0.7% and 1.9% of college students with disabilities have an ASD (White, Ollendick & Bray, 2011). In 2014, the Center for Disease Control estimated that 1 in 68 children had been identified with an ASD, which was 30 percent higher than the 2012 estimates (1 in 88). Research also shows that there is a higher percentage of males identified with ASD than females (Halladay, et al., 2015). According to the CDC (2014) data shows that the prevalence among boys (1 in 42) is almost 5 times higher than it is among girls (1 in 189). According to the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5: American Psychiatric Association, 2013), ASD is characterized by persistent difficulties with social communication and social interaction, and restricted and repetitive patterns of behavior, interests, or activities that has a significant influence on daily functioning.

Of those graduating high school, less than 50% of students identified as having an ASD will attend college (Shattuck, Narendorf, Cooper, Sterzing, Wagner, & Taylor, 2012). Relative to the problem highlighted in and through this study, much of the literature over the years has focused on young children with ASD (Cohen, 2011) rather than on adults. Although outcomes have improved for individuals diagnosed with ASD (Howlin & Moss, 2012), there are critical predictors in leading to more positive outcomes, including predictors of academic success and retention. One of those predictors has been shown to be social connectedness (Robbins, Allen, Casillas, Peterson, & Le, 2006; Wehmeyer, Agran, & Hughes, 1998).

As students with disabilities transition into the postsecondary environment from high school, their ability to develop skills, including advocating for themselves and developing higher levels of self-awareness, will be critical to their success. Students who have developed specific skills are more likely to be successful in the postsecondary educational environment (Gil, 2007).

In the secondary environment, parents, teachers and school administrators are primarily responsible for advocating on behalf of the student. However, once students matriculate to the postsecondary environment, that responsibility then falls to them. However, students will often come into the university without well-developed advocacy skills. Not being able to advocate for one's self can influence students' educational experience in many different ways, not the least of which is in their ability to request appropriate accommodations and academic support services. As students with disabilities are already at-risk academically, their ability to advocate in a meaningful way is not just critical to their success, but also to their belief that they can be successful. Accordingly, the development of self-determination skills has been shown to not only increase the likelihood of success in transitioning to postsecondary education (Cimera, Burgess, & Wiley, 2013), but also to contribute to a higher quality of life (Denney & Davisio, 2012). It is for this reason that the current study was developed.

Local Context

The current study took place at a large university in the southwestern part of the United States. Over the past few years, the freshman retention rate at this university has significantly increased. According to *U.S. News and World Report* (2016) the average freshman retention rate is 83.5% nationally. As one of the largest universities in the nation, this university also has one of the largest populations of students with disabilities. While comparative data from other universities was not known at the time of the study, the National Center for Education Statistics reported in 2011-2012, that approximately

11% of college students have a disability (NCES, 2015). According to the most recent annual report of the University's Disability Resource Center (DRC), there are approximately 3000 students with disabilities registered with the Center. Of those, approximately 120 students have identified themselves and registered for services as having an ASD (Disability Resource Center, 2016). The DRC acknowledged that their system was not effective in tracking student retention, and have recently transitioned to a more effective system. As a result, retention data for students with ASD is not currently known. While current retention statistics are not known for ASD students at the university, retention rates for students with ASD nationally remain extremely low (VanBergeijk, Klin, & Volkmar, 2008).

Research Guiding the Project

The completion of a postsecondary degree has long been shown to provide significant benefits to individuals, as well as the broader society. According to a report by the College Board (Baum, Ma, & Payea,, 2013), individuals who completed a bachelor's degree as compared to those who have only completed a high school diploma, are more likely to benefit in several ways, including, a greater potential for increased income (the median earnings for an individual with a bachelor's degree in 2013 being $21,100 more annually than an individual with only a high school diploma), more likely to contribute in terms of tax revenue, and more likely to contribute more to the overall well-being of the economy. Adults who completed a bachelor's degree were more likely to move up the socioeconomic ladder, compared to those with only a high school diploma (31% vs. 11%). College graduates are also less likely to be unemployed, compared to those with only a high school diploma. Additional benefits included greater job satisfaction, increased ability to contribute more to their pension/retirement, more likely to be covered by employer-provided health insurance, and less likely to live below the poverty line (Baum, et al.).

Despite the well-established benefits of attaining a college degree, there remains a substantial discrepancy between students with disabilities and those without disabilities, with regard to postsecondary enrollment. Transitioning to postsecondary education is difficult for students with disabilities. Data show that only 9% of those with disabilities enter college following high school graduation, compared to 70% of their peers without disabilities (Bank, 2014).

Personal Context

Education has always been an important part of my personal and professional journey. As a child, I observed first-hand the positive effect that education had on improving the lives of others. More specifically, I witnessed the effect that caring and intentional educators, who took the time to personally connect with students, had on helping those students succeed, and how that influence forever changed their social, educational and developmental path. That influence included positively affecting their lives and their future path. Each of these model educators had all the requisite skills, tools, education and experience required for all teachers. What made these educators unique, however, was the way in which they engaged students, and the manner in which they demonstrated care and concern for the students within their sphere of influence.

I come from a long line of educators. Three of my grandparents were teachers and/or educational administrators. Perhaps the greatest example of what I viewed as a model educator was my mother. She was instrumental in my decision to pursue education as a career and is the primary inspiration for this study. To her, education was much more than just the process of learning, it was about the personal development of each of her students. She understood that her ability to influence the lives of her students was limited only by her ability to connect with them on a personal level. To her students, she was much more than just a teacher—she was a mentor, an advisor, a guide, a soft place to land during difficult times, an honest evaluator of progress and always an educator.

In addition to being passionate about education, I have spent the majority of my professional career working with students who have been marginalized from society in one way or another. Over the span of my 20+ year career, I have seen the tremendous growth that comes when students are engaged in their educational experience as part of a well-structured, nurturing and supportive environment. However, I have also seen the challenges that have resulted when students enter the university and are unable to access the support services they need and attempt to navigate the postsecondary environment without any personal support and guidance. When that happens, I have seen the resulting gaps that exist in the support structure of the very institutions committed to the success of these students.

Over the past 20 years, I have tried to position myself in a way that best leverages my ability to influence the lives of others through education. After receiving a bachelor's degree in psychology, I completed a master's degree in Higher Education Leadership. It made sense to me that the next step in my educational journey would be in pursuing a doctoral degree in Leadership and Innovation, where I might be able to apply and evaluate my experience with the students with whom I works. As an administrator within the Disability Resource Center at the university in which this study took place, my own positionality, biases and limitations were critically evaluated in this process. As an insider, and as one who potentially could influence the process, I was mindful of that in this work. In addition to taking on an insider position in this work, I also collaborated with other insiders, including and especially students, faculty, and staff. As someone who has a brother with a disability, and having seen the influence mentoring has had on my life, I also acknowledge that I come into this process with my own biases, and was mindful of how I considered and controlled for those biases.

In the context of working with students who have disabilities, access is an important element in promoting success. Without access to the university, students with disabilities would not have the same opportunity as their non-disabled peers to experience all the opportunities that the university has to offer, and they may therefore be less effective in influencing their communities. Making the educational experience personal for the students who participate in this process, specifically through intentional outreach, engagement and mentoring, builds trust among the students involved.

Action Research

In order to best understand the innovation for which this work intends to explore, it's critical to understand and frame the approach for which the work will follow. The research design used was a mixed methods action research approach. This approach was chosen due to the specific nature of the work and the environment for which the innovation will influence. Herr and Anderson (2015), note the importance of action research relative to the environment for which the work is being done. They propose as a major goal of action research is to “generate local knowledge that is fed back into the setting” (p. xiii).

Innovation

Recognizing the tremendous need for a mentoring program for students with disabilities within the university in which this study will take place, the intent of this research will be to evaluate the need for a more formalized mentoring program, as well as to explore critical component elements for the development of that program. As a way of increasing students' ability to navigate the complexities of a large university, this innovation will implement a combination of both formal and informal mentoring as part of this process. This mentoring program will be designed to help students develop self-determination skills, including self-advocacy and problem-solving skills, learning key differences between high school and college, while becoming more aware of the influence of their disability. The purpose of the study is to develop a mentoring program for students with an Autism Spectrum Disorder (ASD), and to determine whether there is any relationship between learning specific self-determination skills and self-efficacy.

The specific innovation this work hopes to achieve is to develop a series of mentoring modules which focus on skill development and increase awareness of key university student support services and resources specifically geared towards students with an Autism Spectrum Disorder; to increase students' belief in their own self-efficacy through a strategic mentoring program aimed at increasing self-determination skills; and to develop a staffing and funding model for sustainable mentoring (future).

Purpose Statement and Research Questions

Previous research has underscored the importance of Self-Determination (Getzel & Thoma, 2008) relative to persistence (Lee, Rojewski, Gregg, & Jeong, 2015) and self-efficacy (Zimmerman, 2000) particularly for students with disabilities. However, current literature on the effect of teaching Self-Determination through mentoring for students on the Autism spectrum is limited. The purpose of the current study was to examine the effect of strategic mentoring on the educational experience of students diagnosed with an Autism Spectrum Disorder. The research questions guiding this work are as follows.

Research Questions

Research Question 1: How do students with ASD describe their experience in participating in a mentoring program?

Research Question 2: How do participants describe their experience in discussing primary self-determination constructs?

Research Question 3: How and to what extent do participants view the usefulness of a mentoring program focused on the development of self-determination skills?

CHAPTER TWO

THEORETICAL PERSPECTIVES AND RESEARCH

Introduction

The theoretical perspective and research that will guide this work is presented in three sections. The first section presents broad information on Autism Spectrum Disorders (ASD). The second section presents information on the specific theoretical approaches used to guide and frame this work, including Self-Determination Theory, the primary theoretical aspect of this work (Deci & Ryan, 1978); Self-Efficacy Theory (Bandura, 1978); and Sociocultural Theory (Vygotsky, 1978). The third and final section is a discussion of formal and informal mentoring.

Autism Spectrum Disorders

In the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5: American Psychiatric Association, 2013), ASD is characterized by persistent deficits in social communication across multiple contexts, and restricted, repetitive patterns of behavior, interests, or activities. ASD is a neurodevelopmental disorder that is most commonly characterized by social communications difficulties, including repetitive or restrictive behavior patterns (American Psychiatric Association, 2013). According to the Centers for Disease Control (CDC), 1 in 68 children, and 1 in 42 boys, have been identified as having an Autism Spectrum Disorder (ASD). This ratio has steadily increased over the past 14 years, going from 1 in 150 in 2002, 1 in 110 in 2006, 1 in 88 in 2008, to its current prevalence of 1 in 68 children (CDC, 2014), and is likely to continue. This increase is generally thought to be due primarily to changes in the diagnostic criteria and greater public awareness of the disorder (Pinder-Amaker, 2014). Of those identified with an ASD, there is a higher percentage of males to females (Halladay et al., 2015). According to the Center of Disease Control, boys are 4.5 times more likely to have ASD (1 in 42) compared to girls (1 in 189).

While the number of students with ASD attending postsecondary educational institutions is increasing (Ames, Mcmorris, Alli, & Bebko, 2015), limitations exist in accurately tracking the extent of this increase (Roux, Shattuck, Rast, Rava, Edwards, Wei, McCracken, & Yu, 2015). Most students with ASD (80%) attend a 2-year college versus a 4-year college (Roux et al., 2015). Of those students with an ASD who attend college within eight years following high school, 46% attended a 2-year college, 11.7% attended a 4-year college, 23.8% attended both, while 19.1% attended a vocational or technical school (Roux et al., 2015).

Transitioning from high school to college can be difficult for students with disabilities. This is especially true for students with an ASD, who experience significant and unique challenges in adjustment (Adreon & Durocher, 2007). Almost one-third of students with an ASD do not consider themselves as having a disability (Shattuck et al., 2014), which further limits the ability to track the exact number of ASD students enrolled in postsecondary education, based on the number of students registered with disability support services. The challenges of transition are likely to include socialization, communication, academic functioning, and self-advocacy (Adreon & Durocher, 2007; Wehmeyer, Agran & Hughes, 1998), and critical thinking (Gobbo & Shmulsky, 2014), highlighting a greater need for the development of intervention programs that focus on goal setting (Anderson, McDonald, Edsall, Smith, & Taylor, 2015; Wehmeyer, Agran &

Hughes, 1998), and establishing inclusive learning environments (Gobbo & Shmulsky, 2014).

As the number of college students with disabilities continues to increase, postsecondary institutions are faced with evaluating the need for critical support services, and assisting students in more effectively navigating the postsecondary environment. There are positive trends towards students with mental health issues enrolling in higher education as a means of improving their personal circumstances, and as an opportunity for “personal growth and fulfillment” (Hartley, 2013, p. 241). In his research, Hartley identified two types of resilience, inter- and intrapersonal resilience, with the latter being more important for students with mental health issues. Students who showed more intrapersonal resilience, completed more academic credit hours and were more likely to remain in school. He also found a strong correlation between specific resiliency factors and mental health, indicating that students with higher levels of resiliency may be more able to cope with the challenges of postsecondary education. The factor considered to be most important is the ability to “bounce back” from difficult situations.

While the work of Hartley looked primarily at students with mental health disabilities, Lee (2014), examined persistence as it related to students with learning disabilities. In that work, Lee defines persistence as “the desire and action of a student to stay within the system of higher education” (p. 2), and divided resilience into two categories – internal and advocating for one’s self, and understanding the impact of one’s external influences (Lee, 2014). Internal resilience factors included temperament, and strategies for requesting disability accommodations. External resilience influences, included supportive parents and college staff. Results of the study indicate that resiliency is important for students with disabilities. Although the number of students with disabilities who are enrolling in postsecondary education is increasing, the rate of enrollment remains far below that of their non-disabled peers, with approximately an 80% incompletion rate of those enrolling in college. It is likely that these numbers will continue to increase (VanBergeijk et al., 2008), further highlighting the importance of the development of academic support systems and resources in an effort to more effectively support student success.

Self-Determination Theory (SDT)

Self-determination theory (SDT) was originally developed by Edward Deci and Richard Ryan (1985) and focuses on factors related to human motivation. More specifically, as a social development theory, the authors propose that individuals are motivated to behave in ways that are partly based on societal and cultural factors, and more specifically on how motivation is related to autonomy, competence, or relatedness.

Field, Sarver, and Shaw (2003) provided a definition of self-determination as “a combination of skills, knowledge and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior. An understanding of one’s strengths and limitations together with a belief in oneself as capable and effective are essential to self-determination” (Field, Sarver & Shaw, 2003, p. 339). They examined students’ level of self-determination as it related to persistence in postsecondary education settings and determined that the following factors were particularly important in educational persistence: the presence of role models; self-determination skill instruction; establishing positive communication and relationships; as well as opportunities to apply decision-making abilities. When acting on the basis of these skills and attitudes, individuals have greater ability to take control of their lives and assume the role of successful adults" (Field, Martin, Miller, Ward & Wehmeyer, 1998, as cited in Denney & Daviso, 2012, p. 2).

Self-determination is a multi-dimensional construct (Carter, Owens, Trainor, Sun, & Swedeen, 2009), where skills are more likely to be developed when supported through mentoring. In broader terms, researchers have identified specific skills that are associated with self-determination. Getzel and Thoma (2008) identified six related perspectives, including, (1) problem-solving; (2) self-awareness; (3) goal setting; (4) self-management; (5) seeking services on campus; and (6) forming relationships with professors / instructors. Based on this perspective, they defined self-determination as "being able to advocate for what you need, understanding your disability and how it impacts your learning, having self-confidence, being independent, and adjusting your schedule to make sure things get done" (Getzel & Thoma, 2008, p. 79). Furthermore, Wehmeyer, Agran, and Hughes (1998) describe twelve skills related to self-determination. These skills include: (1) choice-making; (2) decision-making; (3) problem-solving; (4) goal setting and attainment; (5) independence, risk-taking and safety skills; (6) self-observation, evaluation and reinforcement skills; (7) self-instruction; (8) self-advocacy and leadership skills; (9) internal locus of control; (10) positive attributes of efficacy and outcome expectancy; (11) self-awareness, and (12) self-knowledge (Wehmeyer, Agran & Hughes, 1998, as cited in Denney & Daviso, 2012).

Martin and Marshall (1995) add that self-determined individuals choose and assertively pursue goals, while adjusting performance, as needed, in order to find the most effective way to reach those goals. Self-determination is particularly important for students with disabilities as they transition from high school to college (Garrison-Wade, 2012), as the requirements and expectations are significantly different from high school. These differences may include the role of support staff, legal protections/mandates (e.g., IDEA) and more emphasis on student self-reliance, including a responsibility shift from school officials and parents to the student, particularly in the disclosure of disability. Self-determination skills are necessary for student success, particularly the ability to self-advocate when confronted with other obstacles that may be present at higher educational institutions, such as transportation, technology, university facilities, and architectural barriers (Garrison-Wade, 2012).

Durlak, Rose, & Bursuck (1994) examined whether students could learn specific self-determination skills using a direct educational approach, and then generalize those skills to the classroom. Their intent was to determine whether high school students could acquire skills that would help them to be successful in a postsecondary institution. Results underscored the importance of early learning of self-advocacy skills. While all students learned self-determination skills, those students who learned how to advocate for themselves using self-determination skills prior to transitioning to college, were more likely to be successful in their postsecondary educational experience, have a higher GPA (Sarver, 2000), and have more successful academic outcomes and a higher quality of life (Denney & Daviso, 2012) than students who learned these skills later. In the Denney & Daviso study, there were two participants who were unable to generalize these skills to other areas. Unique to both of these participants is that they had been enrolled in special education classes since early elementary school and had parents who advocated for them. This finding supports the critical nature of being able to advocate for oneself, and the importance of not relying on parents to advocate for them. Studies have shown the importance of self-determination skill development as it relates to successful outcomes. However, inconsistencies and lack of training for the educators working with students with disabilities at the secondary level has proven to be problematic (Denney & Daviso, 2012), further demonstrating the need for these skills to be developed at the postsecondary level.

Additionally, research has further explored various challenges that are common for students with disabilities. Garrison-Wade (2012) identified key areas of post-secondary transition that remain problematic for students with disabilities and influence their persistence towards graduation. These include, “(a) capitalizing on student self-determination skills, (b) implementing formalized planning processes, and (c) improving postsecondary support” (p. 113). Other critical competencies identified in this work include the importance of the development of social and self-advocacy skills, academic preparation, and familiarity with assistive technology. Note taking, studying, time management skills, test taking skills, and learning strategies were also noted as contributing to student success. Garrison-Wades’s findings are consistent with the findings of previous authors (Durlak, Rose, & Bursuck, 1994; Field, Sarver, & Shaw, 2003; Getzel, & Thoma, 2008), who looked at self-determination as a key to student retention and persistence.

A relationship also exists between student persistence and various academic and non-academic factors. Factors that might influence student persistence in higher education include decision-making, self-efficacy, mentoring, value of education, perceived social support (family and friends), and academic factors, including entrance exam scores, high school GPA, and college GPA (Bordes –Edgar et al, 2011). Students who persist towards graduation receive more mentoring, make positive persistence decisions (e.g., value education, demonstrate positive self-belief in their own ability, choose positive social supports), and have a high entering GPA (Bordes – Edgar, Arredondo, Kurpius, & Rund, 2011).

Mamiseishvili & Koch (2010) analyzed factors that influence persistence for students from first-to-second-year in college and risk factors that lead to attrition for students with disabilities. The authors looked at a number of different disability populations, including those with sensory issues (e.g., blindness, deafness), mobility or physical impairments, broad categorization of psychiatric conditions, emotional difficulties and learning disabilities. Their findings indicated that students with disabilities persist from first-to-second-year at a rate of 76.4%. However, there were discrepancies between various disability groups. Students who were identified with learning disabilities / dyslexia persisted at a rate of 85.7% (as the highest), and students with other conditions, not specified, persisted at a rate of 64.3% (as the lowest). Additionally, they found that students who received specific accommodations and services had a higher rate of persistence. Students who received course substitutions, course waivers, readers, note takers, scribes, and who participated in academic and social activities, saw a higher rate of persistency.

Particularly relevant to the work of this study, little is known as to the relationship between students with ASD and their ability to develop and enhance their own self-determination skills (Carter, et. al.). What data does show, however, is that the level of education that students receive in the general education environment is critical to the development of self-determination skills. This is particularly true as a result of inconsistencies in promoting self-determined behavior for students with disabilities (Denney & Daviso, 2012).

Self-Efficacy Theory (SET)

According to Albert Bandura (1994), self-efficacy is defined as one's belief in his or her ability to be successful. It is believed that increased self-efficacy will translate into an increase in greater academic success, retention and persistence rate. According to Wehmeyer, Agran & Hughes (1998) self-efficacy relates to one's belief that a specific behavior will result in a particular outcome. He notes that "a person has to believe that 1) he or she can perform a specific behavior needed to achieve a desired outcome and 2) if that behavior is performed, it will result in the desired outcome" (p. 22).

There are a number of positive factors that have been shown to be associated with the development of self-efficacy. These factors include, resiliency (Hamill, 2001; Hartley, 2013), which includes the ability to cope with difficult situations, adapting to change, finding humor in difficult situations, coping with stress, self-assurance, goal achievement, adapting to the unexpected, and one's ability to bounce back from difficult situations (Hartley, 2013), positive achievement outcomes and persistency (Zimmerman, 2000), the ability to handle challenging situations and finding information they need (Shattuck et al., 2014), high self-confidence and high self-esteem (Golden, 2003). SET has also been shown to be an effective predictor of motivation, student activity choices and motivation to learn (Zimmerman, 2000). In considering the effect of mentoring on the development of self-determination skills and the role of a mentor, previous research has also highlighted the importance of others influencing belief in self-efficacy. For example, Jenson, Petri, Day, Truman, & Duffy (2011), note the important role of instructors in having a positive effect on the level of self-efficacy.

