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Student Support Services for Autistic Students Transitioning to Community Colleges

Arlitha Williams-Harmon

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Student support services for autistic students transitioning to community colleges

By

Arlitha Williams-Harmon

A Dissertation
Submitted to the Faculty of
Mississippi State University
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy
in Community College Leadership
in the Department of Educational Leadership

Mississippi State, Mississippi

May 2016

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2016

Student support services for autistic students transitioning to community colleges

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This study researched the prevalence of Autism Spectrum Disorders (ASD) and the potential impact ASD on postsecondary human capital development in California Central Valley. The problem of the study was to determine the perceptions of parents, high school educators, and community college educators' regarding awareness of and satisfaction with college transition support services for ASD students. The study also examined respondent's opinions regarding delivery modes and importance of support services topics for ASD high students transitioning to community colleges. The participants in the study included parents, high school educators, and community college educators in California's Tulare and Fresno Counties. The criteria for participation in the study were parents and educators of 18-21 year old ASD individuals with an intellectual capacity in the Asperger's range based on the Diagnostic and Statistical Manual of Mental Disorders and Intelligence Quotient Score in inclusive educational environments. The study's questionnaire utilized the ThinkCollege Theoretical Framework that identifies academic access, career development, campus membership, and self-advocacy as key support service that assist students navigating the college transition. Descriptive

statistics were used to analyze respondent's perceptions. ANOVA was performed at the 0.05 confidence level to test for a statistically significant difference between each group's perceived awareness and satisfaction. A total of 63 participants completed the Internet-based surveys out of 69 responses. The awareness and satisfaction data indicate a trend towards high school and community college educators both having similar perception of community college support services and delivery modes. All respondents believed that individual support services have the greatest impact on academic access, career development, and campus membership for ASD students. A key finding is that there is statistically significant evidence substantiating that parental perceptions are different from those of community college educators towards awareness and satisfaction with community college student support services. It is concluded that communicating expectations and removing silos could possibly improve or eliminate the awareness and satisfaction perception differences between parents and community college educators.

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The road to success is not straight. There is a curb called Failure, a loop called Confusion... But, if you have a spare called Determination; an engine called Perseverance; insurance called Faith, and a driver called Jesus, you will make it to a place called

Success!

- Unknown

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CHAPTER I INTRODUCTION

California's coherent network of public education institutions serves the most diverse population in the nation. The network contains K-12 schools, community colleges, and universities. The California Community College System (CCCS) is the largest higher education system in the nation (California Community Colleges Chancellor's Office, 2015). In the 1960s, California's legislature realized that the state's population was dramatically changing to a new multicultural and ethnic composition (Douglass, 2010). California's Master Plan for Higher Education, Donahoe Higher Education Act, established a social contract that the state would provide a low-cost college education to any eligible student (Douglass, 2010). Therefore, the state funded policies to promote building human capital assets.

California's future economic, social, and cultural development depends upon ensuring that its citizens have opportunities to access higher education systems. California must support an educational system which prepares all Californians for responsible citizenship and meaningful careers in a multicultural society; this requires a commitment from all to make quality education available and affordable for every Californian (California Education Code Section 66002-66003, April 27, 1960, p. 1)

Today, the CCCS provides instruction to approximately 2.6 million students, representing nearly 25 % of the nation's community college student population (California Community Colleges Chancellor's Office, Student Success Taskforce Report, 2012). The percentage of these students receiving disabled student support services is growing. According to the California Community College Management Information System Data Mart, the unduplicated headcount of students accessing disability services increased by almost 300% between the 1992-1993 Academic Year and the 2012-2013 Academic Year (California Community Colleges Chancellor's Office, 2015b). The Student Success Taskforce Report asserts that by 2025, California's workforce will face a shortage of one million college degree and certificate holders (Bohn, 2014). In response, California Governor Brown signed the California Student Success Act of 2012 (California Office of the Governor, 2012). Approximately \$240 million was allocated to the system's 112 colleges in the 2015 Academic Year to fund student success and equity initiatives (California Community Colleges Chancellor's Office Matriculation and Student Equity Allocation, 2015c).