Specific to this study is the importance of the mentoring experience relative to the development of self-efficacy. Previous research has shown a high correlation between intervention programs and one's belief in his or her own self-efficacy (Van Dinther, Dochy, & Segers, 2011). This was particularly true when the intervention program was based on social cognitive theory, and involved practical experiences (Van Dinther et al., 2011). Research also indicates that students with a high level of self-efficacy tend to also have high self-confidence and high self-esteem (Golden, 2003), particularly with getting the information they need (Shattuck, 2014), while noting that in applying one's learning leads to higher levels of self-efficacy (Jenson, et.al., 2011).

Mentoring

Mentoring has been successfully employed as a means to support protégé growth for thousands of years. It provides many benefits, including the development of meaningful relationships and the provision of guidance and support (Bordes-Edgar, Arredondo, Kurpius, & Rund, 2011; Salas, Aragon, Alandejani, & Timpson, 2014), and an increase in GPA and few failed courses during the first semester (Salinitri, 2016). In general, mentoring is commonly seen as an interactive learning and teaching process. Mentoring has also been shown to have a positive effect on academic achievement and school attendance (Rhodes, Grossman, & Resch, 2000). Most relevant to this study is the relationship between mentoring and the development of self-determination skills. The findings of several previous studies (Bordes-Edgar, Arredondo, Kurpius & Rund, 2011; Durlak, et al., 1994; Salas, Aragon, Alandejani, & Timpson, 2014), demonstrate a clear relationship between mentoring students in the development of self-determination skills and their success in postsecondary education. Although, not all of the previous literature involved students with ASD (e.g., Bordes-Edgar, et al. looked at Latina/o students), each demonstrates the importance of mentoring with postsecondary students. Relative to working with students with ASD, Pillay and Bhat (2012) propose a multipronged approach in engaging students with ASD. Included in that approach they specifically note self-advocacy and assertiveness, as well as having access to accommodations. Additionally, they note that those working with ASD students should assume a role similar to that of a coach whereby they may assist and support students in a broad range of academic and social experiences.

While there are a number of different mentoring models, in general, mentoring is believed to be either formal or informal. The *Pathways to College Network* (2011) describes formal mentoring as more structured, and encompasses both one-on-one relationships between an adult and the student, or an older more experienced peer and a younger peer, as well as small groups of students working with an adult or older peer on a particular goal. Informal mentoring is primarily concerned with supporting students more informally and with less structure. For example, informal mentors may include neighbors, teachers, and others who are interested in assisting students to grow and develop more fully. Zachary (2002) frames mentoring as the process by which knowledge is passed on from one person to another and facilitates personal development. The results of one survey found that informal mentoring is more common than formal mentoring (83% vs. 17%) (McLean, Colsanto & Schoen, 1998). The current study is only concerned with formal mentoring, provided in a more organized, consistent and structured approach, including pre-scheduled appointments, and pre-developed mentoring modules.

Sociocultural Development Theory

Mentoring has its foundation in the sociocultural development theory of Vygotsky (1978). This theory is comprised of three primary themes. The first theme states that social interaction plays a critical role in the process of cognitive development because social learning is a critical part of student development. The second major theme centers around the role of what Vygotsky termed the more knowledgeable other (MKO). MKO refers to the critical interaction between the learner and someone who has more knowledge than the learner. According to Vygotsky, this person could have been anyone within the learner's sphere of influence, including teachers, coaches, peers, advisors, and mentors. The MKO in this process is the mentor-researcher. Fundamental to this process is that the MKO shares his or her knowledge with the learner through their social interactions. The third component of Vygotsky's theory is the zone of proximal development (ZPD). ZPD has been commonly defined as the distance between the learner's ability to learn a new process or task under the guidance of a MKO as compared to his or her ability to learn that task independently (Vygotsky, 1978).

In considering the importance of sociocultural theory as it relates to the development of self-determination skills, colleges have been looking for better ways of supporting success for the increasing number of ASD students attending these institutions. Van Hees, Moyson and Roeyers (2014) found that postsecondary institutions of higher education can best support students with ASD through more extensive coaching aimed at developing skills. These skills should go beyond the academic environment and extend to daily independent living. The study also looked at the involvement of students with ASD in their own transition planning. Results indicated the importance of student participation in the planning process through more individual coaching, and highlighted the need for further research into the mentoring process and how mentoring contributes to the development of SD skills.

Conclusion

Self-determination skills are critical to student success, particularly students with disabilities as they transition from high school to college. Self-determination commonly includes, (1) problem-solving; (2) self-awareness; (3) goal setting; (4) self-management; (5) seeking services on campus; and (6) forming relationships with professors / instructors (Getzel & Thoma, 2008). These skills, along with confidence (self-efficacy), and self-advocacy, have been shown to be critical to student success. The importance of social interactions, especially with more knowledgeable others (e.g., teachers, coaches, advisors, mentors), plays a critical role in the development of these skills. Likewise, mentoring has also been shown to be an important component of skill development.

CHAPTER THREE

METHOD

Research Design

The research design used was a mixed methods action research approach, more specifically a Sequential Quantitative → Qualitative Mixed Method Action Research design. Although both qualitative and quantitative methods were used, the overall research design was intended to be more qualitative. Since each participant came into the study with widely different experiences, utilizing a more qualitative approach adds depth which may otherwise be missed. Herr and Anderson (2015) propose that action research is useful in generating "local knowledge that is fed back into the setting" (p. xiii). For this reason, this particular design was chosen in order to capture experiences that may be relevant to this particular setting. Using a design that incorporates both quantitative and qualitative data allows for comparison of data through triangulation, where data from multiple sources, including the pre- and post-surveys, participant observations, interviews, and post-session surveys can be used.

Setting and Participants

Setting. This study took place at a large university located in the southwestern part of the United States. Individual mentoring sessions and the final interview took place in university administrative offices that were agreed upon and convenient for each participant.

Participants. Participants were recruited using a sample of convenience from a pool of approximately 120 students who identified themselves to the Disability Resource Center (DRC) as having ASD. To qualify for participation in the study, the following criteria were established: (1) enrollment at the university where the study took place; (2) documentation verifying an Autism Spectrum Disorder; (3) registration with the DRC; (4) 18 years or older; and (5) signed informed consent.

Disability documentation consisted of either a psychological or a psychoeducational evaluation, verifying that the student is diagnosed with ASD. In order to ensure that mentoring sessions could occur in-person, and to control for any extraneous variables associated with the protocol, participants were limited to students enrolled in in-person classes on campus. Online students from out of state were not included.

Participant background. The following section provides a brief outline of each participant's background and experience coming into the study.

Susan. Susan was an 18 year-old freshman, majoring in Digital Culture. Susan attended a public high school and was on an IEP. She was introverted and friendly.

Karen. Karen was a 20 year-old junior, majoring in Theater. Karen attended a public high school and was on an IEP. Karen was open and talkative, and was diagnosed with ASD the year before high school began.

James. James was an 18 year-old freshman, majoring in Engineering. James attended a public high school and was on an IEP, although he indicated that he did not use the IEP in high school. James was introverted and openly acknowledged at the beginning of the study that he does not like talking to people.

Matthew. Matthew was a 43 year-old junior, majoring in Accountancy. Matthew attended a private high school (religious), and was not on an IEP. Matthew was witty and talkative.

Amy. Amy was a 51 year-old junior, majoring in Psychology. Amy did not attend high school, and received her GED instead. Given that Amy did not attend high school, she was not on an IEP, was outspoken and confident. At one point, she openly acknowledged that she views herself as narcissistic.

Participant demographics are listed in Table 1.

Table 1

Participant Demographics

Name[1]	Gender	Age	Year in School	Major	High School	High school special education/ Accommodations
Susan	Female	18	Freshman	Digital Culture	Public	Yes; IEP
Karen	Female	20	Junior	Theatre	Public	Yes; IEP
James	Male	18	Freshman	Engineering	Public	Yes; IEP (not used)
Matthew	Male	43	Junior	Accountancy	Private (religious)	No
Amy	Female	51	Junior	Psychology	GED did not attend high school	No

Role of the Researcher

As an administrator at the university where this study, I took an active role of practitioner/researcher and insider. In this role, I served as both the researcher and the mentor throughout this study. Herr and Anderson describe the role of the insider within an organization where the research is being conducted, and define this action research as an “inquiry that is done by or with insiders to an organization or community…” (Herr &

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[1] Pseudonym

Anderson, 2014, p. 3). As an insider, I worked with other insiders (students, faculty and staff). As the researcher, I also served as the administrator for all procedural elements, including scheduling appointments, creating assessments, analyzing data, and reporting on findings. As the mentor, I served as the facilitator for each mentoring session, including answering questions, providing information, asking specific prompts, and serving as a general resource for all participants.

While the mentoring was time intensive, I chose the role of mentor in order to (a) provide my own reflective observations of the process, (b) comment on challenges or opportunities to improve the process prior to the innovation, and (c) control for any variations that might have otherwise occurred by utilizing other staff as mentors. As an insider, I also served as a practitioner/researcher. The importance of this research and the role that I played was intended to improve the support services provided to students with ASD, and to explore ways to more effectively engage students with disabilities through their educational experience. Challenges that were considered included finding the time to conduct the research, controlling for personal biases and assumptions regarding outcomes, including the assumption that mentoring (whether formally or informally) is critical to helping students succeed academically in the postsecondary environment, and that disability information remained confidential throughout the entire process.

Procedure

Critical to the process of action research is the importance of utilizing a cycled approach (Ivankova, 2015). This study was developed and implemented over three distinct cycles. The following provides information regarding each of those cycles, and how each contributed to the overall development of the process.

Cycle 1 (Development*).* The first research cycle focused on the development of this innovation. This included gathering information from the literature, assessing the need for the innovation and implementation of a mentoring program, collecting information from a previous needs assessment performed by the DRC, and developing materials that would be used in the implementation cycle (e.g., pre- and post-survey, mentoring modules, post-session surveys, and interview questions). The previous needs assessment explored the perceived importance of a mentoring program for students with disabilities. There were 22 DRC staff who responded to the needs assessment. Results indicated that DRC professional staff viewed self-advocacy, decision-making, self-management, problem-solving, self-awareness/knowledge, as the most critical skills for students with disabilities to develop. This led to the development of the three constructs (primary themes) used in each of the mentoring sessions. These constructs were consistent with those identified in the literature, and were, (1) *Self-advocacy*; (2) *Self-awareness*; and (3) *Confidence*.

Additionally, critical friends and colleagues assisted in narrowing topic areas. This included discussing the innovation with DRC staff members who have an expertise in working with students with disabilities in order to develop each mentoring session module. In addition, DRC staff also viewed having a knowledge of university services and resources; understanding the difference between high school and college; assistive technology; and understanding accessibility laws as being important for students. Additionally, DRC staff viewed the Disability Resource Center (DRC), TRiO Student Support Services (provides academic support services, including tutoring, to first-generation, low-income and students with disabilities), student advocacy, academic tutoring, counseling services, Student Success Center (provides a variety of academic support services, including tutoring, writing assistance, academic mentoring, and supplemental instruction), financial aid, and Career Services as the most important resources respectively. Each were included in the mentoring modules.

Cycle 2 (Implementation of Innovation). The second cycle focused on the implementation of the modules and strategies developed in Cycle 1. This included recruiting participants, sending the pre- and post-surveys, providing the individual mentoring modules, noting observations, providing post-surveys, and conducting the interview at the conclusion of the protocol.

Recruitment. Once IRB approval was completed, recruitment of participants began the beginning of July. Maintaining strict confidentiality was critical to this process. In order to ensure that confidentiality was maintained for all participants, the recruitment process was facilitated with DRC advisors identifying and contacting students with ASD. All disability documentation remained under the control of the DRC at all times. To ensure confidentiality, selected students were given information on how to create a unique identifier, which they then used on the pre- and post-survey, and post-session surveys. All efforts were made to maintain strict confidentiality for all participants. There were approximately 120 students total who had identified themselves to the DRC as having been diagnosed with ASD. In collaboration with the DRC, all 120 students received an initial recruitment letter (via email) at the beginning of July (see Appendix A). Due to limited response from students, a second email was sent mid-July. Again, given the low response rate from prospective participants, DRC staff assigned to work with students with ASD contacted students at the beginning of September and personally invited their participation in the study (see Appendix B). As an additional incentive for participation, each person who agreed to participate was entered into a random drawing for a $25.00 Visa gift card. The email provided information about the study and asked students who were interested in participating to contact the mentor-researcher. Participation in the study was voluntary.

Pre-survey. Once the recruitment phase was complete, participants were contacted by the mentor-researcher (via email), and was asked to complete a consent form (see Appendix C). Prior to the initial meeting, each participant received (electronically) a 6-point Likert scale survey (see Appendix D). Once the pre-survey was completed, an initial meeting was scheduled with each participant.

Mentoring Sessions. The mentoring sessions began at the end of August and continued into the beginning of September. Each of the sessions took place in university offices or meeting spaces that were convenient and agreed upon by the participant. The initial meeting was critical in establishing a strong rapport with each participant. This initial meeting provided general information about the process, including getting to know each other, what participants could expect from the process, reviewing confidentiality, building rapport and trust with each participant, and addressing any questions or concerns participants may have about the study.

At the conclusion of the initial meeting, the mentoring schedule was determined and the first mentoring session was scheduled for each participant. Sessions were intended to be fluid and interactive conversations, and began with general building of relationship, asking how each participant was doing, getting a sense of their day, etc. This was followed with an introduction of the specific module topic, including why that topic was important, what research has said about that topic, and what we would be discussing during the module. The final part of the process was a conversation around that particular topic, including a discussion of their experience, challenges, opportunities, lessons learned, resources and services used, and areas for additional support, answer questions, etc. As indicated in observation notes (see Appendix G), conversations did not always follow a specific and outlined script. While there were talking points and specific prompts used to facilitate the conversation and ensure critical elements were covered (see Appendix H), the conversations were allowed to flow and evolve naturally. This was done intentionally in order for this experience to be reflective of what a mentoring session would look and feel like.

Table 2 provides a timeline for when each of the modules were provided, as well as the topic area discussed.

Table 2

Mentoring Session Topics / Timeline

Session	Topic	Date
Initial Meeting	General introduction and information	Aug. / Sept.
Session 1	Understanding differences between high school & college	September
Session 2	Self-advocacy skills	September
Session 3	Understanding university services & resources	October
Session 4	Decision-making / problem-solving	October
Session 5	Self-awareness	November
Final Meeting	Final interview	Nov. / Dec.

Post-session survey. Following the completion of each module, a brief survey was administered which was intended to assess (1) the extent to which the participants viewed the usefulness of that particular module, and (2) how they used the information from that module in their educational experience. The complete survey for each session can be found in Appendix E.

Participant observation. Participant observation was critical during this cycle, and required flexibility in adjusting to the flow of each session. Observations were noted after each session, including individual interactions, specific experiences noted by the participants, and recommendations and suggestions for improving future opportunities. Complete participant observations can be found in Appendix G.

Interviews. Participants engaged in all scheduled meetings (35 total), including the initial meeting, all five mentoring modules, and the final meeting / interview. The modules were created around concepts that had been shown through the literature as being critical to the development of self-determination skills, or were identified by DRC professional staff as being critical to students' academic success.

Post-survey. The post-survey was administered at the completion of the final interview. Pre- and post-surveys, which were alike, were intended to assess the extent to which the mentoring protocol would influence student self-determination behaviors. Participants assessed self-determination behaviors relative to the constructs (self-advocacy, self-awareness, and confidence), identified as part of the study. The complete survey is located Appendix D.

Table 3 gives the timeline for data collection.

Table 3

Data Collection Timeline

Data Collection Measure	**Collection Timeline**
Pre-survey (administered electronically)	August
Participant observations (during sessions)	September – December
Post-session survey (following each session)	September – December
Post-survey (administered electronically)	November – December
Interview (in-person)	November – December

Cycle 3 (Reflection / Data Analysis)

The third and final cycle involved collecting and assessing the data from the previous two cycles.

Materials

The study used five instruments to gather data. Table 4 provides details on each, including the type of data gathered, type of instrument, source of the data and specific details.

Table 4

Data Collection Instruments

Data	**Instrument**	**Source**	**Detail**
Quantitative	Pre-survey	Participants	3-5 minute survey (online) 28 Likert-type questions
	Post-session survey	Participants	1 Likert-type question
	Post-survey	Participants	3-5 minute survey (online) 28 Likert-type questions
Qualitative	Participant Observations	Researcher	Observations resulting from 25 individual mentoring sessions
	Post-session survey	Participants	1 open-ended question
	Semi-Structured Interview	Participants	5 participants yielding 2 hours and 15 minutes

Pre- and post-survey. The survey had 28 questions, and was designed to assess students' belief in their own self-efficacy, confidence in their own abilities to advocate for themselves, their understanding of available resources/support services, awareness of their own disability, and awareness of disability/accessibility laws. There were three primary constructs included in both the pre- and post-assessment. The survey was based on the previously described needs assessment completed by DRC staff. This survey was used to gather general demographic information, including whether participants received accommodations in high school, how they viewed their experience in high school utilizing accommodations, whether they have participated in any student success programs previously, and how they rate themselves relative to the constructs identified as part of the study. Table 5 lists questions from the pre- and post-survey, along with the construct for which it measures. The complete survey is located in Appendix D.

Table 5

Pre- and Post-Survey Constructs

#	Question	Construct
11	I feel comfortable advocating for myself	Self-advocacy
14	I believe self-advocacy is critical to my success as a college student	Self-advocacy
19	I am confident that I can advocate for myself	Self-advocacy
23	I can discuss the impact of my disability with my professors	Self-advocacy
16	I am confident in my ability to request accommodations when needed	Self-advocacy
15	I know how my disability impacts my learning	Self-awareness
12	I believe self-awareness is critical to my success as a college student	Self-awareness
17	I know what accommodations work best for me	Self-awareness
20	I am knowledgeable regarding disability legislation (e.g., Americans with Disabilities Act).	Self-awareness
21	I am familiar with student support services at the university I am attending	Self-awareness
13	I am confident in my ability to navigate the complexities of the university	Confidence
22	I am confident that I will be successful in achieving a postsecondary degree	Confidence
27	I view myself as a confident student	Confidence
26	I view myself as an intelligent student	Confidence
25	I am confident in my ability to problem solve	Confidence

Description of Modules. Information gathered as part of a departmental needs assessment was used in the development of the following five modules. This needs assessment was conducted by the disability services office. The purpose of the needs assessment was to determine if there was a need for the development and implementation of a mentoring program, and what information was critical to be included in that program (see cycle 1).

Based on the needs assessment, the following modules were developed and used to guide each of the sessions. The modules were designed to be interactive and informative regarding skill and knowledge development for participants. During the course of each module, the researcher provided information to each participant, and engaged each participant in a way that would be similar to an actual mentoring session. Each module was designed to introduce a particular topic, and then frame that topic in way to ensure common understanding, while minimizing any confusion as to what was meant or intended to accomplish during the presentation of the module. Specific talking points for each module are located in Appendix H.

Module 1 – Differences between high school and college. As students transition from high school to college, it is critical to their success that they understand key differences between the two. This is especially true for students with disabilities, where the experience and the systems in place to support success and access are significantly different. The purpose of this module was to instruct participants on primary differences between high school and college, and engage students on what their experience(s) has been in that transition. Key differences include self-advocacy, establishing eligibility for services, requesting accommodations, and legal protections. In high school, the responsibility for identifying the need for services primarily falls on the high school and parents, but as students move from high school to college, the responsibility of establishing eligibility for services and requesting accommodations and other support services falls to the student. This is one of the most significant changes for many students, as well as for parents. Understanding the difference is important to student success, as well as to the foundation of module 2 which focuses on developing self-advocacy skills.

Critical to the accommodation process was a discussion regarding accommodations being provided on a course-by-course basis, at the university. The intent of adding this to the conversation was to help students understand key differences between the IEP process in high school and the process for requesting accommodations in college. Since not all participants received accommodations in high school, each discussion, at times, was different.

Key legislation and the differences between legislative protections and rights that existed in high school were discussed, including the Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act (1973), and the Americans with Disabilities Act (1990, 2008). Module 1 also included key student responsibilities, including each student meeting the same academic standard, regardless of disability status, and a discussion about the Family Education Rights and Privacy Act (FERPA), which states that parents no longer have access to their student records, unless students choose to grant that access.

In order to facilitate the discussion, sessions included pre-developed prompts, or prompts that were determined appropriate per the conversation. The following are examples of the prompts used in module 1 (see Appendix H for a full list of talking points and prompts).

1. Prompt 1 – What do you see as the primary difference between your high school experience and your collegiate experience?
2. Prompt 2 – What has been your experience in transitioning from high school to college?
3. Prompt 3 – What have been the challenges / opportunities in that transition?

Module 2 – Self-Advocacy. Self-advocacy has long been associated with student success. This is particularly true for students with disabilities. According to Wehmeyer, Agran and Hughes (1998), “assertive behaviors and effective communication skills are critical components of self-advocacy. Students with disabilities frequently need instruction in these areas to improve interactions and to achieve self-selected goals” (p. 232). Included in good communication are good listening skills, conversational skills, non-verbal communication skills (eye contact, body gestures), and confidence.

Module 2 focused on facilitating a conversation around how and to what extent each participant felt comfortable in advocating for what they needed and any strategies that they had developed to aid in that process. This conversation included an exploration of individual communication styles, including how participants viewed their communication style. This module included discussions on the importance of communication skills, including active listening skills and non-verbal communication skills. Given the very diverse personalities of each participant, the manner in which these conversations occurred was occasionally strikingly different. The intended outcome of this module was to establish the importance of self-advocacy as an important tool in student development.

Pre developed prompts, or prompts appropriate for the conversation, used in Module 2 to better facilitate the discussion, included the following examples: (see Appendix H for a full list of talking points and prompts).

1. Prompt 1 – What are ways that you have found effective in advocating for what you need?
2. Prompt 2 – What do you consider your strengths / weaknesses in advocating for self?
3. Prompt 3 – What has been your experience in self-advocating in college?
4. What is your preferred method for self-advocating (e.g., email, in-person)?

Module 3 – Understanding University Resources and Services. Module 3 focused on providing information related to various university services and resources. These resources were identified as part of a needs assessment performed by the DRC. In this needs assessment, the DRC staff were asked which university resources were most important to student success.

In order to advocate for the services that one needs, one must first have an understanding of those services. The method used in providing this information and facilitating conversations included a brief introduction of the service, followed by a discussion as to whether or not they have used the service, and how that service can or has benefitted their educational experience. Participants also viewed brief videos that were available on the Counseling Services and Student Success Center websites. The video for counseling services can be found at the following link - https://youtu.be/kZqk6y8Akxg. The video for the Student Success Center can be found at the following link - https://vimeo.com/77829934.

Pre-developed prompts used in Module 3 included the following examples: (see Appendix H for a full list of talking points and prompts).

1. Prompt 1 – What services and resources have you found useful / not useful?
2. Prompt 2 – How would you improve the services and resources available at the university you are attending?
3. Which services and resources would you most likely use?
4. What has been your experience in utilizing the resources and services you have used?

Module 4 – Decision-Making / Problem-Solving. Problem-solving and decision-making are life-long skills. One of the objectives of being a student is to learn how to be an effective life-long learner. For students diagnosed as having an Autism Spectrum Disorder, there may be additional challenges. Though students with ASD are capable of academic success, learning to navigate the academic environment may include challenges that are unique to this population. Research has shown that developing effective problem-solving skills may help reduce barriers, improve quality of life and increase the likelihood of greater academic success. An important element of problem-solving is being able to think abstractly. However, students with ASD tend to have weaker conceptual reasoning (Williams, et al., 2014).

Much like other students, students with ASD face challenges that are common among college students, including managing stress related to the academic demands of being a student, time management, and most especially navigating the complexities of establishing and maintaining social relationships (Glennon, 2001). While there is evidence to support the effectiveness of more detailed problem-solving therapies (PST)

(Pugliese & White, 2013), the purpose of this module is to outline and develop basic problem-solving techniques that may be used to guide a facilitated conversation regarding the importance of developing problem-solving skills. Pugiliese and White (2013) note in their work that students benefit from developing problem-solving skills.

Pre-developed prompts, or prompts appropriate for the conversation, used in Module 4 included the following examples: (see Appendix H for a full list of talking points and prompts).

1. Prompt 1 – What strategies have you found most effective in problem-solving?
2. Prompt 2 – How would you incorporate the strategies and skills discussed in this module?
3. Prompt 3 – Are there particular situations or problems that you have found to be most challenging?

Module 5 – Self-Awareness. Self-awareness is broadly defined as understanding oneself. For students with disabilities, having an understanding of oneself is critical to ensuring success. Having an understanding of one's strengths and weaknesses positively influences one's quality of life (Wehmeyer, Agran &Hughes, 1998). This is particularly true in the development of self-determination skills. According to Wehmeyer, Agran and Hughes (1998), "If students with disabilities are to become self-determined, they need both to possess the skills to act in a self-determined manner and to hold perceptions and beliefs about themselves and their environment that are conducive to using those skills"

(p. 274). They also note the importance of disability awareness, and emphasize self-acceptance as a critical element of self-understanding.

Module 5 was designed to facilitate a conversation on how participants viewed their disability, and to help students understand the importance of knowing oneself. Pre-developed prompts, or prompts appropriate for the conversation, used in Module 5 included the following examples: (see Appendix H for a full list of talking points and prompts).

1. Prompt 1 – How would you describe your disability to another person?
2. Prompt 2 – What stereotypes have you heard regarding ASD? How do you feel about stereotypes?
3. Prompt 3 – How do you view disability?

Post-Module Surveys. At the completion of each module, each participant was sent a link to a brief (two questions) post-session survey. The surveys asked a question on how useful participants viewed the module, and a question on what ways information learned in the module was used (see Appendix E). Additionally, following each session, the researcher noted his general observations of the interactions, including what he believed to be relevant information related to the study (see Appendix G).

At the end of the 12 weeks, participants took a post-survey (same survey as the initial) that asked how they viewed their own self-efficacy after having completed each session. They also described their experience with the process in a semi-structured interview. The following are sample interview questions (see Appendix F for full list of interview questions):

- Can you describe your experience in going through the mentoring program this semester?
- What would you say are the most important skills to develop as a student?
- Can you describe what university resources or services you used this semester?
- What would you say is the most important thing you learned this semester from this mentoring program?
- Can you tell me what techniques or strategies you used this semester?

Data Analysis Plan

Data were analyzed using a mixed-methods approach. Quantitative data was analyzed first, followed by analysis of the qualitative data.

Quantitative Data Analysis. Quantitative data from the pre- and post-intervention surveys, and post-module surveys were used to measure levels of self-efficacy, the ability to advocate for oneself, and to determine if participants found the information to be useful. The surveys were administered using Qualtrics. Descriptive statistics including mean, medians and standard deviations were determined using SPSS software. Given the small sample size, no statistical analyses could be conducted.

Qualitative Data Analysis. Qualitative data included participant observation notes, open-ended questions from post-session surveys, and the final interview. The participant observation notes and the interviews were transcribed. Emerging themes were identified and correlated relative to research questions. Given the limited number of participants in the study (n=5), qualitative data were coded by hand, highlighting and noting commonly reoccurring themes and responses. Post-session survey information was triangulated with data gathered from observation notes and interviews.

Triangulation of Quantitative and Qualitative Data. Triangulation of the data was a critical element to ensure the validity of this study. Triangulation is a process whereby convergence or non-convergence of results is confirmed through various forms of data input. In this study, triangulation of results occurred by analyzing participant responses and data through (1) pre- and post-surveys, (2) participant observations, (3) post-session surveys, and (4) semi-structured interview.

CHAPTER FOUR

RESULTS

Results are organized by primary themes and secondary themes. The primary themes were identified through the literature, while secondary themes were identified from the post-session surveys and the semi-structured interviews. Five students participated in this study, and completed all five mentoring modules. Quantitative and qualitative data were collected utilizing pre- and post-surveys, participant observations, and interviews), then analyzed. Data results are organized by the research questions guiding the study, primary themes identified from the literature, and secondary themes identified during the mentoring process and data analysis.

Research Question 1: *How do students with ASD describe their experience in participating in a mentoring program?*

While all participants responded positively to the mentoring program, some were more positive than others. Karen, for example, who was highly engaged throughout the entire process, said of her experience in the program, “It’s been great”, and has, “honestly been one of the most fascinating experiences I've had so far at [my university]”. Susan added, “I thought it was interesting. I thought it was an interesting program. I think it's definitely been beneficial, and helped me to think about things”.

Matthew described the experience as being “emotionally productive” in that “there's a way to say what I feel needs to be said. It's a chance to be heard”, and that he felt that “…it's a way of having my problems serve a purpose for the next person. It's really very beneficial for me”. He also added that, “the fact of being able to take the things that aren't right and put them to someone who might be in a position to fix it, or at least to talk to that person who might be in a position to fix it”, and that “having access to someone who can have an effect on something is very, very meaningful”. Amy then added that “our meetings have been tremendous”, while James followed that the process was “fairly easy”, and that “It didn't take a whole lot of time”.

When further exploring why it was positive, Karen suggested that it was a positive experience due partly to her being “low-key egotistical” and someone who enjoys “talking about [herself]”. She further added that “disability is something that doesn't really come up in your everyday conversations with professors or the students or anything. To be able to info dump as [an] autistic is really amazing to me”. She went on to say that she viewed the overall experience as being, “Ridiculously useful”, noting that she particularly enjoyed talking about her disability experience and her overall level of self-awareness. Adding that it is not often that someone might have an opportunity to talk about their experience in this way. Karen added that she found the experience positive in part due to her being able to, “Info dump without feeling awkward”.

Relationship with mentor. Participants also spoke to the importance of having a good relationship with the mentor. Examples of this relationship include Amy saying, “(You are) extremely easy to talk to”, and that, “I find you to be a (sic) genuine. I enjoy doing participation with you”. Adding that she has a, “sense of a person's genuineness and of a person that wants to make things happen for the good”. Amy went on to say, “I don't find you to be judgmental or I would not have been participating up to this point”, indicating the importance of developing an honest and genuine rapport with each participant. To do otherwise may have been detrimental to the flow of information.

Challenges. While participants spoke of the benefits in having engaged in the process, some aspects were also challenging. Karen, for example, spoke about an experience she had in setting-up services with the DRC, adding that sometimes she does not feel connected to the university community, and that, “taking advantage of resources still feels awkward”.

Matthew said of his challenges, “I didn't necessarily have the words to express what I wanted to say”. Although Matthew found the experience to be beneficial, he also felt that modules were “smudged together”, which was interpreted to mean that the modules ran together, rather than there being a distinct separation between them. James provided some helpful context in understanding the process when he added that he does not like talking to people. This was evident throughout as his responses tended to be very short. When asked what he found to be most challenging in participating in this experience, he noted that it was “mainly the conversation, just like talking”. Indicating the need to further explore how certain communication styles might, in fact, be barriers to the mentoring process.

Other challenges included differences in communication styles. For example, James and Susan required additional prompting to participate in the conversation, as their responses tended to be shorter. Whereas, Amy, Karen and Matthew were much more talkative and engaged in the dialogues.

Research Question 2: *How do participants describe their experience in discussing primary self-determination constructs?*

Three primary themes were identified in the literature prior to the start of the study. These primary themes served as anchors for each of the mentoring modules, which were: (1) self-advocacy; (2) self-awareness; and (3) confidence. Secondary themes were identified during the mentoring sessions, and corroborated in the data analysis. Secondary themes provided additional details as to how participants describe their experience relative to primary themes. In some cases, the secondary themes were more subtle (e.g., resources, skills, knowledge), whereas with others, secondary themes were more descriptive and insightful (e.g., stereotypes, influence of others).

Table 6 shows primary themes, secondary themes, assertions, and sample statements. Data was organized from the pre- and post-surveys, post-session surveys, and semi-structured interviews, while participant observations were used to confirm or contradict data results, as part of the triangulation process in ensuring validity of the assertions.

Table 6

Primary Themes, Secondary Themes, Assertions and Sample Statements

Primary Themes	Secondary Themes	Assertions	Sample Statements
Self-Awareness	• Stereotypes • Disability influence • Experience • Influence of others • Accommodations • Effectiveness • Development • Challenges • Opportunities • Environment • Peer networks • Online resources / tools	Self-awareness is a critical aspect in students' demonstrating self-efficacy. Self-awareness is an important part of understanding the influence of one's disability.	"It has helped me to think about myself, and to better understand me and how I process things" (reflection). "Labels aren't problematic. This is what you are. It doesn't need to have this negative connotation to it" (opportunities).
Self-Advocacy	• Resources • Skills • Strategies • Experience / HS • Experience / college • Accommodations • Personality • Knowledge • Peer networks • Communication • Challenges in advocating	Self-advocacy is a critical skill in supporting student self-efficacy. Self-advocacy is often challenging for students with ASD.	"Self-advocacy is the most important [skill to develop]" (development). "Sometimes I explain it awkwardly, as words are confusing" (communication).
Confidence	• Confidence building • Lessons learned • Personality • Past experience • Current experience • Influence of others • Self-assured • Knowledge • Skills	Confidence is a critical aspect of student self-efficacy. Mentoring increases confidence in students with ASD.	"I feel like even the stuff that I don't know how to do, I can at least figure out how to do" (self-assured). "No, it would be hard for you to get a job if you were me" (self-assured).

Self-Awareness

Participants expressed that self-awareness was a critical element in their respective educational journeys. Participants demonstrated a high-level of self-awareness, and enjoyed discussing that module. Karen was especially positive in discussing self-awareness, and emphatically noted that she likes talking about those areas of her life that are of interest to her. For Karen, self-awareness can be a vague concept, but she found it very helpful in talking through each of the modules. She added that she found the process to be helpful in that it allowed her the opportunity to, “info dump”. We had lengthy conversations around what she has learned, personal areas of interest, and the experience of having ASD. In our conversations, she stated that she found the experience valuable, and is considering ways in which she can incorporate her own life experience in helping others.

Self-reflection. Participants were also self-reflective. James, who demonstrated more introverted behaviors than other participants, including limited eye contact and short answers when responding to questions, said that the experience allowed him the opportunity to self-reflect, and to analyze his own “skills” and “shortcomings”. He added that he hopes he may be able to use the skills discussed to improve himself. While James seemed reluctant to engage throughout the process, he was very thoughtful when observing that he has historically struggled with specific skills, including and especially time management, perhaps indicating that this is an area where he has an understanding of how ASD can influence his ability to manage critical areas of his life. He also noted his regret at not having participated in IEP meetings in high school.

One of the more telling statements made by participants is when Karen said, “There is no me that is not autistic”, possibly reflecting a deeper understanding as she self-reflected on having ASD.

Challenges (general). There were challenges identified during the self-awareness discussion that were specifically related to having ASD. For example, James initially said that he was unaware of his strengths and weaknesses, but then added that, given that he does not like to talk, said that self-advocating can be difficult. Perhaps indicating that he, in fact, does have an understanding of his strengths and weaknesses, but is unable to express his true beliefs given other challenges (e.g., not feeling comfortable talking). He also added that he tends to be more “non-assertive”, and, “timid”, while trying to, “avoid conversations”. This same sentiment was shared by Susan. Karen spoke of social challenges that she has experienced. She said, “Being on the autism spectrum you have a lot of social obligations and a lot of social obstructions in the way you function”. She went on to say that she “sucks at social cues”. Similarly, Matthew said that he also struggles in social situations, specifically when non-direct communication is used. He said of his experience and speaking in general of others with ASD, “…those with ASD struggle with implied language, or having conversations with people who tend to use implied language”, which he said can often lead to confusion in conversations. He specifically noted that those with ASD often will struggle in conversations with those who tend to use “idioms”. According to Matthew, people who are autistic tend to view things very literally, noting that change can be very “disruptive”.

Social perception. Challenges in having ASD also included social perception around what ASD means. Karen said that she identifies herself as “high functioning”, but, does not like either of the terms “high functioning” or “low functioning”. She suggested that there is an exclusionary outcome when putting people into specific categories. She often does not get the help she needs because others do not see her as having a disability. As a result, she has become more self-aware as to how she presents herself. This was similar to a comment made by Amy when she said that ASD is not always taken seriously, and has been challenging when advocating for what she needs, particularly when others do not believe that she has a disability.

Stereotypes. Another interesting secondary theme was stereotypes. As the subtheme for stereotypes began to emerge during sessions, the theme was included in talking points for other sessions, and participants were asked to think about and respond to those stereotypes that they have most commonly seen, negative or positive.

In a lengthy conversation with Karen, she spoke about the idea of common stereotypes and misperceptions related to those with ASD, specifically negative ones. In her view, negative rhetoric seems to be common, and she provided examples that she has heard about ASD. She recalls watching a popular news program about a family that had just learned that their child had ASD. Upon hearing that, the couple expressed that they had just “lost a child”, and were, “grieving the diagnosis”. Karen appears to be very aware of negative social constructs often espoused in media and other popular culture. She discussed a common classification of “high functioning Autism”, and the problem with that classification. She suggested that in classifying some individuals as “high functioning,” it inherently becomes exclusionary to those who may not fall in that category. She recalls that others have told her that she is “basically normal,” and that any struggles she may have are due to her, “not trying hard enough”, suggesting a misperception around disability. By using the term “high functioning”, she believes it creates a scenario where those who are not “high functioning” must be somehow “less than”, and perhaps viewed by others that they “may not be able to contribute as much in society”. She gave a number of examples where she responded openly to others who have espoused incorrect ideas about disability, suggesting that she also has well-developed advocacy skills. She does not see herself as having a disability, and chooses not to identify as disabled or non-disabled. She will selectively identify herself in some contexts, but not in other contexts.

Other common stereotypes suggested by Karen, included, the movie *Rainman*, and the TV series *The Big Bang Theory*. She noted that media will often portray characters on TV or movies as being autistic without actually labeling them as autistic. She specifically noted *The Big Bang Theory’s* character Sheldon as a common stereotypical portrayal of someone who is autistic, and recalled an experience she had after watching a production where one of the actors played the role of an autistic person. On the way out of the theatre, she heard others exclaim, “He did such a great job with the character. I could really tell how it must feel to be autistic”. She recalled being very conflicted during the days following that production, feeling that they could not possibly know what it must be like to have ASD, unless they had ASD.

Another common stereotype Karen and Susan both note is that those with ASD are good at math, adding that neither are particularly so. From an advocacy standpoint, Karen will often take a stand when she feels negative stereotypes and misperceptions are being perpetuated. She gave an example of an exchange that occurred over social media where someone took exception to something she posted in support of disability awareness. What made the conversation so insightful, however, was how she was able to put herself in someone else's shoes and see perspectives other than her own, which is often said to be problematic for those with ASD.

Susan noted similar stereotypes, including hearing others say, "Oh, you're autistic, just like Sheldon Cooper". Again, referring to the character on the television show *The Big Bang Theory*. She said that when she hears stereotypes, she typically will not address them with the speaker and just lets the comments roll off her back, possibly indicating a lack of confidence in her ability to self-advocate.

Matthew proposed an alternative view and said that he loves stereotypes. When asked why, he responded that, "They give you a way to start," and allow for conversations to happen around a particular stereotype, which he says may broadly define a group, and help others understand particular nuances of that group. Matthew encouraged stereotyping, adding that, and "While we are not robots, when it comes to understanding the language of the neuro-typical, we are best described as robots in terms of what we will and will not understand. It's a point of perception". When asked what stereotypes he has heard most often, he also noted the character, Sheldon, from *The Big Bang Theory*. The only participant who did not address stereotypes was James, who responded that he was not aware of any stereotypes.

Services and other resources. Self-awareness was demonstrated in students' ability to access services and other resources, including their accommodations. Karen noted her frustration in requesting services through the Disability Resource Center saying that it was "confusing". Matthew reported several experiences that he had over the course of the semester where self-awareness became more relevant. Being on the spectrum can sometimes negatively influence his ability to engage in coursework and access accommodations. For example, in one of his classes, he recalled having a professor who spoke very fast, to the point where the transcriber was unable to keep pace with the lecture, demonstrating the critical nature of certain accommodations, and the challenge that exists when the accommodation is not effective. He also spoke of challenges that he has had previously in advocating for himself.

Challenges associated with having ASD. Matthew claims that those with ASD have the unique ability to self-diagnose. He noted that with “Aspies”, whenever someone talks, those without Asperger’s are always “trying to interpret it into something else”. He indicated that those with Asperger’s or ASD are very literal in what they say, which he noted as an important element to self-advocacy. He then gave an example of what a conversation with him might look like. He said, “If I say the sky is blue…I don’t mean let’s take a walk, I mean the sky is blue”. He noted the previous example of not belonging in one of his classes this semester, saying that, “When I say that I do not belong in this class, I don’t mean that I am mad at you, or I am upset, I literally mean that I do not belong in this class”. While the conversation was not specifically on self-awareness, he believes self-awareness to also be a critical part of self-advocacy, which demonstrates self-awareness of his communication skills.

Peer-to-Peer Mentoring. Participants also discussed the importance of having a peer-to-peer mentoring program as a good way of developing self-awareness. Karen believes that having someone who can advise and support would be critical. Having someone tell you to, “just get over yourself”, and, “It's okay, we'll deal with your emotions in a second. Just get the information down and get it to who needs to get it”, would be a great asset. Elaborating on what that might look like for her, having someone who she can call or email, even late at night, and be able to work through challenges together, would be very beneficial. She prefers having someone who is brutally honest, adding that, “Sometimes your problems are unavoidable. Sometimes you just got to pick the lesser of two evils. Go to sleep and go to their office hours first thing in the morning, [instead of] staying up the next seven hours trying to freak out”.

Even though Karen found the idea of peer-to-peer mentoring to be worth considering, she also discussed possible challenges. She is often intimidated by her peers, especially those who she believes have been very successful and have gone through the same experiences. She finds that success can be, “intimidating”. As a strategy for that, she is often much more comfortable talking with faculty and staff.

Conversely, in an email received from Amy, she noted the importance of having peer-to-peer mentors, rather than staff-to-student mentors, saying, “Would it not be fabulous to have mentors with shared experience, whether it be re-entry to the community, disability, mental health, shared experience and the knowledge that you are not the only one?” Amy went on to add, “The mentors that share like experiences, that have shown success, determination, and relentlessness, will always be more welcome than someone that has no idea what it is like to have a challenge”.

Amy had a positive experience with a peer-mentor while she was incarcerated, and witnessed firsthand the influence it can have on others. As a result, she expressed her desire in wanting to be a mentor for others, believing that her life experience could be a benefit to others.