The CCCS's 2012 Student Success Task Force Report recommended that community colleges again develop comprehensive support programs to become more responsive to the needs of students and the economy. This rebalancing will require establishing student support programs and policies for the growth in the population of high school students transitioning into California's community college system with Autism Spectrum Disorders (ASD). ASD is a group of developmental disabilities characterized by impairments in social interaction and communication and by restricted, repetitive, and stereotyped patterns of behavior according to the Centers for Disease

Control and Prevention (CDC, 2012). In March 2012, the CDC updated its estimate of autism prevalence in the United States to 1 in 88 children (1 in 54 boys and 1 in 252 girls) and this prevalence rate indicates a significant increase in the number of individuals diagnosed with ASD. “By comparison, this is more children than are affected by diabetes, AIDS, cancer, cerebral palsy, cystic fibrosis, muscular dystrophy or Down syndrome – combined. The new numbers - based on a 2008 snapshot of 14 monitoring sites - represent a 78 % increase in autism over the previous five years. This estimate represents a ten-fold (1,000 %) increase in reported prevalence over the last four decades” (CDC Autism Spectrum Disorders: Data and Statistics, 2012, p. 1).

Based on 2014 data, the estimated prevalence of ASD was 1.25% greater than previously reported in CDC data, a significant increase (Zablotsky, Black, & Maenner, 2015). The autistic children of today will become the autistic adult population of tomorrow. Students with ASD have the intellectual capacity required academically for college but are often socially underprepared (Johnson & Myers, 2007; Wei, Yu, Shattuck, McCracken, & Blackorby, 2013). To meet the increasing demand for college-educated workers, community colleges will need to provide comprehensive support services to aid in the retention and persistence of autistic students. This research provides data-driven information for student support services to close the opportunity gap of the emerging ASD community college demographic. The study uses the University of Massachusetts Boston - ThinkCollege Institute’s theoretical framework that recommends academic access, career development, campus membership, and self-advocacy supports for ASD college students (Weir, Grigal, Hart, & Boyle, 2013).

Statement of the Problem

The problem of this study is to ascertain the perceptions of parents, high school educators, and community college educators regarding their awareness and satisfaction with ASD college student support services. In addition, the problem addresses which student services would improve an ASD student's ability to transition into community college. The problem leading to the need for this study is the perceived lack of comprehensive student services and programs at community colleges that support the behavioral and social needs of autistic students transitioning from high school. Research reveals that youth with an ASD have poor postsecondary employment and education outcomes (Roux et al., 2013; Shattuck, 2012). Additionally, studies have found a need to improve the outcomes of ASD youth especially in the first two years after high school (Roux et al., 2013; Shattuck, 2012). The changing demographic of California's community college ASD population is an important public health issue that has non-medical related impacts on society.

Purpose of the Study

The purpose of this survey study is to survey the perceptions of California parents, high school educators, and community college educators regarding awareness of, satisfaction with, delivery mode of, and important topics for ASD student support services. The study sought to determine which support services are required to aid in the transition of ASD high school students in community college as perceived by California parents, high school educators, and community college educators. Also, this study uses the theory of ThinkCollege Theoretical Framework that recommends academic access,

career development, campus membership, and self-advocacy supports for ASD college students transitioning to community colleges.

Research Questions

1. What are the perceptions of parents, high school educators, and community college educators regarding awareness of ASD student support services?
2. What are the perceptions of parents, high school educators, and community college educators regarding satisfaction with ASD student support services?
3. What are the perceptions of parents, high school educators, and community college educators regarding the delivery mode of ASD student support services?
4. What are the perceptions of parents, high school educators, and community college educators regarding the important topics of ASD student support services?
5. Are there differences in the perceptions of parents, high school educators, and community college educators regarding awareness of programs and satisfaction with ASD student support services?

Definition of Key Terms

For this study, there are several terms that need to be defined:

1. Community college readiness – According to the American Youth Policy Forum, readiness means being prepared to successfully complete credit-

bearing college coursework or industry certification without remediation, having the academic skills and self-motivation necessary to persist and progress in postsecondary education, and having identified career goals and the necessary steps to achieve them (Hooker & Brand, 2009).