Others noted the importance of developing a strong network of peers. For example, Susan has had positive experiences with friends and other peers. Matthew agreed that a peer-to-peer mentoring program might be effective, but added that it would depend on how that program was set-up. Karen said that having someone “walk you through the program physically and mentally”, would be an important element for future mentoring program development. In other cases, participants spoke of confidence and how a mentor could help in increasing confidence. For example, Matthew spoke positively about friends and DRC staff who have helped him be successful. His confidence has increased as a result.

Self-Advocacy

With the exception of one participant, each described the importance of self-advocacy relative to their own success. In the one case (James), while he indicated that he believes self-advocacy to be important, he was unable to fully describe what techniques or strategies he has developed to be his own self-advocate. Even when asked open-ended questions, James would often respond with “I don’t know” or “I’m not sure”. There were times it was difficult to distinguish whether James did not know something, or if James was just uncomfortable in the conversation and responded in a way that moved the conversation along. Given that he does not like talking to others, this was important as to whether James was comfortable and confident in developing self-advocacy skills. As James did not participate in the IEP process in high school (by choice), where advocacy skills are often discussed, this may have hindered his ability and comfort level in fully engaging in this process.

Karen provided an example that was similar to what others expressed in that, “I know how my disability impacts me, I just don’t always know how to describe it to others”. Susan, on the other hand, reported that she is improving her advocacy skills.

Assertiveness. Learning assertive behavior has been shown to be an important part of self-advocacy. Amy suggested that assertiveness is a “very big thing”, while Susan (who openly struggles in being assertive) says that she is learning how to ask for help and be more straight forward. We also discussed a number of challenges associated with advocacy. For example, Susan said, “Sometimes I explain it awkwardly, as words are confusing”, adding that, “Asking for help has always been hard for me, so sometimes I would get accommodations, but for a while I would refuse to use any. Just because I was stubborn. I've gotten a little bit better about that”.

Karen recalled an experience she had in high school that highlighted for her one of the challenges in self-advocating.

> My sophomore year I had a ruptured brain aneurysm at the start of the semester which sent me three weeks in an ICU. Really traumatic. I ended up staying home the rest of that semester. I didn't start school again until spring that year. I ended up getting the accommodation plan initially for the brain aneurysm. Then we tacked on all my spectrum needs onto that. It was something that I was deeply uncomfortable with. I didn't want an accommodation plan. High school is so much about, ‘*look you're other; you're different’. Screw you.* This is really awful. I tried to avoid a lot labeling. I didn't tell people I had an accommodation plan or anything. Teachers were pretty okay about giving me those accommodations, but I

> avoided them at all costs. I’d rather sit and be freaking out at 3 a.m. about an essay due the next morning than say, ‘*Hey, can I get an extension?’* It wasn't really until my senior year of high school, first year of college, that I had started doing more research into the autism spectrum and specifically where I felt I fit in on that. There's a lot of on-line communities for autism spectrum kids. It was a lot more positive than I'd experienced in the real world.

Strategies. Relative to noted challenges, participants suggested communication strategies for the development of future mentoring programs. The following are examples that illustrate the need to further develop a communication system in order to help translate and frame what it means to be a person with a disability, and more specifically what it means to be on the autism spectrum. Matthew suggested,

> Two or three things. Number one, the biggest problem is communication. Simple things like whether or not I'm disabled. Basically, in one of my classes, this is an ongoing conversation. To a person like me, disabled means that I can't do something. So if I don't have a hand and I'm trying to open the door, as far as the door is concerned, I'm disabled. It doesn't tend to translate well into soft things like whether or not I'm maximizing my potential, whether or not I need an accommodation. The first thing I would do if I was designing an introduction for me is I would have a language class where I translate between my speech and everyone else's speech.

When asked if framing disability this way was important, Matthew responded that, “It’s paramount. It's a question of getting everyone on the same page. The other half of it is doing it on the other side with the professors. That would be number one”. Matthew also suggested that,

> You need mutual translation between what words and phrases mean to an Autistic versus a neuro-typical, especially with things where there's a cultural meaning. It can be assumed that if something is an idiom of any sort, the autistic person is not going to understand what it means. From the standpoint of communicating to the neuro-typical what it means to be on the spectrum, I very much encourage the stereotype of us being robots.

The method for advocating was also different for each participant. For some, avoiding self-advocating at any expense was the preference. For others, the preference was advocating through email rather than in-person. When asked his preferred method of advocating, James noted that “…it just depends on the medium in which I have to advocate”. Amy added, “If you have something that you have an issue with…you are old enough to go and speak with that person alone because that is your concern”. She went on to say, “Everyone has a different concern, they may voice it so it sounds like it's close to your concern, but not really. You see, deep down, we all have a different concern, even if it sounds the same.

Influence of mentoring program. When participants were asked to rate their ability to self-advocate post-study, Susan noted that for her it also depends on whether or not she has an interest in a particular area. She noted that she feels her academics are better because she has an interest in being successful. Her collegiate experience has been different than high school. This is partly because, “it's not like in high school where you're like, ‘I don't care about this, who cares’.

When asked in the interview to describe her ability to self-advocate, Susan said, “probably still not great, but I'm getting there”. Matthew added, “I can say what I'm supposed to say, to the people I'm supposed to say it to. I can't really open a door that hasn't been opened for me. Show me how to open it once, I can repeat the process”. Further demonstrating the importance of working with a mentor.

Amy was very outspoken regarding her passion for advocating for others, and feels that she may be at her best when she is “advocating on the behalf of others”. Her passion for advocacy demonstrates how important she views this as a skill.

Confidence

The third primary theme was confidence, which was a complicated metric to measure. The following are sample statements where participants demonstrated confidence during and after the program

Confidence during the program. Some of the participants were outspoken and confident in some areas, but less confident in other areas. When discussing disability with Amy, she openly admitted to being “narcissistic”, which translated into conversations where she exuded an assuredness of herself and how she views her disability. In the last session, she noted that she sees those on the spectrum as having “genuine gifts” and that she is amazed at how gifted they are. She believes that one day, people on the spectrum will no longer be living in “their [non-disabled] world”, but that those without disabilities, “Will be living in our world”. She gave an example of when she was challenged by someone else who said, “It’s going to be hard for you to get a job”, to which she replied, “No, it would be hard for you to get a job if you were me”, demonstrating a high level of confidence.

Another example of how participants have seen their confidence grow during the course of the study included Karen,

> I was thinking about the conversations and the self-awareness, when I was talking about diversity and disability and accessibility in theater specifically. Actually, last night, I emailed the current teacher of drama and debate at my high school. I was like, '*Hey, the election is crazy, and stuff's insane, I was a huge part of this program when I was here in high school and I know most of the kids that I knew have graduated. Even all the ones that were way younger, but I would really love to come and talk to the theater classes.* I sent this whole big thing, and I was, especially now when we're talking about the 'Tangerine Terror' as the President, I was like, '*I really feel like diversity in theater really needs to be talked about. Who's writing stories? What stories we're presenting? Who's playing those characters? Are we making sure that we have trans-stories, disabled stories, Asian, Hispanic, Black stories? Not only on stage, but behind the scenes. Are we making sure that our community as an arts community is being inclusive? I'd really love to come get your students' opinions and just like a sort of talk-back with them'*. She hasn't e-mailed me back, but I was like, I probably wouldn't have done that before this election and before this mentoring study. I was really impressed with myself for that, and I was like, this has helped a lot.

Confidence after the program. Once the program was completed, there were mixed responses when asked whether having participated in this study has influenced participant confidence. These responses included Karen saying “I don't think it's changed anything, but it's certainly given me more to think about, or brought up stuff that I didn't quite remember back to the surface”. Matthew added, “I don't know if it has changed my confidence at all, but it has improved my mood and that has a positive impact on my performance”. He went on to add. “The fact of having this emotionally-rewarding thing going on is energizing and puts me in a stronger mode to do what I have to do”. When asked to elaborate on what he meant, he said that, “Having resources and knowing that you have a voice and that you have resources gives you the energy for success. The confidence that follows from having successes gives you more energy”.

Matthew added that “success builds confidence”. When asked if having participated in the mentoring program influenced her confidence, Amy said, “Sure, yes. It makes me know that there is someone that is advocating at the higher level in this university for those of us that are trying to get to a certain level. Absolutely”. Susan said, “I feel like it's pretty good. I feel like even the stuff that I don't know how to do, I can at least figure out how to do”. While most of the participants indicated that the program improved their confidence, James did not. When he was asked if having participated in the program has influenced his confidence, he responded, “Not really”.

Confidence already high. For some participants, confidence was already high. Seeing any real influence may be difficult to assess. Amy said that her life experience has given her confidence, believing that she can do anything at school, including navigating the complexities of the university. Other examples of already having high confidence, included when Karen was asked whether having participated in the mentoring process increased her confidence and she responded, “I don't think so, but I think that's probably because I'm pretty confident from the start. I don't think it's changed anything but it's certainly given me more to think about”.

Amy believes her ability to advocate for herself is” absolutely phenomenal”, while Susan added, “I think it gave me a little more perspective, and talking about my disability, in a way helps me to understand it a little better”. Susan similarly added it was helpful in, “getting over that initial anxiety”.

Even though participants already had high confidence prior to participating in the mentoring process, participant responses indicate that having participated in a mentoring session increased confidence in speaking with others, or in reducing anxiety. For example, Karen said, “Being confident in myself is one thing. To use that confidence to reach out to other people, that's something that's newer, and definitely more inspired by what's happened with these conversations than it would have been before”.

Influence of others. The influence of others in shaping their self-awareness, self-advocacy and confidence was also an important secondary theme. Examples included family, friends, advisors, DRC staff, and counselors. Karen said that she already feels very self-aware, but emphasized the importance of talking through it again, noting that there were areas that were still problematic for her. To make her point, Karen recalled an experience that she had as a young child. Karen has a twin sister (without ASD) who was very influential on her. At a young age, Karen recalled being compared to her sister by others. She said that others would say that her sister was very extroverted whereas she was said to be “quiet and weird”. From that experience, she learned to mimic her sister’s behaviors and “mirror” her sister as she would interact with others, in what became a, “fake it until you make it” scenario, without realizing that she was even doing it. She felt isolated because she “didn’t know how to react or act in specific situations without an example”. It wasn’t until about two years after she was diagnosed with ASD when she realized she was mimicking her sister. It was then that she began realizing the importance of self-advocacy as a life-long skill, and no longer wanted to rely on her sister. She said that she “lucked out with the Autism Spectrum Disorder because of my twin sister. Ended up mimicking her behavior a lot in order to sort of avoid the problems of social cues”. This experience demonstrates the importance of others in helping to shape her self-awareness, specifically noting that, “I should probably say thank you at some point here. Thank you for letting me mimic you because otherwise I would have just been a wreck”.

Online Resources. Karen added that she accessed a number of online resources and found the information to be, “A lot more positive than I'd experienced in the real world”, and noted, “Being on the autism spectrum you have a lot of social obligations and a lot of social obstructions in the way you function”.

In addition to her sister, Karen also noted the influence of having a mother who was a counselor, expressing that much of her self-awareness came as a result of her mother doing Dialectical Behavior Therapy (DBT). She added that DBT is, “basically this concept of my mindfulness and being grounded in the moment and not trying to avoid emotion or stress. Just riding through it. That ended up making me extremely self-aware through my childhood”.

She further added that this was particularly helpful in developing self-awareness around having a disability. Specifically, she recalled that “because my mother's a counselor, I ended up with a lot of self-aware vocabulary in regards to a learning disability, and mental setbacks, or coping skills”.

Amy described a university staff member as being “extremely helpful”, someone who will take “any amount of time that you need” and “will talk to you about any issue that she is able to”. Matthew added the importance of what he called “superheroes”, and said that he has worked with a couple. He specifically noted a previous advisor and a couple of DRC staff members. He sees the role of these “superheroes” as someone who can “listen and walk him through the scenario so it doesn’t end in panic. Someone who will help him interpret the scenario”. He noted the importance of these individuals in assisting him in “navigating the grays”. He then gave an example from an analogy he heard before that he believes is from Judaism. It was a story about a blind person walking around in the dark with a lantern over his head. When challenged by others who said that the lantern wasn’t helping (because he was blind) and questioned why he was using it, the person replied that the lantern wasn’t for him, but for others to warn him of dangers in the path ahead of him. He added that he doesn’t need to know how to navigate the grays when problem-solving; he only needs to “develop trust in the people around me, and trust that the help is there”. The same was true in the area of self-advocacy. For Matthew, having a strong network of support has been critical for his own success, and gave an example of an advocate he had previously had through Jewish Family Services. There were times that he didn’t trust other people, and by going to his advocate, she was able to assist as a “go between”. This experience helped him learn to trust others, including the disability professional staff at his current university. This aligned well with what Lee (2014) described as external resilience influences, meaning, those individuals who support student success, and the influence they can have on students’ ability to advocate, understand the influence of their disability, and persist in their educational pursuits from one year to the next.

Research Question 3: ***How and to what extent do participants view the usefulness of a mentoring program focused on the development of self-determination skills?***

Data indicates that participants found the mentoring program to be useful. This section presents quantitative and qualitative data results, including results from the pre- and post-survey, and post-session surveys.

Data found in Table 7 shows how participants responded to questions in the pre- and post-surveys (all items). However, due to the small sample size, no statistical analyses could be completed. Data indicates that participants responded more favorably to the questions in the post-survey compared to the pre-survey. These results suggest that the mentoring program positively influenced participant perception regarding key self-determination constructs.

Table 7

Descriptive Statistics – Pre and Post-Survey (All Items)

	Mean	Std. Deviation
Pre-Survey	4.777	1.160
Post-Survey	5.092	.874

(Note: 6-point Likert scale went from 6 (strongly agree) to 1(strongly disagree)
n = 5

Table 8 illustrates how participants responded to pre- and post-surveys for questions related to individual self-determination constructs (e.g., confidence, self-advocacy and self-awareness). Data indicates that participants responded more favorably to the questions in the post-survey compared to the pre-survey for the self-advocacy constructs (pre-survey mean = 4.466 / post-survey mean = 4.933) and the self-awareness construct (pre-survey mean = 4.466 / post-survey mean = 5.133), and less favorably to the questions in the post-survey compared to the pre-survey for confidence construct (pre-survey mean 5.333 / post-survey mean = 4.933). These results suggest that the mentoring program influenced participant perception regarding key self-determination constructs. These results suggest that the mentoring program positively influenced participant perception regarding how they view self-advocacy and self-determination, but did not positively influence how participants view their confidence. Given the small sample size, a statistical analysis could not be completed. It should be noted that quantitative data showing that the program did not influence participants' belief in their level of confidence, partly contradicts qualitative data that shows that participants reported positively that the mentoring program influenced their level of confidence. However, qualitative reports were mixed.

Table 8

Descriptive Statistics – Self-Determination Constructs

	Mean	Std. Deviation
Pre-Survey / Confidence	5.333	.816
Post-Survey / Confidence	4.933	.593
Pre-Survey / Self-Advocacy	4.466	1.552
Post-Survey / Self-Advocacy	4.933	1.032
Pre-Survey / Self-Awareness	4.466	1.125
Post-Survey / Self-Awareness	5.133	.990

(Note: 6-point Likert scale went from 6 (strongly agree) to 1 (strongly disagree)
n =5

Module Usefulness

Data found in Table 9 shows how participants responded to questions regarding how they viewed the usefulness of each mentoring module. Participants were asked to rate usefulness using a 6-point Likert scale, where a score of 6 indicated that they strongly agreed that the module was useful, whereas a score of 1 indicated that they strongly disagreed that the module was useful. Results show that participants found module 5 (Self-Awareness) to be the most useful (mean = 6.000), followed by the module 3 (Understanding University Services and Resources / mean = 5.333), module 1 (Differences between High School and College / mean = 5.000), and module 2 (Self-Advocacy / mean = 5.000). Results also show that participants found module 4 (Problem-Solving / Decision-Making) to be the least useful (mean = 4.666).

Table 9

Descriptive Statistics – Module Usefulness

	Mean	Std. Deviation
Module 5 – Self-Awareness	6.000	.000
Module 3 – University Services and Resources	5.333	.577
Module 1 – Differences Between High School & College	5.000	.000
Module 2 – Self-Advocacy	5.000	1.000
Module 4 – Problem-Solving / Decision-Making	4.666	.577

(Note: 6-point Likert scale went from 6 (strongly agree) to 1 (strongly disagree)

n=5

Qualitative data

Data indicates that participants found the modules to be useful. Sample responses included Susan saying, “I felt like they were pretty useful. Some of the stuff was stuff that I already kind of thought about. Other things made me think more on certain things”.

James noted, “I found like the self-advocacy one really useful, but the one talking about all the various resources and stuff not quite as useful”. He also added that “some of them I found pretty useful. Some of them weren't as useful for me in particular”. Matthew said, “I don't know. I can't really say that. They bleed together in my mind”.

Participants also described modules that they did not find useful. Examples of this include Amy noting that module 1, which focused on the difference between high school and college, was not useful because she didn’t attend high school. He went on to add that “accessibility is really a hit or a miss thing. I think one of the first conversations we had was about rights, accessibility rights, and one of the first things I said to you, "It's a nice theory but it's there when it’s there and it isn't when it isn't. It might be a law, but there's nothing backing it up”.

Post-session survey. Participants responded that they were able to use the information discussed during each module. The notable exceptions to this were in cases where the information was not relevant (e.g., difference between high school and college when the participant never attended high school). Following each of the modules, participants were asked in what ways have they used the information discussed in that particular module. Participants responded as follows:[2]

Module 1 (Difference between High School and College). Following the completion of module 1, participants were asked, “In what ways have I used the information discussed in module 1?” Participant responses included the following:

- “I did not experience [high school]”.
- “I have learned that college is much more rigorous in the curriculum. Self-determination and the motivation needed to complete college is immense”.
- “Minimally [useful], as I've already made this transition”.

Module 2 (Self-Advocacy). Following the completion of module 2, participants were asked, “In what ways have I used the information discussed in module 2?” Participant responses included the following:

- “In all areas of my life. School, interactions with faculty, and with my children”.
- “It has offered me a new chance to determine what I feel comfortable advocating for, and what still prevents me from speaking out when I should”.

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[2] Post-session surveys were anonymous, and therefore could not be tied to any specific participant

- “By trying to be more self-advocating”.

Module 3 (Understanding Critical University Services and Resources). Following the completion of module 3, participants were asked, “In what ways have I used the information discussed in module 3?” Participant responses included the following:

- “I have thought about the ways in which I might use the various resources available to me and, though I have not yet utilized most of these, I know about where to go if would like assistance in a certain area.”
- “By using Kurtzweil 3000”

Module 4 (Decision-Making / Problem-Solving). Following the completion of module 4, participants were asked, “In what ways have I used the information discussed in module 4?” Participant responses included the following:

- “It has helped me somewhat to think about how I can resolve issues or make decisions, or how I have done so in the past.”

Module 5 (Self-Awareness). Following the completion of module 5, participants were asked, “In what ways have I used the information discussed in module 5?” Participant responses included the following:

- “It has helped me to think about myself, and to better understand me and how I process things”.

In this study, qualitative data sources included participant observations, post-session surveys, and a semi-structured interview. Table 10 shows the richness of this data set, where *time* indicates the total time spent with all participants during the modules, and *word count* indicates the number of words from the participant observations.

Table 10

Description of Qualitative Data Sources

Data Source	Time	Word Count
Interview w/ Karen Transcription	39 minutes, 24 seconds	5,275
Interview w/ Susan Transcription	20 minutes, 13 seconds	2,096
Interview w/ Matthew Transcription	41 minutes, 46 seconds	5,394
Interview w/ James Transcription	17 minutes, 39 seconds	1,670
Interview w/ Amy Transcription	37 minutes, 44 seconds	5,334
Participant Observation – Module 1	3 hours, 23 minutes	1,035
Participant Observation – Module 2	4 hours, 6 minutes	2,048
Participant Observation – Module 3	3 hours, 12 minutes	1,331
Participant Observation – Module 4	4 hours, 3 minutes	2,241
Participant Observation – Module 5	4 hours, 42 minutes	2,907
Total	22 hours, 5 minutes	29,331

Qualitative and quantitative data indicate that participants responded positively after participating in a mentoring program. Participants also viewed Self-Awareness, Self-Advocacy, Decision-Making / Problem-Solving, Understanding University Services and Resources, and know Difference between High School and College, as useful modules within a mentoring program.

CHAPTER 5

DISCUSSION

This chapter presents the discussion of findings, mentor-researcher positionality, implications for practice and research, limitations, and conclusion.

Triangulation of Qualitative and Quantitative Data

Triangulation of the data was performed through the use of a pre- and post-survey, post-session surveys, and a culminating interview. Participant observations were used to confirm and support a convergence in the data.

Qualitative data indicates that participants found the mentoring process to be positive, particularly working with a mentor, and engaging in self-advocacy and self-awareness protocols. Quantitative data also indicates that after having completed the mentoring protocol, participants responded more favorably to the questions in the post-survey compared to the pre-survey. These results suggest that the mentoring program positively influenced participant perception regarding key self-determination constructs. Data shows increases in self-advocacy and self-awareness, while showing a slight decrease in confidence between the pre-survey and the post-survey. However, while quantitative data show a slight decrease from pre-survey to post-survey for level of confidence, qualitative data was mixed. Some participants (e.g., Amy, Karen) reported that the program positively influenced their confidence, while other participants (e.g., Matthew, James) reported no change in their confidence level. Data also shows that participants found the modules to be useful. These data support previous literature that underscores the importance of self-advocacy and time management skills (Garrison-Wade, 2012; Shattuck, et al., 2014), the importance of others in influencing the development of these skills (Jenson, Petri, Day, Truman, & Duffy, 2011), inconsistencies that exist in the development of these skills at the secondary level (Denney & Daviso, 2012), and the importance of developing self-awareness and understanding one's disability (Wehmeyer, Agran & Hughes, 1998). Triangulation of these convergences were supported through participant observation, confirming that participants responded positively to participating in the mentoring program; responded positively to discussing their development of self-determination skills (e.g., self-advocacy, self-awareness, and confidence); and found the modules to be useful in their skill development.

Mentor-Researcher Positionality

As an administrator within the university where this study took place, I took on an insider position. As an insider, I was mindful of my own position, strengths and limitations, and, to the greatest extent possible, accounted for any potential biases. Those biases included a belief that this process would be beneficial to the participants involved, and a desire to see the students who participated in the process achieve success from this experience.

Assumptions

There were a number of assumptions made going into this work. These assumptions were considered, and, to the best of my ability, accounted for so as not to influence the data results. Data indicate that while some of the assumptions were true for some of the participants that was not the case for all participants. These assumptions included:

1. Students will want to participate in the study – This assumption was shown to be true, given that each participant completed all five mentoring modules;

responded positively to having participated in the experience; and found the modules to be useful.

2. Students will have a positive experience in going through this process – This assumption was shown to be true, given that participants responded positively to having gone through the experience.
3. Students will develop self-determination skills as a result of having participated in a mentoring program –This assumption was shown to be only partly true, given that participants responded that the mentoring program helped in developing self-awareness and self-advocacy skills. However, participants had mixed reactions to the development of confidence, and did not all express the same level of confidence post-mentoring program.

Lessons Learned

As a disability practitioner and administrator at the university where this study took place, as well as someone who has worked with students with disabilities for most of my career, I came into this study having already witnessed firsthand the importance of mentoring for students with disabilities. As the number of students with ASD has increased over the past few years, it also became evident that there were gaps that currently exist in the university support system.

Through this study, I gained a better understanding and appreciation of challenges that exist in creating a mentoring program of this type. One of the more evident challenges included noticeable differences in how participants communicated. While the mentor-researcher had anticipated differences to exist, unexpected differences in communication arose. This was both an opportunity and a challenge in how one might most effectively engage others in the mentoring process. While three of the participants were highly engaged and interactive, two participants were less so. In order to more effectively engage participants in the process, further consideration should be made in developing prompts that may be more effective in pulling out information related to prior experience.

One of the most striking results of the study showed that while self-awareness and self-advocacy increased after completing the mentoring process, students' self-confidence decreased on the quantitative measures. There are a number of possible reasons for this. However, the most likely reason is that, perhaps, as students' self-awareness increases, creating opportunities for deeper self-reflection regarding newly acquired knowledge, perspective, or skills, this process may, in fact, result in a view of self-confidence that might be more accurate. Said another way, after having completed the mentoring protocol, student confidence may have decreased upon realizing that they may not have been as self-assured as they initially believed that they were. Having more time to work through student development over the course of several semesters, rather than just one, may prove to be more effective in increasing confidence, and helping students explore their own self-awareness development.

Finally, trust was an important element to this process. Over the course of the study, participants either explicitly expressed that each session had become much more comfortable, or behaved in a way where it was believed that they had become much more comfortable. The behaviors exhibited by participants that led to this belief, included, participants becoming much more open, talkative, and seemingly less guarded in their responses. Participants were also willing to disclose sensitive information. James (who was noticeably guarded during throughout the process) noted that the process had become "easier and more comfortable" for him as the sessions went along.

Limitations

The study presents three critical limitations, including, (1) number of participants, (2) duration of study and time spent on each module, (3) limited access to disability documentation, and (4) limited responses on pre- and post-survey and post-session surveys.

Participation – While 120 students were contacted and invited to participate in the study, only five students chose to participate. As such, this limits the transferability of the results. The limited number of participants also meant that both qualitative and quantitative data were also limited. Quantitative data is limited to being reported as descriptive statistics only. Additionally, not every participant chose to respond to pre- and post-surveys, as well as post-session surveys. This limited the ability to fully account for and address nuances and variables that may otherwise exist and that may have influenced data results. Further consideration should be given to exploring the reasons for the reluctance of students to engaging in a mentoring program.

Duration of the Study - Given the short duration of the study (12 weeks), as well as the short amount of time spent discussing each module (approx. 30 – 60 minutes per module), limited the ability to fully account for other variables that may have also influenced the development or hindrance of development of self-determination skills. Each of the five participants presented and engaged in the process in unique and individualized ways, limiting the ability to identify variables that may have influenced the process and ultimately the outcomes. If the study were to take place over the course of two semesters, this would allow for tracking progress and skill development. Self-efficacy is often used as a metric of retention and persistency. Given the limited time frame, tracking retention and persistency from one semester to the next was not measured.

Access to Disability Documentation - A critical aspect of understanding the influence of a person’s disability is, in part, confirmed through the evaluation of disability documentation. Access to disability documentation for any of the participants was not available. As a result, verification on how and to what extent the disability was influential, or whether there were any comorbid disabilities / conditions that may have influenced the results of the interactions, was not known. While there was discussion with each participant as to how they describe the influence of having ASD, future development of a broader mentoring program should include a thorough review and discussion of available disability documentation.

Limited Responses to Pre- and Post-Surveys and Post-Session Surveys – Although instructed to answer every question, participants did not all respond to pre- and post-surveys, or the post-session surveys, limiting the ability to fully analyze nuances that might exist in the data. For future studies, surveys would administered electronically whereby participants will be unable to move ahead with the program until all questions are answered.

Other Notes of Interest

It should be noted that the sample ratio of males to females in this study was not reflective of the current prevalence rates for ASD among boys and girls. National data shows that the prevalence among boys (1 in 42) is almost five times higher than it is among girls (1 in 189) (CDC, 2014). An assumption here would be that there would be a higher number of males to female participants in the study. However, for this study, there were three females and two males. While all students registered with the DRC (identified as having ASD), were invited to participate in the study, it is unknown as to why only five chose to participate.

Threats to validity

There were a number of potential threats to validity considered, the most relevant being the Hawthorne effect (e.g., participants changing their behavior or responding in a particular way due to knowing that they are being observed), and history effect changes (e.g., when other events happen in between the pre-assessment and the post-assessment, which could influence the outcome of the study). Each of these threats were considered, relative to the results. The Hawthorne effect was considered from the perspective of participants knowing about the study and the innovation of developing a mentoring programs for students with disabilities. Participants did not appear to respond or behave in a particular way or changed their behavior during the course of the study. However, there is no way to know for sure whether the Hawthorne effect occurred.

Given that the mentoring program took place over the course of 12-weeks, the history effect was also considered. There were a number of events that may have occurred during the course of the semester, including advising, coursework, counseling services, conversations with others, etc. To the extent that history effect occurred is unknown. However, during the course of providing the mentoring protocol, there was nothing discussed with the participant that would make one believe that a history effect occurred. Participants remained fully engaged throughout the process, participated in each module, and did not appear to behave and/or respond in a way that would lead one to believe that were doing so because they were aware of the intended purpose of the study.

Implications for Research

Further research is needed regarding specific tools and methods relative to the mentoring process, as part of a broader mentoring program. While the literature notes the important elements related to self-determination, the literature is limited as to how each of those elements might be further developed and integrated into a mentoring protocol for students with ASD, and the best tools and methods for doing so. Additionally, as more and more postsecondary institutions implement online educational experiences, the need for more research regarding online mentoring for students with disabilities also becomes critical.

Previous literature shows that students on the spectrum often have high levels of confidence in getting the information they needed, but lower levels of confidence in their ability to "handle things" (Shattuck, et al., 2014). This was consistent with the findings of this project. Students demonstrated having a high level of confidence, yet some reported having challenges with effectively advocating for themselves. Denney and Daviso (2012) note that inconsistencies and lack of training for the educators working with students with disabilities at the secondary level has proven to be problematic. This was also evident in this study, as participants noted a number of inconsistencies in their experience in the secondary level. Future development should include a deeper level of training for mentors.

Garrison-Wade (2012) identified key areas relative to the postsecondary transition process, which included the development of social skills and self-advocacy skills, preparing academically, and time management. Participants described the importance of self-advocacy in this experience, and specifically noted time management as a critical area for future development. Relative to the role of the mentor-researcher, the literature shows a positive correlation between the role of a mentor or other individuals who helped to develop these skills. Specifically noted in the literature was the importance of others in influencing individual belief in self-efficacy (Jenson, Petri, Day, Truman, & Duffy, 2011). This was found to be true, as participants noted the significance of others in their own development, including, the mentor for this study, parents, siblings, friends, advisors and DRC professional staff.

Wehmeyer, Agran and Hughes (1998), note the importance of self-awareness and self-acceptance, particularly regarding understanding one's disability. This was confirmed by the data as participants note the importance of understanding their disability relative to their overall self-awareness.

Implications for Practice

Implications to consider for further application into practice include (a) a deeper appreciation and review of the participants' background and experience, (b) the development and implementation of peer-to-peer mentoring, (c) the need for more intentional collaboration with high school partners, (d) the need to expand the skills being developed, (e) the need to expand the number of services and resources discussed, and (f) utilizing a focus group where participants may share their individual and collective experiences.

Participant background. In order to most effectively frame the context of this work, it’s important to note that there were differences between each of the participants relative to their experience and background prior to the study. Critical to the development of self-determination skills is the foundation for which those skills are based. Given that each of the participants came into the study with varying degrees of experience and knowledge regarding the concepts that we discussed during the study, their prior experience is likely to have had an influence on how they responded in program. The extent to which their prior experience influenced their responses is unknown. Any future development should take into account previous experience in order to mitigate extraneous variables that may influence results.

Additionally, given the work of previous researchers regarding the importance of academic support programs (e.g., mentoring) as they relate to persistency (Lee, 2014), future programming will include tracking persistence of participants in following the mentoring program, through to graduation.

Peer-to-Peer Mentoring. A common theme noted by most of the participants was the suggestion to include a peer-to-peer mentoring component. Specifically noted was the idea that another student with similar disability and life experience serve as the mentor. Future development and implementation of a more broad-scaled mentoring program, will look at adding a peer-to-peer component. While the approach taken this semester (administrator-to-student) was intended to establish a better understanding of the participant experience, as well as to more effectively account for and mitigate the influence of any extraneous variables, one theme that was identified from several of the participants was the idea of developing and implementing a peer-to-peer model, where students would work with other students who share similar abilities, disabilities and life experience. Amy suggested to “make sure that the mentor was in the field that the student was majoring in…” and that the mentor “had great grades, of course, when they were in there they were already past the point that the student is in”. She also added that the mentor should have “empathy and definitely to be in the field that that person, or be in the subject that that person is has to major in it”.

High School Collaboration. Given the diverse background of each participant, and more specifically, given that participants noted differences in their high school experiences, it became evident that future mentoring and academic support experiences would be best suited if developed in collaboration with high school partners. Doing so, would enable researchers to ensure more consistency in the experience of students participating in the collegiate mentoring experience, broadening its application and influence, and more effectively account for extraneous variables that may exist relative to the academic experience prior to entering college, as well as more deeply supporting the student experience.

Expanding Skill Development. In addition to the skills discussed during each of the five modules, other skills were also identified. Specific skills to be added to future mentoring modules to include: time management skills; communication strategies; preparing for the collegiate experience (in collaboration with high school partners); active listening skills; and using assistive technology. Each of the skills were either identified specifically by participants or in conversations with colleagues during the process.

Expanding Services and Resources. In addition to including additional skill development, also identified was the need to expand the services and resources module. Included in the current module was the Disability Resource Center, the Fitness Complex, Counseling services, Career and Professional Development Services, TRiO Student Support Services, and the Student Success Center. Future mentoring modules will be expanded to include Financial Aid, Residential Life, and Student Advocacy. The reason for this expansion was identified as students expressed the desire to be more fully aware of other support services available to them.

Given the time limitations for discussing each module, it would make sense that further defining and expanding the resources and services list, to perhaps several modules, would be appropriate. For example, Karen noted surprise at the number of resources available to her, adding that even though the university does a good job at "promoting" the services and resources, that sometimes that information "kind of just goes over your head". She specifically noted counseling services, stating that she knew the service was available, but was unaware of the low cost, or the 24-hour help line.

Post-Mentoring Focus Group - In order to better understand the collective experience of the participants, creating a post-program focus group where participants can share their experiences, may provide insight that might otherwise be missed during individual mentoring sessions. The focus group would also help identify to what extent participants feel connected to the university or to specific staff or services at the university. Given the limited information in the literature regarding sense of connectedness for students with ASD, there is an opportunity to explore connectedness relative to persistency and graduation. Including questions regarding connectedness to the pre- and post-survey may also provide useful insight (e.g., “To what extent do you feel connected to the university?”)

Communication strategies. Participants also identified the need for the development of communication strategies. One example of this was noted by Karen who suggested the importance of knowing how to word an email. Making sure that you are communicating in a way that makes sense, including being precise and to the point.

Additionally, the word choices that were used in the mentoring process were, at times, also problematic. For example, during the interview, participants were asked to rate their ability to, “navigate the complexities of the university”. While the question was intended to seek information regarding perceived ability in problem-solving, identifying and accessing resources as needed, advocating for the things one needs, etc., the question was confusing for participants (i.e., Matthew, James, and Amy). For some, they took “navigating” to mean a literal physical navigation of the university. This was noted when Matthew referred to challenges that he has had in not knowing which building are around him, and the best routes to take when traversing across campus.

He also adds that “I know that there's other resources like tutoring and that there's more than one library. The only one I've been in is Hayden because it happens to be on the way to DRC. He acknowledged that he has not spoken with many of his advisors, while adding that, “It seems silly that at my age I need someone to hold my hand to get me from point A to point B, but I guess that's how it is sometimes. So no, I'm not really navigating it very well”.

James asked for clarification on what was meant by “navigation,” and followed his questions by stating, “It depends”. He further clarified by saying, went on to say, “If it requires like going to a particular place and speaking to someone in person, I'm usually fairly nervous about that and end up putting it off a little”. He added that, “If it's calling in or stuff like that like what I did with the advising it's fairly easy”.

Conclusion

As the number of college students with disabilities continues to increase, postsecondary institutions are faced with looking more deeply at critical support services, and assisting students in accessing support services and resources in the postsecondary environment. One of the many support services available to students in college is mentoring. However, despite its long existence, there is limited information regarding mentoring in postsecondary education as it relates to working with students who have disabilities, and even more limited relative to students with Autism Spectrum Disorders.

Self-determination has consistently been shown to be an important factor in student success (Durlak, Rose, & Bursuck, 1994; Getzel, & Thoma, 2008). Field, Sarver, and Shaw (2003, p. 339) defined self-determination as, “a combination of skills, knowledge and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior. An understanding of one’s strengths and limitations together with a belief in oneself as capable and effective are essential to self-determination”.

As an educator, particularly one who has spent the majority of his career working with students with disabilities, I have seen the influence that well-developed problem-solving, self-advocacy, and the effective utilization of academic support services and resources, can have in helping students be successful. The literature has shown that mentoring has been employed as an effective means in developing these skills, support student success, including the development of meaningful relationships, and providing guidance and support (Bordes-Edgar, et al., 2011; Salas, et al., 2014), as well as an increase in GPA and fewer failed courses during the first semester (Salinitri, 2016), and a positive effect on academic achievement and school attendance (Rhodes, Grossman, & Resch, 2000). Relevant to the current study is that the literature shows a relationship between mentoring and the development of self-determination skills (Bordes-Edgar, et al., 2011; Durlak, et al., 1994; Salas, Aragon, Alandejani, & Timpson, 2014). Specific to working with students with ASD, Pillay and Bhat (2012) note the importance of those working with ASD students, and suggest that they should assume a role similar to that of a coach, helping to develop and support students in a broad range of academic and social experiences.

As an educator working with students with disabilities, the results of the study provide a framework for which we can broaden efforts in supporting the academic experience for students. My hope is that this work may be added to the growing body of literature, and benefit others as much as it has me.

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APPENDIX A

PARTICIPANT RECRUITMENT LETTER

Dear Student:

My name is Dr. Linda Caterino and I am an Associate Professor at Arizona State University and Training Director, School Psychology Program. I am currently working on an action research study that will examine the experience of students with an Autism Spectrum Disorder, specifically examining how they describe their experience working with a mentor in developing self-determination skills. Self-determination skills are generally defined as skills related to self-advocacy (e.g., critical thinking, self-awareness, problem-solving, self-advocacy, decision-making, etc.).

I am inviting you to participate. If you agree to participate, you will be asked to complete a brief survey at the beginning of the study (August 2016). The survey will consist of less than 30 questions and will take approximately 5-7 minutes to complete. In addition to gathering some demographic information, the survey will ask questions regarding your experience as a person with a disability. Your responses on the survey will remain strictly anonymous.

After completing the survey, you will participate in bi-weekly meetings with a Disability Resource Center staff member who will administer the mentoring protocol. These mentoring meetings will be every other week for 10 weeks (5 meetings total), beginning in September 2016. Each meeting will last about an hour. Data will be collected during mentoring sessions in the form of mentor notes. No video or audio recordings will be made during mentoring sessions.

At the end of the 10 weeks, you will be asked to complete a final survey and participate in an interview (November 2016). The survey will consist of less than 30 questions, and should take approximately 5-7 minutes to complete. Your responses on the survey will remain strictly anonymous. The interview will take approximately 40-45 minutes to complete, and will ask questions regarding your experience participating in the mentoring process. The interview will be audio recorded and your responses collected and analyzed in order to better understand your overall experience in working with a mentor. In addition to gathering some demographic information, the interview questions will be open-ended and focus primarily on how you describe your experience as a person with a disability, and your experience in having gone through a mentoring process. Analysis for both survey and interview will consist primarily of looking at common themes, as well as how you describe your experience in working with a mentor.

Your participation is completely voluntary. You may choose to stop your participation in the study at any time. If you choose not to participate or withdraw from the study, there will be no penalty, and your academic standing at ASU will not be impacted. In order to maintain confidentiality of your disability status, eligibility for participation in this study will be determined by the Disability Resource Center (DRC). No personal or disability information will be provided from the DRC to the researcher and your disability documentation will remain solely under the maintenance of the DRC and will not be shared with the researcher. Your disability status will not be disclosed at any time by the DRC. During the survey and interview, you will be asked to describe the impact of your disability. However, you may choose not to answer any questions.

The benefits of participation for you is that you will learn specific skills that may help you be successful as a college student. Additionally, you will have an opportunity to work with a mentor who can provide information and guidance during your educational experience at ASU. There are no foreseeable risks or discomforts to your participation. Your responses will be kept strictly confidential. Additionally, participants will have a 25% chance (1 in 4) of receiving a $25.00 Visa gift card. Should you be chosen to participate in the study, you will be automatically entered to win the gift card, and will be notified if you are a winner through the email, by December 1, 2016.

If you have any questions concerning the research study, please contact me at Linda.Caterino@asu.edu. If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

If you wish to participate in the study and be entered for an opportunity to win a $25.00 Visa gift card, please email me directly at Linda.Caterino@asu.edu.

Sincerely,

Linda C. Caterino, Ph.D., ABPP
Clinical Associate Professor
Training Director, School Psychology Program
Mary Lou Fulton Teachers College

APPENDIX B

PARTICIPANT RECRUITMENT FOLLOW-UP LETTER

Dear XXXXXXX,

I wanted to follow-up on the letter (attached) you may have received regarding a study that is being conducted with students who have been diagnosed with an Autism Spectrum Disorder. This study is being conducted by Dr. Linda Caterino, who is a Clinical Associate Professor in the Mary Lou Fulton Teachers College.

If you have not already had an opportunity to review that letter, I would invite you to review and consider participating in this study. If you are interested in participating, please contact Dr. Caterino directly at Linda.Caterino@asu.edu.

In addition, if you would like to not receive any follow up invitations to participate, please contact Dr. Caterino directly at Linda.Caterino@asu.edu.

Sincerely,

(Name of students Disability Access Consultant)

This communication is being sent from the Disability Resource Center on behalf of Dr. Linda Caterino. Please direct questions/interest to Dr. Caterino. Her email is: Linda.Caterino@asu.edu.

July 19, 2016

Dear Student:

My name is Dr. Linda Caterino and I am an Associate Professor at Arizona State University and Training Director, School Psychology Program. I am currently working on an action research study that will examine the experience of students with an Autism Spectrum Disorder, specifically examining how they describe their experience working with a mentor in developing self-determination skills. Self-determination skills are generally defined as skills related to self-advocacy (e.g., critical thinking, self-awareness, problem-solving, self-advocacy, decision-making, etc.).

I am inviting you to participate. If you agree to participate, you will be asked to complete a brief survey at the beginning of the study (August 2016). The survey will consist of less than 30 questions and will take approximately 5-7 minutes to complete. In addition to gathering some demographic information, the survey will ask questions regarding your experience as a person with a disability. Your responses on the survey will remain strictly anonymous.

After completing the survey, you will participate in bi-weekly meetings with a Disability Resource Center staff member who will administer the mentoring protocol. These mentoring meetings will be every other week for 10 weeks (5 meetings total), beginning in September 2016. Each meeting will last about an hour. Data will be collected during mentoring sessions in the form of mentor notes. No video or audio recordings will be made during mentoring sessions.

At the end of the 10 weeks, you will be asked to complete a final survey and participate in an interview (November 2016). The survey will consist of less than 30 questions, and should take approximately 5-7 minutes to complete. Your responses on the survey will remain strictly anonymous. The interview will take approximately 40-45 minutes to complete, and will ask questions regarding your experience participating in the mentoring process. The interview will be audio recorded and your responses collected and analyzed in order to better understand your overall experience in working with a mentor. In addition to gathering some demographic information, the interview questions will be open-ended and focus primarily on how you describe your experience as a person with a disability, and your experience in having gone through a mentoring process. Analysis for both survey and interview will consist primarily of looking at common themes, as well as how you describe your experience in working with a mentor.

Your participation is completely voluntary. You may choose to stop your participation in the study at any time. If you choose not to participate or withdraw from the study, there will be no penalty, and your academic standing at ASU will not be impacted. In order to maintain confidentiality of your disability status, eligibility for participation in this study will be determined by the Disability Resource Center (DRC). No personal or disability information will be provided from the DRC to the researcher and your disability documentation will remain solely under the maintenance of the DRC and will not be shared with the researcher. Your disability status will not be disclosed at any time by the DRC. During the survey and interview, you will be asked to describe the impact of your disability. However, you may choose not to answer any questions.

The benefits of participation for you is that you will learn specific skills that may help you be successful as a college student. Additionally, you will have an opportunity to work with a mentor who can provide information and guidance during your educational experience at ASU. There are no foreseeable risks or discomforts to your participation. Your responses will be kept strictly confidential. Additionally, participants will have a 25% chance (1 in 4) of receiving a $25.00 Visa gift card. Should you be chosen to participate in the study, you will be automatically entered to win the gift card, and will be notified if you are a winner through the email, by December 1, 2016.

If you have any questions concerning the research study, please contact me at Linda.Caterino@asu.edu. If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the

Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

If you wish to participate in the study and be entered for an opportunity to win a $25.00 Visa gift card, please email me directly at Linda.Caterino@asu.edu.

Sincerely,

Linda C. Caterino, Ph.D., ABPP
Clinical Associate Professor
Training Director, School Psychology Program
Mary Lou Fulton Teachers College

APPENDIX C

PARTICIPANT CONSENT FORM

Dear Student,

Thank you for expressing an interest for participating in the study. Your signature below indicates that you have read and understood the information provided in the recruitment letter, and you have decided to volunteer as a research participant for this study. You will be given a signed and dated copy of this form to keep, along with any other printed materials deemed necessary by the study investigators.

By signing this form, you also agree to be video and/or audio recorded. All video and audio materials will be kept strictly confidential, and will only be viewed by either the investigator (Linda Caterino) or the co-investigator (Lance Harrop), and will not be disclosed for any reason without your written consent. Results of this study may be used in dissertations, reports, presentations, or publications but your name will not be used or known.

Additionally, by participating in the study, you will have a 25% chance (1 in 4) of receiving a $25.00 Visa gift card. Should you be chosen to participate in the study, you will be automatically entered to win the gift card, and will be notified if you are a winner through the email, by December 1, 2016.

If you agree to participate in this study, please provide the information below and then return this form to Linda.Caterino@asu.edu or Harrop@asu.edu.

Participant's Name (print): ___________________________________

Participant's Signature: ______________________________________

Email (required): ____

Phone (optional): ____

Date: _______________________

Investigator's Name (print): ___________________________________

Investigator's Signature: ______________________________________

Date: _______________________

APPENDIX D

PRE- AND POST-SURVEY

Dear Participant,

You are invited to participate in this survey in order to provide an understanding of your experiences as a student, as well as an assessment of how critical you view certain skills. This survey should take about 3 - 5 minutes. The findings from this survey will be used to assess further development of a mentoring program in higher education, and to evaluate how and to what extent the study impacted your belief in your own self-efficacy. Your responses will be kept entirely confidential.

In order to ensure confidentiality, you will need to create and use a unique identifier, one that is easy for you to remember, but one which no one else will know. The unique identifier will be the first three letters of your mother's name and the last four digits of your phone number. For example, Mar 0789, would represent the first three letters of Mary and 0789 are the last four digits of your phone number. This identifier will be used to match your survey and journal responses during the study. You will not be identified in any way. Results of this study may be used in dissertations, reports, presentations, or publications but your name will not be used or known.

If you have any questions concerning this research study, please contact me directly at harrop@asu.edu.

In advance, thank you for your time.

Sincerely,

Lance Harrop

Doctoral Student

1. Please enter your unique identifier (first three letters of your mothers first name and last 4 digits of your phone number…example, Mar7475)

2. What gender do you identify with?

3. What is your major?

4. What year are you in your education?
   - ☐ Freshman
   - ☐ Sophomore
   - ☐ Junior
   - ☐ Senior

5. What is your age?

6. Have you participated in any college success programs?
   - ☐ Yes
   - ☐ No
   - ☐ Unsure

7. Have you participated in student clubs?
   - ☐ Yes
   - ☐ No
   - ☐ Unsure

8. I graduated from the following type of high school
   - ☐ Public High School
   - ☐ Private High School
   - ☐ Charter High School
   - ☐ Home Schooled

9. Did you receive accommodations in high school?
   - ☐ Yes
   - ☐ No

10. My experience using accommodations in high school was positive?
- ☐ Strongly agree
- ☐ Agree
- ☐ Somewhat Agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly Disagree

11. I feel comfortable advocating for myself.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

12. I believe self-awareness is critical to my success as a college student.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

13. I am confident in my ability to navigate the complexities of the university?
- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

14. I believe self-advocacy is critical to my success as a college student.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

15. I know how my disability impacts my learning.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

16. I am confident in my ability to request accommodations when needed.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

17. I know what accommodations work best for me.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

18. I believe problem-solving is critical to my success as a college student.
    - ☐ Strongly Agree
    - ☐ Agree
    - ☐ Somewhat agree
    - ☐ Somewhat disagree
    - ☐ Disagree
    - ☐ Strongly disagree

19. I am confident that I can advocate for myself.
    - ☐ Strongly Agree
    - ☐ Agree
    - ☐ Somewhat agree
    - ☐ Somewhat disagree
    - ☐ Disagree
    - ☐ Strongly disagree

20. I am knowledgeable regarding disability legislation (e.g., Americans with Disabilities Act).
    - ☐ Strongly Agree
    - ☐ Agree
    - ☐ Somewhat agree
    - ☐ Somewhat disagree
    - ☐ Disagree
    - ☐ Strongly disagree

21. I am familiar with student support services at the university I am attending.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Somewhat agree
    - ☐ Somewhat disagree
    - ☐ Disagree
    - ☐ Strongly disagree

22. I am confident that I will be successful in achieving a postsecondary degree.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

23. I can discuss the impact of my disability with my professors.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

24. I believe decision-making is critical to my success as a college student.
- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

25. I am confident in my ability to problem solve?
- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat agree
- ☐ Somewhat disagree
- ☐ Disagree
- ☐ Strongly disagree

26. I view myself as an intelligent student.

☐ Strongly Agree
☐ Agree
☐ Somewhat agree
☐ Somewhat disagree
☐ Disagree
☐ Strongly disagree

27. I view myself as a confident student.

☐ Strongly Agree
☐ Agree
☐ Somewhat agree
☐ Somewhat disagree
☐ Disagree
☐ Strongly disagree

28. I believe mentoring is critical to my success as a student?

☐ Strongly Agree
☐ Agree
☐ Somewhat agree
☐ Somewhat disagree
☐ Disagree
☐ Strongly disagree

APPENDIX E

POST-MODULE SURVEYS (1-5)

Module 1 Participant Feedback – *Differences between high school and college*

Dear Participant,

Thank you for completing module 1 - *Differences between high school and college*. You are invited to participate in this brief survey in order to provide feedback on the usefulness of this module. This survey should only take 2-3 minutes to complete. The findings of this survey will be used to assess further development of a mentoring program in higher education. Your responses will be kept entirely confidential.

In order to ensure confidentiality, you will need to create and use your unique identifier. The unique identifier will be the first three letters of your mother's name and the last four digits of your phone number. For example, Mar0789, would represent the first three letters of Mary and 0789 are the last four digits of your phone number. This identifier will be used to match this survey to results of the pre- and post-survey. You will not be identified in any way. Results of this study may be used in dissertations, reports, presentations, or publications but your name will not be used or known

If you have any questions concerning this research, please contact me directly at harrop@asu.edu.

In advance, thank you for your time.

Sincerely,

Lance Harrop
Doctoral Student

Please enter your unique identifier (*first three letters of your mother's name and last four digits of your phone number…example, Mar0789*).

Question 1

The information discussed in module 1 (*Differences between high school and college*) was useful to me as a student.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat Agree
- ☐ Somewhat Disagree
- ☐ Disagree
- ☐ Strongly Disagree

Question 2

In what ways have I used the information discussed in module 1 (*Differences between high school and college)*?

Module 2 Participant Feedback – *Self-Advocacy*

Dear Participant,

Thank you for completing module 2 – *Self-Advocacy*. You are invited to participate in this brief survey in order to provide feedback on the usefulness of this module. This survey should only take 2-3 minutes to complete. The findings of this survey will be used to assess further development of a mentoring program in higher education. Your responses will be kept entirely confidential.

In order to ensure confidentiality, you will need to create and use your unique identifier. The unique identifier will be the first three letters of your mother's name and the last four digits of your phone number. For example, Mar0789, would represent the first three letters of Mary and 0789 are the last four digits of your phone number. This identifier will be used to match this survey to results of the pre- and post-survey. You will not be identified in any way. Results of this study may be used in dissertations, reports, presentations, or publications but your name will not be used or known

If you have any questions concerning this research, please contact me directly at harrop@asu.edu.

In advance, thank you for your time.

Sincerely,

Lance Harrop
Doctoral Student

Please enter your unique identifier (*first three letters of your mother's name and last four digits of your phone number…example, Mar0789*).

Question 1

The information discussed in module 2 (*Self-Advocacy*) was useful to me as a student.

- ☐ Strongly Agree
- ☐ Agree

- ☐ Somewhat Agree
- ☐ Somewhat Disagree
- ☐ Disagree
- ☐ Strongly Disagree

Question 2

In what ways have I used the information discussed in module 2 (*Self-Advocacy)*?

Module 3 Participant Feedback – ***Becoming familiar with key university support services and resources***

Dear Participant,

Thank you for completing module 3 – *Becoming familiar with key university support services and resources.* You are invited to participate in this brief survey in order to provide feedback on the usefulness of this module. This survey should only take 2-3 minutes to complete. The findings of this survey will be used to assess further development of a mentoring program in higher education. Your responses will be kept entirely confidential.

In order to ensure confidentiality, you will need to create and use your unique identifier. The unique identifier will be the first three letters of your mother's name and the last four digits of your phone number. For example, Mar0789, would represent the first three letters of Mary and 0789 are the last four digits of your phone number. This identifier will be used to match this survey to results of the pre- and post-survey. You will not be identified in any way. Results of this study may be used in dissertations, reports, presentations, or publications but your name will not be used or known

If you have any questions concerning this research, please contact me directly at harrop@asu.edu.

In advance, thank you for your time.

Sincerely,

Lance Harrop
Doctoral Student

Please enter your unique identifier (*first three letters of your mother's name and last four digits of your phone number…example, Mar0789*).

Question 1

The information discussed in module 3 (*Becoming familiar with key university support services and resources*) was useful to me as a student.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat Agree
- ☐ Somewhat Disagree
- ☐ Disagree
- ☐ Strongly Disagree

Question 2

In what ways have I used the information discussed in module 3 (*Becoming familiar with key university support services and resources)*?

Module 4 Participant Feedback – ***Decision-Making / Problem-Solving***

Dear Participant,

Thank you for completing module 4 – *Decision-Making / Problem-Solving*. You are invited to participate in this brief survey in order to provide feedback on the usefulness of this module. This survey should only take 2-3 minutes to complete. The findings of this survey will be used to assess further development of a mentoring program in higher education. Your responses will be kept entirely confidential.

In order to ensure confidentiality, you will need to create and use your unique identifier. The unique identifier will be the first three letters of your mother's name and the last four digits of your phone number. For example, Mar0789, would represent the first three letters of Mary and 0789 are the last four digits of your phone number. This identifier will be used to match this survey to results of the pre- and post-survey. You will not be identified in any way. Results of this study may be used in dissertations, reports, presentations, or publications but your name will not be used or known

If you have any questions concerning this research, please contact me directly at harrop@asu.edu.

In advance, thank you for your time.

Sincerely,

Lance Harrop
Doctoral Student

Please enter your unique identifier (*first three letters of your mother's name and last four digits of your phone number…example, Mar0789*).

☐

Question 1

The information discussed in module 4 (*Problem-Solving / Decision-Making)* was useful to me as a student.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat Agree
- ☐ Somewhat Disagree
- ☐ Disagree
- ☐ Strongly Disagree

Question 2

In what ways have I used the information discussed in module 4 (*Problem-Solving / Decision-Making*)?

☐

Module 5 Participant Feedback – *Self-Awareness*

Dear Participant,

Thank you for completing module 5 – *Self-Awareness.* You are invited to participate in this brief survey in order to provide feedback on the usefulness of this module. This survey should only take 2-3 minutes to complete. The findings of this survey will be used to assess further development of a mentoring program in higher education. Your responses will be kept entirely confidential.

In order to ensure confidentiality, you will need to create and use your unique identifier. The unique identifier will be the first three letters of your mother's name and the last four digits of your phone number. For example, Mar0789, would represent the first three letters of Mary and 0789 are the last four digits of your phone number. This identifier will be used to match this survey to results of the pre- and post-survey. You will not be identified in any way. Results of this study may be used in dissertations, reports, presentations, or publications but your name will not be used or known

If you have any questions concerning this research, please contact me directly at harrop@asu.edu.

In advance, thank you for your time.

Sincerely,

Lance Harrop
Doctoral Student

Please enter your unique identifier (*first three letters of your mother's name and last four digits of your phone number…example, Mar0789*).

☐

Question 1

The information discussed in module 5 (*Self-Awareness*) was useful to me as a student.

- ☐ Strongly Agree
- ☐ Agree
- ☐ Somewhat Agree
- ☐ Somewhat Disagree
- ☐ Disagree
- ☐ Strongly Disagree

Question 2

In what ways have I used the information discussed in module 5 (*Self-Awareness)*?

☐

APPENDIX F

INTERVIEW QUESTIONS W/ SCRIPT

Hello, my name is Lance Harrop, I am a doctoral student in the Mary Lou Fulton College of Education, in the Leadership and Innovation program. As you know, I am conducting an action research study as a requirement for my doctoral degree at ASU.

The innovation that I am looking at is how to increase self-efficacy in students with disabilities, and more specifically, how students with disabilities describe their experience after having participated in a mentoring program.

In order to most accurately capture this interview, I will be audio recording it and then transcribing the interview once it is over. When my research is complete I will be destroying the recording.

Thank you for taking the time to meet with me, I appreciate the opportunity to learn of your experience in going through this mentoring program.

All information from this interview will be kept strictly confidential. Your full participation is appreciated.

Your answers will NOT impact your academic standing whatsoever, or be used against you in any way.

Do you have any questions before we get started?

Questions –

1. *Please state, and spell your name.*
2. *What is your major?*
3. *How long have you been at ASU?*
4. *Is the only college or university that you have attended?*
5. *What year are you in (e.g., freshman, sophomore, junior, and senior)?*

6. *What do you think about your program?*
7. *What do you think about your ASU experience?*
8. *Can you please share a little bit about your background? Why you chose ASU and your particular major?*
9. *Can you please talk about your experience in high school as a student with a disability?*
10. *Can you please talk about your experience at ASU as a student with a disability?*
11. *Have you ever participated in a mentoring program prior to this semester?*
12. *If yes, can you describe what that experience was like?*
13. *Can you describe your experience in going through the mentoring program this semester?*
14. *What did you find most challenging*
15. *What did you find most rewarding?*
16. *Has working with a mentor change your confidence? If so, how?*
17. *What would say are the most important skills to develop as a student?*
18. *Can you describe what university resources or services you used this semester?*
19. *What would you say is the most important thing you learned this semester from this mentoring program?*
20. *Can you tell me what techniques or strategies you used this semester?*
21. *If you could design a mentoring program for students with disabilities, what would you say is essential to be a part of that program?*
    - *Resources*
    - *Information*

  - *Skills*
  - *Strategies*
  - *Other*

22. *Can you tell me about a time where you used the skills you learned in the mentoring program this semester?*

--Closing Script

Thank you for taking the time to meet with me today. You have shared some great information. The next step for me in this process is to transcribe this information. If I have any additional questions, or need to clarify information, would it be ok that I contact directly?

Do you have any final questions for me?

APPENDIX G

PARTICIPANT OBSERVATIONS

Module 1 – Differences between high school and college

James

After briefly describing the process, we discussed primary difference between high school and college. Communication did not flow as fluidly as I had hoped, and required that I ask many more questions. The participant was very much an introvert, which seemingly resulted in his answers being very short. As a result, this required additional prompting. When asked what areas that he felt were significant differences, the student specifically noted that time management was a particular challenge in high school, yet he hopes to manage his time more effectively in college. We spent a good bit of time discussing his high school experience. It was interesting to note that the student openly acknowledged that he did not like doing homework in high school or college; He would simply study for and take exams. Over time he learned to do homework in class rather than doing homework at home. He acknowledged that he did not have a good system in place for organizing his responsibilities. When asked about accommodations and the accommodation process, he indicated that he never attended an IEP meeting in high school, but said that his parents attended.

Karen

Almost immediately, I noted the difference in communication style and personality as compared to other participants. The participant was outspoken and open in her experiences. She noted frustration in a particular challenge she had previously with arranging services through the Disability Resource Center, noting that it was confusing. She identifies herself as "high functioning", although she said that she does not like either of the terms “high functioning” or “low functioning”. We discussed that she will often not get the help that she is needing as others do not see her as having a disability. As a result, she has become more “self-aware” as to how she presents herself. She considers herself a very capable self-advocate, and noted that she is not good at being vague. For the most part, high school was a positive experience for her and all of her teachers were supportive. When asked what she plans to do beyond college, she said that she wishes to use her experience in theatre and her experience in having a disability to do something. She is still trying to decide what that something will be.

Susan

Susan was very pleasant, but appeared somewhat anxious. Based on communication style, which included, limited eye contact and what appeared to be more of a reserved nature, the student appears to be more of an introvert. As such, this required more intentional prompts to keep the conversation going. When discussing some of the primary differences between high school and college, she noted that she enjoys college more than high school. When asked why that is, she noted that she likes the “freedom” that college offers. Susan noted that she commutes to campus, and chose her academic program as it seemed to be a “good program”. When asked if her parents were involved in her educational experience, she noted that they were “somewhere in the middle”. One of the unique aspects and differences that has been most noticeable has been the large class sizes, which she describes as being “weird”, while noting that historically she has struggled in these kinds of environments.

Matthew

Great conversation. Matthew has great insight into his disability and the impact of having ASD. He began this first session by stating that he may be the wrong person to speak with regarding differences between high school and college. He added that he was undiagnosed in high school, and was therefore not on any kind of an IEP, nor did he receive any services. However, he learned to be successful by developing his own success strategies. He specifically noted religious and cultural beliefs that likely contributed to disability diagnosis challenges. Matthew has a great sense of humor, and speaks very openly and articulately about life and his experiences. He was also very self-aware regarding having a disability and the impact of that disability. He specifically noted as an impact that individuals with ASD tend to look at life very black and white, where any change (inconsistencies) are problematic and “disruptive”. He also spoke at length regarding conversations that use implied language, and how that can sometimes lead to confusion. He indicated that those with ASD struggle with implied language, or having conversations with people who tend to use idioms.

Amy

This was a great conversation. Amy was very open and talkative. She demonstrated good conversational skills, and appeared to enjoy the opportunity to engage in the conversation. Much like Matthew, Amy demonstrated great insight and understanding into the impact of her disability. She spoke openly about her family and her previous life experience, which included being incarcerated. She indicated that she wishes to use that life experience to now work with others. Like Matthew, she indicated that module 1 (*differences between high school and college*) was not as applicable to her given the fact that she never attended high school, and chose to complete her General

Education Degree (GED) well after high school, rather than obtaining a traditional high school diploma. She noted that she did not receive “formal education” until she was 48 years old. She stated that she loves learning and enjoys school. She feels she may be at her best when she is advocating on the behalf of others. She believes an asset she possesses is her ability to speak “unfiltered”. As she did not experience a traditional high school experience, we discussed her collegiate experience, which she describes as being positive but challenging. She noted a goal of hers is to mentor felons. One personal aspect of her commitment to success was demonstrated when she was once challenged from someone else who stated “It’s going to be hard for you to get a job”, to which she replied “No, it would be hard for you to get a job if you were me”. As noted in this response, as well as the overall tone of the conversation, she appeared very confident.

Module 2 – Self-Advocacy

James

As was the case in the module 1, the conversation I had with James in module 2 was very limited. Specifically, the conversation was very one-sided, with me asking a number of prompts and James responding (usually) with a very short reply. Even when asking open-ended questions, James often would respond with “I don’t know” or “I’m not sure”. As was the case in module 1, the instructional piece went very smoothly. James seems to be a very intelligent student. My approach during the module has been to teach a particular point, then ask questions, in hopes of spurring a robust discussion. However, given some of the communications flow challenges with James, my approach became more teacher, rather than facilitator. During module 2, James openly admitted that he does not like to talk. In going through module 2, and given that module focused on self-advocacy, it was clear that having an open and flowing discussion regarding experiences where he advocated for himself would be limited. When asked to reflect upon his experience in high school and whether self-advocacy was a challenge, he acknowledged that he does not know how accommodations were requested or provided.

As the conversation turned to strengths and weaknesses, James wasn't readily able to articulate what his strengths were, stating, "I have no idea". He noted that his weakness was that he does not like to talk, which makes it difficult to advocate for what he needs. When asked to describe his communication style, he said that he tends to be more non-assertive. He specifically noted that he is "timid" and tries to "avoid conversations". When asked if he has any strategies for self-advocating, he wasn't sure. When asked if he had created any mentoring networks that he can use to help guide and support during challenging situations, he mentioned that he speaks to his mom, but not really anyone else. When asked what communication style he tends to use, he noted that he hasn't really given it much thought.

Karen

"I know how my disability impacts me, I just don't always know how to describe it to others"

Comparatively speaking, Karen's communication style is the exact opposite of James. She was very open, engaging and talkative. Karen seems to already have a strong sense of why self-advocacy is important. In going through each of the skills, she would affirmatively nod frequently, which I interpreted to mean that that she was either agreeing with the instruction and/or that she also had developed that skill. When asked what she views as her strengths, she noted that she would much prefer to communicate and advocate through email, rather than in-person. She noted that she can express herself more eloquently through email, as opposed to face-to-face meetings. She noted that this is partly due to the fact that she does not have a visible disability, and that often times, others will not believe that she has a disability. This has been a challenge for her in the past with individuals not believing that she has a disability. She also likes to take her time in crafting her written communication to ensure it is polished and expresses what she intends to convey.

When asked how she advocates for herself, she noted that she prefers “point blank and as concise as she can get it, through email”. She noted that she prefers to contact the instructor directly, rather than going through the Disability Resource Center (DRC), and added that is partly due to an experience she had last semester in working with the DRC that was not as positive as she would have liked. She also noted that advocating directly with the instructor more effectively expedites the process rather than waiting for someone else to advocate on her behalf. One of the challenges that we discussed were discrepancies in self-awareness. Namely, students who believe that they are great self-advocators, only to learn that they will struggle with certain areas that they were unaware of. She noted that this will sometimes happen to her as well.

Karen demonstrated great communication skills, including great eye contact and appropriately affirming head nods. When asked how she already has established many of the skills needed to be a great self-advocator, including eye contact, facial expressions, asking questions, she noted learning that ability at a young age. In that experience, she specifically noted that having a twin sister was instrumental in her own development. Her twin sister does not have ASD. At a young age, Karen learned to mimic her sister's behavior. She noted that she was always compared to her sister by others. She said that others would say that her sister was very extroverted whereas she was said to be "quiet and weird". As a result she learned to "mirror" her sister and copy how she would interact with others. She noted that she was pushed to "fake it until you make it", without realizing that she was even doing it. She added that her mom would have them in the same class for one year, and then switch them to different classes the following year. This started when they were both in Kindergarten and continued until they were in 8th grade. What she noticed was that during the years when she was apart from her sister, she struggled in communicating with others and advocating for herself. She felt much more isolated because she "didn't know how to react or act in specific situations without an example". It wasn't until about two years after she was diagnosed as having an ASD where she realized she was mimicking her sister. It was at this time she began realizing the importance of self-advocacy as a life-long skill. She no longer wanted to rely on her sister, as it began to bother her. Highlighted in the conversation was the importance of peer-to-peer mentoring. Karen believes that having someone "walk you through the program physically and mentally" would be an important element in the development of a mentoring program.

After discussing specific skills (eye contact, not interrupting people), Karen noted that each of these, at least for her, were learned behaviors, and become more difficult when she felt very passionate about something. She noted specifically that she is not very good in debate classes because she is naturally argumentative and interrupts without realizing that she is doing so. She believes that her communication style is more assertive, but can drift to non-assertive and aggressive depending on the situation. In situations where she is unable to resolve on her own, she will outreach to others (she noted the DRC) who can advocate on her behalf.

She noted at the end of high school she was much more aggressive and angry. This was due to not having a clear disability support plan, including having her Individualized Education Pan (IEP) being ignored. She also noted that her accommodations were not very helpful and that she had instructors who resented providing accommodations in the manner prescribed in the IEP. Karen believes self-advocacy is important at the collegiate level because, and added that no one else will do it for you, and also helps you learn about yourself.

Karen offered suggestions on how to build self-advocacy skills, which included, identifying individuals that she can bounce ideas off of, but also noted that this is not often effective in that, often times, those individuals typically won't have a disability, so their experience may not be relevant; again, perhaps noting the importance of exploring a peer-to-peer mentoring program.

One of the struggles she noted related to self-advocacy is not knowing how to explain the impact of her disability. She noted that she knew the impact of her disability, yet doesn't know how to explain it to others. An example used to describe this experience is that it's similar to asking someone to describe the color red. Someone just knows the color red, but may not always know how to describe it.

Amy

"I'm a person that focuses on what's strong and not what's wrong"

The following is direct feedback provided by Amy to the researcher via email prior to module 2 – “Much appreciation for the work you are doing. Just a thought, would it not be fabulous to have mentors with shared experience, whether it be re-entry to the community, disability, mental health, shared experience and the knowledge that you are not the only one is extremely appealing. The mentors that share like experiences, that have shown success, determination, and relentlessness, will always be more welcome than someone that has no idea what it is like to have a challenge”.

Amy began the session detailing a conversation that she had with her college professor where she advocated for herself. One of the challenges that Amy has experienced is that she entered her university having previously been convicted of a felony. From that experience she has made the decision to advocate on behalf of others. She noted and reiterated her suggestion (see above) for the implementation of a peer-to-peer model, rather than a staff-to-student mentoring model.

She identified as one of her strengths that she will advocate for anything that needs to be improved. She also likes to advocate for herself, and encourages others to do the same. She considers herself to be strong and insightful. Her approach in advocacy is “to go straight to the top” which when asked what she meant, she explained that she meant to either the department head, or dean, etc.

When discussing the development of her advocacy skills, she noted that she learned advocacy skills from her mother who she describes as a great advocator. She stated that this was a learned skill, and continues to be a learned skill. Advocacy is important to Amy, as she noted that she has seen a direct impact in her own life. She noted that oftentimes people are not always aware that there is a need, and the only way of informing them is to communicate. Additionally, she noted that she does not like to discuss with others that she has a disability. She stated that when it comes to ASD "it is a disability that is not taken seriously". She went on to say that she wants to work hard for the grades that she receives and will work harder than anyone else to get good grades. She noted that "too many professors have said that you don't get any special treatment just because you're with the disabilities office…you still must do the same work as everyone else". She finds great comfort in discussing concerns with others with disabilities. She is enrolled in a class where other students with ASD are also enrolled. She believes communicating with others who have an ASD is very effective because there is no judgment from others where they all share the same experiences.

Matthew

"My weakness is simply that I am an alien. I am an alien from the rest of the population"

Great conversation and great insight into his life experience. We began our conversation by speaking about a few challenges that are happening in his classes. He noted the root of the challenge was a belief (self-awareness) that he does not belong in one of his classes this semester. We discussed the challenges related to having Asperger's Syndrome (ASD). He noted that one unique aspect of ASD is having the uncanny ability to self-diagnose, and to be ultra-aware. Matthew noted another challenge with "Aspies" (his word) is that whenever someone talks, those without ASD are always "trying to interpret it into something else". He indicated that those with ASD are very literal in what they say, which he noted as an important element to self-advocacy. An example of this was that he said that, "If I say the sky is blue…I don't meant let's take a walk, I mean the sky is blue”. He noted the previous example of not belonging in one of his classes this semester, noting, “When I say that I do not belong in this class, I don’t mean that I am mad at you, or I am upset, I literally mean that I do not belong in this class”.

He referenced using a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats), for making decisions regarding his own self-awareness. When discussing assertiveness as a skill, he noted that his dad walked away from two marriages rather than being assertive. He also noted that he struggles with communication with women saying that, “They don’t ever say what they mean to say”. One interesting aspect he raised was that in some cases, people who have an ASD may appear to be aggressive or disrespectful, but do not mean to be. He noted that he believes that in many cases it may also be due to the fact that some people don’t have the communication skills to work through it, particularly in situations where someone may feel trapped in a corner. All in all, he appeared to have terrific self-awareness. He noted that his siblings “hate him” because they think he does not show emotions. In his words, “They think I am a psychopathic robot”. When asked if he could identify any weaknesses, he noted that he “speaks a different language”, he added that this means that not everyone understands him. As an example of this, he said that when people say, “My dog ate my homework” what they mean to say is that “I was out partying last night and I was drunk”. What I mean by “My dog ate my homework is that my dog literally ate my homework”.

When discussing self-advocacy, one of the challenges that he has experienced as a person with ASD is that people do not always believe what he is saying. In turn, he also added that there are times when he may not always understand what people are saying.

Much of the conversation centered on processing and the challenges with processing. He noted that he literally processes individual statements and sometimes individual words. He referenced having been previously tested as having a high IQ test score in that he is in the 95th percentile in general intelligence, while in the 10th percentile in social intelligence. He noted that this was partly due to his hearing loss and partly due to being ASD. He also noted that he is likely more Asperger than autistic. Two of his cousins were highly autistic. He referenced his background in Judaism and specifically noted that self-reflection is a critical part of that tradition. He noted that he is "preconditioned to being self-aware".

While the conversation was not necessarily on self-awareness (that will be in module 5), he believed self-awareness to be a critical part of self-advocacy. He noted that having a strong network of support has been critical for his own success, and gave an example of an advocate he had previously through Jewish Family Services that has been a great support and resource for him. He added that there were times that he didn't trust other people, and by going to his advocate, she was able to assist as a "go between". He also noted that this experience helped him learn to trust others, including the disability professional staff at his current university. Similar to the experience of Karen (see above), he believes that he knows how his disability impacts him, but does not always know how to describe to anyone else.

Susan

"Sometimes I explain it awkwardly, as words are confusing"

Much like James, Susan presents very much as an introvert. As such, her responses tend to be very short. As a result, each conversation tends to be more one-sided, which required more instruction on specific skills, followed by a series of prompts, which are intended to facilitate more of an interactive conversation. The conversation tends to be much more one-directional (e.g., mentor-researcher facilitating). When Susan responds to questions, responses tend to be short and succinct, relative to other participants who were more descriptive in their responses.

In discussing self-advocacy, specifically about strengths and weaknesses, Susan notes that her weaknesses include not knowing how to phrase things, or becoming anxious when she must advocate for herself. She acknowledged that self-advocacy is not one her strengths, but is getting better at it. When she is in a situation where she will need to advocate for something, one strategy that she will use is that she will rehearse prior, in order to ensure that she does not “mess it up”. She also noted one of her greatest challenges was not always knowing what she needs help with. As an introvert, conversing with Susan was not as fluid as with other participants. Providing prompts was helpful in facilitating the conversation.

When asked what her strategy is for engaging in conversations with others, Susan acknowledged that she tends to be non-assertive (no further explanation). She noted the importance of developing an advocacy development program, explaining that some people struggle with self-advocating, and that developing a way to assist students in developing advocacy as a skill would be beneficial. When asked what systems she currently uses to assist in advocating for herself, Susan noted having lots of friends with disabilities that she can bounce ideas off of. When asked what recommendations she would make to others in advocating for what they need, she suggested that others should make sure they know what they need. If they’re stuck, talk to professors, advisors, or friends. Be polite and respectful. Know what you want to say beforehand and practice before.

Module 3 – Understanding Key University Services and Resources

Karen

After reviewing each of the first two modules, module 3 was framed and defined. When discussing the disability services office, it was unique in that Karen’s experience with this office has not been as positive as she would like. She also noted one of the challenges in seeking counseling services has been that her mother was a counselor, and grew up with that influence. Specifically, she noted that she knows it would be helpful, but after having had a mother who was a counselor, she already feels as though she knows what they are going to say. Karen admitted that she does not use ASU services and resources, adding that because she is a transfer student, that she is not familiar with the services. She also noted that she is usually very busy, specifically saying that her participation in this study was the most that she has been involved in a particular project to date. She noted that this (being busy) was similar to previous educational experiences. When asked about some of the challenges she has experienced in utilizing disability support services, she added that she is very comfortable in advocating for herself so “why bother”. She seemed very positive towards TRiO Student Support Services. When asked what would prevent her from accessing any of these resources, particularly in using a peer-to-peer approach, she responded that peers intimidate her. She explained that she is even intimidated by peers who have been very successful in navigating similar life experiences. She noted that she was much more comfortable talking with faculty or staff. When asked which resources she would most likely use, she indicated TRiO Student Success Service and Student Success Center. It was interesting to note that she detailed an experience that she had with a friend where she was encouraging the friend to get connected with disability services and counseling services.

Matthew

As indicated previously, Matthew continues to demonstrate great insight to his disability. This was evident as he detailed an experience he recalled as a youth and his up-bringing. He recalls specific times where he began noticing that he was autistic. He noted the importance of medication in helping him to be successful. Matthew stated that the key to using services (for him) has been in having already had a positive experience with services provided previously. He noted the importance of trust in that process, and referenced a particular person who he said has been instrumental in helping him trust others. He also noted the importance of his step-father in his own development. According to Matthew, he felt that he was always treading on water with his step-father…given just enough support to not drown, but not enough to swim. When discussing specific resource and services, Matthew asked great questions on the process for getting connected to Career Services. One of challenges that he has in navigating the university, is that there is so much information that is often hard to remember and keep track of the service. He suggested as a solution, that the university create a list of services, including location. That way it will make it easier to keep track of the service and where to access that service. One of the elements I added to this particular discussion, were two videos. The first was a short video on counseling services, while the second was a brief video on the writing center and tutoring services. In general, Matthew indicated that he believed the services were good services, he also provided good feedback on the delivery of those services, including a discussion on how to make the videos more accessible and user-friendly. Towards the end of the conversation, it was difficult to keep him on task in discussing services. The conversation evolved into a broad conversation about challenges he was having in registering for courses next semester. These side conversations were allowed in order to be more reflective of what an actual mentoring session might look like.

James

James noted that his semester is going very well, indicating that he would rate it as a 7 out of 10, with 10 being very positive. Great discussion regarding services. He seemed interested in the topic, just not very talkative. Overall, the conversation went well. Similar to previous sessions, James was pretty quiet, even when prompting with questions. For example, when asked what he thinks about when he hears “Career Services”, he responded with “internships”. When asked what he thinks about when he hears “fitness center”, he responded with “gym”, but would not provide additional thoughts. One area where he seemed to be most interested was in one of the gaming events that the university hosts every year. Overall this was a much shorter conversation, and was almost entirely instructional (one-way) rather than interactive. Also, this session was shorter because I was unable to play the videos that I had intended to play. Instead, I sent a link to the videos in my follow-up email. He noted that he feels the DRC is important for students with disabilities. He noted that he does not feel TRiO is useful. When asked why it would not be useful, he said that he doesn’t see himself using that service, or connecting with people in that way. He did indicate that counseling would be helpful, but the fitness center does not interest him at all. James became much more open towards the end of the conversation, especially when asked how he would use each of the services.

Susan

Susan reported that her semester is going well. After framing and discussing the importance of services and resources, Susan reported that she has been going to counseling (assumed to be at the university she was attending), primarily for anxiety. She also added that she has not been using the DRC as frequently as she needs to. She noted that this is due partly to not needing it as much at this time, but primarily because of the anxiety it causes when having to discuss her disability and request services from others. As a student, she noted that asking questions causes much anxiety. She also reported that advocating for herself is highly anxiety producing. After showing the video on counseling services, she noted that her experience using counseling services has been very positive. Other services that she uses included the DRC. She was interested in TRiO Student Support Services, but had not yet completed the application process. Similar to other students, when asked what she thinks of when I mention the fitness complex, she said “working out”. When asked how the services may benefit her, she mentioned that she would like to use more disability accommodations, tutoring services, and career services. Overall, given the communication style of Susan (very introverted), the conversation was primarily instructional, rather than Susan providing much feedback on her experience.

Amy

After a brief review of the previous two modules, Amy began by discussing frustration with the DRC, specifically with not having the information that she needs in accessing assistive technology. She also expressed that following the procedures required to access accommodations has been challenging. She specifically gave the example of providing receipts in order to receive alternative formatted materials. Per the DRC process, proof of purchase is required for all students receiving alternative formatted materials. In this example, Amy noted that having enough time to do all of that work has been difficult. She also expressed frustration in utilizing TRiO Student Support Services. She claims that she is unable to access TRiO as she does not meet the specific eligibility requirements.

One of the resources that she expressed an interest was Career Services. She noted having lots of great experience and needs to update her resume in order to keep track of the information. She also expressed a need to get involved in the fitness center. A point of frustration when using the Student Success Center, was the fact that you have to make an appointment. She also expressed a need to utilize counseling services.

Module 4 – Problem-Solving / Decision-Making

Karen

“I just need to freak out for two minutes and then I will move on”

Very open and engaging conversation. After framing problem-solving, she noted that it is very difficult to problem solve, and often doesn’t realize that she is facing challenges. One of the ways (strategies) that she has developed in identifying problems is by the physical response that she experiences. She specifically noted that she can feel her heart beating faster. During times when she was facing a particular challenge or problem, but does not have a solution, she would remove herself and go and workout. She said that by “disassociating” with the problem for a while, she has found this to be an effective way of “re-centering” herself. After a while, she would return with a clearer idea on how to solve. She has found this to be particularly helpful in situations where she is not looking forward to working through a problem (e.g., math). By disassociating, it often removes “emotional roadblocks” that prevent her from moving forward. Another strategy that she found effective is by bouncing ideas off of other people. She specifically noted her mother and sister. Academically, she tends to struggle more in problem-solving with STEM courses because she is very un-interested in the subject area.

She openly acknowledged that she tries to avoid problems, including not asking questions of her instructors. I found this to be interesting given the fact that one of her strengths is in advocating for herself. She indicated that most problems cause her to be emotionally stressed. She attributes this emotional distress to being on the spectrum, and will sometimes “shut down” in extremely stressful situations. She added that her ability to solve problems in college is significantly better than it was in high school. She added that she especially struggles in solving problems that she feels are irrelevant, which is why she said she struggles in STEM classes. One area that she has found effective in navigating social problems with others, is that she tends to just draw boundaries and to not allow social problems to impact her. She demonstrates a high sense of social awareness, noting that she will often feel extremely guilty when she chooses to set boundaries with friends, but also feels comfortable in making decisions that are in her best interest and she can't always worry what other people feel about her.

One interesting challenge that she noted was what she referred to as a "weird relationship with empathy". She indicated that she tends to be more sympathetic, but struggles with empathy. The challenge with this has been most especially apparent in her relationships when she may not understand what others are feeling. When discussing more of the details in thinking through a solution to a problem, she indicated that she struggles with the initial identification, defining, and identifying a solution, but once she gets to implementation, she knows exactly how to implement. She refers to this as "autopilot". Modifying and adjusting is a little more difficult for her. One tactic that she will use with her boyfriend is that she will vent. She added, however, that when she vents, she is not looking for a solution, she just wants to be heard as she works out the solution. She noted that sometimes she just needs to "freak out for two minutes" and then she'll move on. She does not like it when others offer solutions as it complicates the scenario for her, adding that she is not much of a collaborator when it comes to solving problems.

James

"Just do it…"

The intent of this module was to work through what James has found effective in problem-solving strategies, and to provide additional information regarding problem-solving tools. Overall, James was much more open during this module than he has been previously. To begin the conversation, I framed problem-solving very broadly, and added that the hope was that he would look at developing skills that were based primarily from his own perspective of his personal experience. In general, I outlined a specific strategy for problem-solving, but emphasized that I really wanted to build on skills and strategies that he has already found to be effective.

One of the challenges I found in this conversation was that James had a difficult time understanding what I meant by problem-solving and decision-making, and asked for clarification several times. After discussing a common technique of (1) identifying the problem, (2) defining the problem, (3) thinking through or listing possible solutions to the problem, (4) implementing a solution, (5) revising solution, and (6) learning from the process, he seemed to better grasp the concept. Perhaps the information that I was providing was far too broad and using a more “real life” scenario to illustrate may have been more effective.

James identified his strengths as being able to think through a scenario really well. He noted weaknesses to be areas that “involve other people”, but was unable to articulate what was meant specifically. When asked if has a particular style / strategy for solving problems, he noted that “I have never really tried solving a lot of problems”. When asked why that is, he responded that he may have a strategy, but he “is not aware of it”. He did indicate that his current way of problem-solving seems to be effective.

When asked if there are particular situations or problems that are especially challenging, and in which he would rather avoid altogether, he responded “no”. When given a particular scenario and asked how he would solve the problem, he responded to just figure out the problem and just do it. When asked how he incorporates previous experience in guiding his decision-making now, he responded that he typically faces each problem as a separate challenge. He seemed to struggle defining what that means for him. In working through problems, he indicated that he will sometimes use a network of others to listen to his solution and help offer other suggestions. When asked how he feels his problem-solving ability has changed since high school, he said that it hasn’t changed and that he feels confident in his ability to solve problems.

Susan

When asked if there is a particular process she follows to solve a problem, Susan noted that it depends on the problem, noting that she just solves without thinking about the solution. Susan noted that time management and procrastination has been an issue. She also noted that she typically is hesitant to rush into a solution. Although, she did note that she may “rush into” a solution at times for “emotional reasons”. She will take longer to solve for things that she is anxious about. When asked to give an example of those things that create anxiety, she noted social situations and personal things. She indicated that she has a support system to work through situations, but will depend on the situation. Sometimes she will go to her parents, other times it may be her friends. In most situations, she noted that she will try and “figure things out” herself before going to anyone else.

I tried to give an example of scenario, but came across awkwardly. The example was meant to show where previous experience may be used to assist in finding a solution. She did note that she will integrate previous experience to help make decisions. When asked how she tends to navigate social situations involving problems, she noted that she tends to avoid social problems. When she does address them, she tries to be as respectful as possible. She indicated that she is pretty good at making “casual friends” but has difficulty connecting on a deeper level. She noted that this is not entirely related to ASD, but also may relate to previous experience. One problem that she has noticed is that she often has difficulty knowing when to jump into conversations with others. This has been problematic in group situations. She noted a previous experience where she was grouped with others who already knew each other. This created what she referred to as “awkward silence”.

When asked what were/are the most important tools that she has developed and would suggest to other students, she noted campus resources, specifically counseling services. She did add, however, that she has not used many of the resources. She also suggested to talk with people that you know, and added that she will sometimes look online at guides and video tutorials, and has found online resources to be helpful.

Amy

We began our conversation discussing what is typical for students on the spectrum. Amy noted an experience she had with her parents and others who pushed her “to be better”. Amy noted that she did not attend high school or middle school, saying only that school was not right for her and that she did everything she could to avoid being in school. She is now 51 years old, and completed the GED three years ago. She completed the GED while incarcerated. Amy has been incarcerated three times now. When Amy was in prison, she helped others complete their GEDs, which motivated her to complete her own GED. She said that encouragement has been important to her success. When asked how she defines problem-solving, and whether she has any specific strategies that she uses, she noted that medication is very helpful. She also openly admits to being narcissistic. She noted in the past that she would solve problems by drinking alcohol and using recreational drugs. She noted that she no longer drinks or does drugs. A turning point for Amy was in working with other inmates in completing their GEDs. She noted that this gave her confidence to complete hers. When asked how helping others helps her, she noted that her past experience has helped shape her perspective, indicating that she was where they are now. She sees herself as an advocate, and noted a number of examples she experienced in prison where she helped others to learn how to advocate for themselves. She sees herself as a problem-solver, and specifically is motivated to help others solve problems. She believes she can do anything at the university that she is attending, and expressed high confidence in her ability to navigate the complexities of the university.

Matthew

“Develop trust in the people around me, and trust that the help is there” (superheroes)

We began the conversation with a detailed conversation on whether or not self-awareness is “self” awareness or environmental awareness. Matthew specifically noted that most “aspies” see self-awareness very differently. Matthew notes that he uses a SWOT analysis (strengths, weaknesses, opportunities and threats) for making big and small decisions. When asked how he thinks through a problem scenario, he noted that he now has tools to effectively problem solve. He added that “there is no thinking through stress”, adding that he has had lots of support in navigating through stress management. It was interesting to note that Matthew sees life not as binary, but in terms of the grays. Other tools he noted were yoga, breathing techniques, and the fact that it takes years of learning to teach someone on the spectrum that there are choices that exist between “zero and one” (noting that sometimes in life there are grays). He specifically mentioned a person he worked with previously that he characterized as a “super hero”. He added that oftentimes he will need someone there to listen and walk him through the scenario so it doesn’t end in panic. Someone who will help him interpret the scenario. He mentioned a couple of other super heroes, including staff members that at the DRC at the university where the research is occurring. When asked how he “navigates the grays”, he responded that he doesn’t, and then added an analogy of being blind and using a cane by tapping back and forth. He added another analogy from Judaism of a blind person walking around in the dark with a lantern of over his head. When challenged by others that the lantern isn’t helping, so why use it, the person replies that the lantern isn’t for him, but for others to warn him when he is about to drop into a pit. He added that he doesn’t need to know how to navigate the grays when problem-solving he only needs to “develop trust in the people around me, and trust that the help is there”. One specific strategy he added as being critical to communicating with others on the spectrum is to “tell them straight out” what you want them to know, and then trust others around you to be able to translate for you. When asked how he learns, he gave an interesting take on the learning process. He was very in-tune with how he learned best. When asked how he would develop a mentoring programs that is most effective in promoting learning, he saw peer-to-peer mentoring as possibly being effective but would need to be set-up correctly, including early access to course information. He noted the isolation that students with ASD often feel, adding that it is a scary world for which he is not a part of. He added that it is often difficult to function socially when others see things differently than he might. When asked whether he ever uses “critical friends” to help problem solve, he added that the only friends that he has are those that are paid to be his friends (meaning professionals).

Module 5 – Self-Awareness

Karen

“There is no me that is not autistic”

When asked how she would increase self-awareness in others, she noted doing a project last year as part of her theater program. Karen was very aware of her disability in general, citing and contrasting the medical and social views of disability. She noted that disability is a construct of accessibility, and added that she has done a lot of research related to disability, noting common approaches, including the use of person-first language. For example, she compared identifying a person “as disabled” to a person “with autism”, noting the difference in language used as being important, while also adding that “there is no me that is not autistic”. We discussed at length common stereotypes and misperceptions related to those with ASD. She noted negative rhetoric that seems to be common with some. She provided examples that she has heard when others refer to having a child with ASD. She notes that she has heard some saying that they “have lost a child” when learning of an ASD diagnosis, or that they are “grieving the diagnosis”. The same could be said of any disability group, and she noted physical disabilities specifically. Karen appears to be very aware of negative social constructs that are common in society. With ASD, she noted common stereotypes to include the idea of “high functioning” saying that this, in and of itself, it becomes exclusionary to those that may not fall in that category. She noted that some have told her that she is “basically normal”, or if she is not high functioning, some will just say that she is not trying hard enough. By using the term “high functioning”, she noted the opposite that is often created, which is that those who are not “high functioning” must be “less than”, and “may not be able to contribute as much in society”. She gave a number of examples where she responded openly to others who have espoused incorrect ideas about disability, showing that she also has great advocacy skills. In general, she does not see herself as having a disability, and chooses not to identify as disabled or non-disabled either way. She will selectively identify herself in some contexts, but not in other contexts.

Part of our conversation focused on disability culture, including misperceptions. She noted a specific pet-peeve of hers is the negative connotation often associated with having a disability. She demonstrated great understanding of using person-first language. When asked how much of her own self-awareness played in her own identity development, she noted that while she was younger it played a significant role. After she was diagnosed, she became much more aware of how people referred to disabilities. Part of the conversation was very tangential, where she discussed feminist culture, the movie *Rainman*, theatre, how we dress, and how each of those portrayals have been influential in her own development. She noted that much of her own style (dressing in black, having short hair) was partially due to sensory impacts, but largely due to setting herself apart from her twin sister. An interesting note related to how she has developed socially; she notes that much of what she has learned to do socially has been through her involvement in theatre. She noted that media will often portray characters on TV or movies as being autistic without actually labeling as autistic. She specifically noted *The Big Bang Theory's* character Sheldon as a common stereotypical portrayal of someone who is autistic. She further conveyed an experience when watching a production where one of the actors played the role of an autistic person. On the way out of the theatre, she recalled hearing others exclaim, "He did such a great job with the character. I could really tell how it must feel to be autistic". She recalled being very conflicted during the days following that production, knowing that they could not possibly know. One stereotype that she hears a lot about is the assumption that she is good at math, and she fully acknowledges that she does not enjoy math.

From an advocacy standpoint, she noted that she will often take a stand when she feels negative stereotypes and misperceptions are being perpetuated. She gave an example of an exchange that occurred over social media where someone took exception to something she posted in support of disability awareness. She further noted a video that she saw during Autism Awareness Month where people were taking extreme positions in perpetuating negative stereotypes. She was incredibly aware of her own disability and the influence of that disability. What made the conversation so insightful, however, was how she was able to put herself in someone else's shoes and see perspectives other than her own. Very insightful.

Susan

When asked to explain the influence of her disability, Susan had a difficult time. She noted that memory is impacted, and that dealing with other people can be confusing. She noted that communication can be difficult, adding that anxiety and the fact that she finds it more difficult around people who she is not familiar with, including instructors. She acknowledged that memorization and note-taking were particularly difficult for her. With note-taking, she specifically noted not knowing what to put in her notes, namely, deciding what's important and what is not. Much like my conversations with James, conversations with Susan were limited and usually required that I ask questions in order to keep the conversation going. Whereas conversations with the other three participants, a single question could lead to a very open and detailed response.

Susan was very aware of stereotypes. When asked if there is a particular stereotype that she gets a lot, she noted hearing, "Oh, you're autistic. Just like Sheldon Cooper", referring to the popular character on the television show The *Big Bang Theory*. Similarly, she noted that she will often hear the stereotype of knowing math, and acknowledged that she "can't do math worth crap". Relative to other participants, she noted that when she hears stereotypes, she typically will not address with the other person, and just lets it roll off. When asked whether she views being on the spectrum as having a disability, she noted that she does not typically view it as a disability.

When asked what she believes are the most critical things that we discussed over the course of each session, she noted that students should know what the services are, and don't be afraid to ask questions or for help. She noted specific utilization of counseling services as being a positive part of her educational experience. When asked to give one word that describes her, she said that she is “loyal, determined, and creative”. She added that describing herself is difficult. She also likes helping other people.

Matthew

Matthew began the conversation asking for time to revisit module 4 stating that if I were to ask him the same questions, that he would now be able to provide a “better answer”, stating that he had not considered those things before. When asked how he views disability and specifically how he views whether he has a disability. He confirmed that he does view autism as a disability, but acknowledged that when he hears the term “disability”, he tends to think in terms of physical disability, for example, someone missing a leg. He noted that when defining himself as having a person with a disability, he said that the problem is not that he has a disability, the problem is that he is vastly different than others. He specifically noted that those with autism see the world differently than others, much like engineers see the world differently. He additionally added that almost by definition “autistics are not self-aware”. He explained this by saying that it is a “difference in wiring”, and that we “connect the dots differently than others that are not autistic”. He characterized autism much like a “puzzle” or a “Rubik’s Cube”. Once you understand the conversation, it becomes much easier to define what it means to have ASD. When asked how he can successfully define the impact of his disability to others, he noted that it is “much like trying to swim through a dam (barrier)…it’s an impossible puzzle”. He noted it is not an issue of self-awareness, but rather an issue of “term awareness”, adding that “we (meaning those with ASD relative to those without ASD) don’t have like terms”. He went on to note that people who are autistic view things as being “very literal” (black and white) whereas others (not ASD) may view more fluidly (in the grays). When asked about stereotypes, he emphatically responded that he loves them. When asked why, he responded that “they give you a way to start” and allow for conversations to happen around a particular stereotype, which helps broadly (although not always accurately) define a group. He again noted the Rubik’s cube and said it was much like giving someone a clue to solving the puzzle. He went on to provide that disability is a matter of perspective. He added that in many situations he is not disabled, in others he is. He gave the example of one of his classes, noting the challenge with the instructor who did not fully understand how to accommodate. In that context, he noted that he had a disability. When asked whether to add a component of self-awareness to a mentoring program, he noted that he wouldn’t call it self-awareness. Rather, he provided a number of ways that he would define it, including “social awareness”, “interactive awareness”, “difference awareness” and “linguistic awareness”. He further noted it really come down to communication, and defining the impact of disability in a way that the other person understand the impact. It’s about correct articulation and cross-cultural awareness (culture of disability). He added a final note on disability, saying that it is not about a physical defect, but rather it’s about accessibility. He also added that “Sheldon” from the TV show the *Big Bang Theory* is portrayed “right on the money” as a person with ASD. One final area that we discussed was that the role of an advocate is actually a role of a “translator”, meaning that the advocate will translate the impact of disability to others in a way that they understand.

James

After discussing how others typically view disability and giving some statistics showing that many people on the spectrum don’t view themselves as having a disability.

When asked how he views disability, he responded that he doesn’t see it as a disability, but rather as “differently skilled”. He noted that he is not good at talking to people one-on-one, but he is good at doing other things. When asked how he would describe the impact of being “differently-abled” to someone else, he initially wasn’t sure of what I meant. After clarifying and giving a scenario, he wasn’t readily able to describe how he would describe to others. Perhaps with James, he had not ever really considered having to describe to others the impact of having a disability. When asked whether he has ever really had to think about having a disability, he said that he has not.

When discussing stereotypes and having asked whether or not he is aware of any stereotypes, he responded that he has not heard of any. When asked how he would define “autistic” to someone who is not familiar (long pause), he noted that it is when the “mind works differently”, particularly with regards to “social skills”. When asked if having that understanding is important to his success as a student, he responded with “not really, no”. We then revisited topic areas that we had discussed in previous modules, I asked which areas he felt were the most critical to his success. He noted that advocating was the most important. When asked why he believed that, he added that when he must speak with someone about something, he will typically “put it off for a long time”. He gave the example of having to pick up his books, noting that he only recently picked up his books. When asked why he puts it off, he said that “mainly it’s that I just don’t want to talk to people” and that he doesn’t want to interact with the people in order to get the books. When asked if our conversations have been difficult, he noted that it is becoming easier, adding that if he doesn’t know something, it is still hard. When asked if the semester is also getting easier in talking to others, he said that it depends on the situation. When asked why our conversations are getting easier, he explained that it’s primarily about comfort level with me as the researcher, and also in becoming used to my style and the questions that I ask.

We had a brief conversation regarding family. He noted that his brother is also attending college (in another state), and that his grandma, although undiagnosed, was also on the spectrum. When asked how self-aware he is of himself, he responded that he knows himself well. When asked if he is starting to become more self-aware as he interacts with others, he responded not that he is aware of. He added that he is a “little confident” in his ability to be successful. He then clarified that he is confident in that he will and can be successful, but will often second-guess himself when he misses an assignment. He said that he is confident in knowing the materials for the tests, but that it is the other things he must balance (e.g., homework) that are more challenging to his confidence level. When asked why his confidence is not as high as he would like, he responded that often times he doesn’t “know about things” or “when things are due”. He added that he is not very organized, saying that he tends to keep everything “mentally organized”.

As with each of the previous conversations, I would tend to ask more open-ended questions, trying to get more information, but only get limited responses.

Amy

After revisiting the previous four modules, we began the conversation discussing how she views disability. It was interesting to note that she views those on the spectrum as having “genuine gifts” and that she is amazed at how gifted they are. She added that she believes that one day, people on the spectrum will no longer be living in their (non-disabled) world, but that “they will be living in our world”. She noted all of the “genius” artists, mathematicians, scientists, who are on the spectrum. Similar to Henry, she also noted puzzles and Rubik’s cubes, saying that those who are on the spectrum are able to solve puzzles in a very different way. She then added that she believes the frequency of those diagnosed as having ASD will continue to increase to 1 in 20 or more, and then we will able to see “the great authors that are autistic”.

When asked how she is in advocating for herself, and how she describes the impact of her disability to others, and how she goes about doing that, she responded that “you can’t” adding that if they can’t see it, it will be difficult for them to see the impact. She gave as an example an instructor who once challenged her on having ASD, saying that she did not fit the typical ASD profile in that “she reads faces”, meaning that she maintains good eye contact in her communication. She noted she will often wear her hair draped over her eyes as a way of helping in her communication with others, and then added the instructor made assumptions based on an over generalization of those with ASD. When asked if that has been difficult in advocating for herself, she said that it isn’t once you understand the impact. She gave as an example an autistic adult being able to calm a child with autism much quicker than someone without. Adding that they can do this because they know what they are feeling.

Conversations are always interesting in that I typically just need to give a prompt and then Amy will then open up and talk about herself. She exudes confidence in her own ability. She noted that self-awareness is really a matter of perspective. She added that disability awareness can’t be learned through simulated activities, meaning those activities where those without disabilities are given experiences in an attempt to teach what it’s like to have a disability. For example, putting a blind-fold on someone in an effort to teach what it’s like to be blind. She added that rather than classify as having a disability, to classify as having “special abilities”, and then she noted as an example of these abilities those individuals who are blind and use a cane to navigate the world.

When discussing stereotypes, she noted that stereotypes do come up. She also added that she is a woman of color and comes from an affluent family, noting that each also factors into stereotypes that she has experienced. She recalled an experience she had when she was a child, and a colleague of her parents had come to visit. She recalls coming out of her room, only to hear the visitor say to her father “I thought you only had two sons” noting that she believed her father was embarrassed by her having a disability.

APPENDIX H

MODULE TALKING POINTS (1-5)

Module 1 Talking Points – Differences Between High School and College

General Differences

- Students are responsible for requesting accommodations and services.
    - Student must self-identify.
    - Students must self-advocate.
    - Student vs. parents / school administrators.

PROMPT: What do you see as the primary difference between your experience in high school and your experience in college?

PROMPT: How has your transition been in moving from high school, where others advocate on your behalf, to college, where you now must advocate for yourself?

Documentation / Accommodation Request Process

- University may require additional disability documentation to verify the impact of the disability.
- Documentation must include functional limitations and need for accommodations.
- Student is responsible for cost of documentation.
- Accommodations are determined on a course-by-course / semester-by-semester basis.

Legislative Differences

- IDEA vs. ADA
- Section 504 of the Rehabilitation Act
    - IDEA no longer applies in college
    - Universities and colleges fall under Section 504 and ADA
    - IDEA is about success / ADA is about access
- IEP's and 504 plans no longer apply to students in college

Academic Differences

- Student is responsible for meeting same academic standard as students without disabilities.
- Professors NOT required to modify curriculum.

PROMPT: What have been the challenges / positive experiences in transitioning?

Parental Involvement

- Parents no longer have access to student's records without students' consent (FERPA).
    - What is FERPA?

Module 2 Talking Points– Self-Advocacy

As students transition from high school to college, it becomes critical for students to learn how to advocate for themselves. This module will help students develop strategies for advocating for what they will be needing. During the module, the following points will be emphasized.

- Student responsibility (revisit difference between high school and college)
- Critical communication skills
    - Listening skills
    - Non-verbal communication skills
    - Be respectful
    - Ask questions
    - Understand impact of your disability

PROMPT: Describe which communication style is yours (assertive or non-assertive)

- Strengths and weaknesses (conversation)
- Why self-advocacy is important to identifying and solving problems (conversation)
- How to discuss impact of disability (conversation)

PROMPT: How would you describe the impact of your disability?

- Strategies for problem-solving
    - Identify the problem
    - Discuss with others
    - Consider alternatives

PROMPT: What strategies have you used that have been effective?

PROMPT: What do you consider your strengths and weaknesses?

- Identify key advisors, mentors, support (e.g., mentors, friends, family)

- Be polite and respectful
- Develop communication strategies that works best for you
- Know the impact of your disability
- Understand your rights as a student (ADA, Student Rights and Responsibilities)

PROMPT: What has been your experience in self-advocating in college?

PROMPT: What is your preferred method for self-advocating (e.g., email, in-person).

Module 3 Talking Points – Critical University Services and Resources

Disability Resource Center

Ensures accessibility by facilitating accommodations and services for qualified students with disabilities.

- Provides services to QUALIFIED students with disabilities
- Ensures accessibility for course and co-curricular activities
- Documentation process (refer to module 1)
- Requesting accommodations
- DRC locations

PROMPT: What has been your experience using DRC service?

PROMPT: What is the reason you have chosen not to use DRC services

Counseling Services (show video)

Provides counseling and crisis services for students, including facilitating critical connections to community services and resources as needed.

- Confidential, time limited, counseling
- Identify solution
- Stress management
- Crisis management
- Common misperceptions

PROMPT: When you think of counseling, what do you think of? How do misconceptions influence our ability to access services?

Student Success Center (show video)

Offers free tutoring, test taking preparations, and writing support to students. Also included is supplemental instruction.

- Tutoring
- Writing Center
- Academic support

TRiO Student Support Services

A grant funded resource for undergraduate students, which provides academic support services to first-generation, low-income, or students with disabilities.

- Serves 800 students across all locations
- Serves first-generation, low-income, and/or students with disabilities
- Tutoring services
- Academic support
- Cultural and community engagement
- Workshops
- Goals – student success, retention, graduation.

Career and Professional Development Center (CPDC)

Located at each campus, CPDC provides support to students preparing for employment, internship and other professional development opportunities.

- Resume writing
- Don’t wait until your last year…start year one

PROMPT: What services and resources have you found useful / not useful?

PROMPT: How would you improve the services and resources available at the university you are attending?

PROMPT: Which services and resources would you most likely use?

Module 4 Talking Points– Problem-Solving / Decision-Making

Why problem-solving is important

- Skill that can be utilized life-long

PROMPT: In what ways have you found problem-solving useful in college?

Common problems of being a college student with ASD

- Social problem-solving
- Situational problem-solving
- Navigating complexities of the university

PROMPT: What problems have you found most challenging in your collegiate experience?

Problem-solving strategies

- Problem recognition / define problem for understanding
- Identify possible solutions
- Work through outcomes
  - Utilize networks
- Implement solutions
  - Course corrections as needed
- Apply lessons learned as template for future problems

Problem-solving network

- Using critical friends to bounce ideas off of
  - Friends
  - Family
  - Advisors
  - Professors

PROMPT: What is your typical approach when working through a problem?

PROMPT: What have you found to be your greatest challenge in problem-solving?

Module 5 Talking Points – Self-Awareness

Disability Impact

- Functional limitations
- Understanding disability documentation
- Requesting accommodations in an informative way

PROMPT: How would you describe your disability to another person?

Disability impact – High School vs. College

- Understanding the IEP process
- Developing strengths through informative conversations with others

Communications Strategies

- Preferred way of communicating
- Strengths vs. weaknesses
- Increasing self-awareness in others

How we see disability vs. how others see disability

- Social constructs – the good, the bad, the ugly
- Stereotypes – negative and positive
- How perception shapes reality regarding disability

PROMPT: How do you view disability?

PROMPT: What stereotypes have you heard regarding ASD?

PROMPT: How do you feel about stereotypes?