Readiness also refers to the content knowledge, skills, and habits that young people and adults must possess to be successful in postsecondary education or training that leads to a family sustaining career (Conley, 2012).

2. Persistence - Continued enrollment (or degree completion) at any institution (National Student Clearinghouse Research Center, 2014).
3. Retention - Continued enrollment (or degree completion) within the same institution for the fall semesters of a student's first and second year (National Student Clearinghouse Research Center, 2014).
4. Social intelligence – According to the Multiple Intelligences Theory, Social IQ refers to the capacity to appropriately and effectively communicate with and respond to other people. Social IQ is also the ability to work cooperatively with others and understand their feelings (Gardner, 1983).
5. Student success support services - These are the community college orientation, assessment, counseling, and follow-up services provided to students (California Student Success Taskforce, 2012).

Overview of the Method

The study followed a research approach involving the use of a survey instrument for data collection. It involved a descriptive examination of the perceptions of parents, high school educators, and community college educators to determine the awareness of and satisfaction with ASD student support services students. The research site was California's Central Valley.

Delimitations

Restrictions imposed upon this study by the researcher included the following:

1. The sample populations selected for this study were parents, high school educators, and community college educators who have experience with 18-21 year old ASD students. The sample is similar in nature to the population that provides transition support services for ASD students.
2. This study focused on California's Central Valley. For more conclusive results, additional California geographic regions should have been studied. However, this was not possible due to time and financial constraints.
3. The researcher utilized an online survey technique using e-mail to distribute the survey over the Internet. This technique is convenient for the population under study.

Limitations

Restrictions outside the control of the researcher included the following:

1. The researcher recognized that the instrument has inherent errors and biases and assumed that the subjects provided honest responses to the instrument.
2. The researcher acknowledges that the Family Educational Rights and Privacy Act (FERPA) and Health Insurance Portability and Accountability Act (HIPAA) standards require the instrument to be disseminated to parents by public educational support agencies.

Significance of the Study

The significance of the study is that it may fill gaps in the literature regarding interventions that improve an ASD high school student's transition to community college. As a parent of an autistic child and educational administrator, the researcher personally understands the dire need to identify evidence-based approaches to respond to the emerging special needs demographics. Recent studies and empirical experiences reveal that California will fail to develop a significant percentage of human capital without continuous educational interventions at various academic levels for the ASD population (Roux et al., 2013; Shattuck, 2012; Wei et al., 2013). Therefore, community college administrators must use post-secondary equity and student support funding to prevent the occurrence of negative socio-economic externalities and provide higher education opportunities for the ASD population.

CHAPTER II

LITERATURE REVIEW

Data and research studies were evaluated to review educational interventions within the ASD population that influence human capital development. The review examined evidence-based interventions and findings. Autism intervention and educational research is funded from several organizations with separate and overlapping missions. These include the Office of Special Education Programs (OSEP) and the National Institute of Child Health and Human Development (NICHD) within the U.S. Department of Education and the U.S. Department of Health and Human Services. Also, the Autism Speaks Foundation, University of California at Davis Mind Institute, University of California at Los Angeles CART Center, CDC, and American Speech and Language Association studies were reviewed. Bibliographies and reference lists from research funded by these agencies were scanned for relevant information. Search terms included autism interventions, treatment outcome, at-risk youth, post-secondary transition programs, and educational inclusion.

Human Capital Development

An analysis reviewed the relationship between human capital development and educational attainment. A common theme in human asset development literature is that a college degree is the best way to prepare workers, foster economic growth, and compete in a global marketplace (Becker, 1993). Asset-based community development is an

approach to develop communities through identifying and employing existing forms of capital (Kretzmann & McKnight, 1993). Human capital investment is the notion that individuals acquire skills and knowledge to increase their value in labor markets. Experience, training, and education are the three main approaches for acquiring human capital. However, the primary approach to acquire knowledge that increases productivity is through education (Gitterman & Coclanis, 2011).

Kretzmann and McKnight (1993) describe human capital development as an approach that recognizes the capacities of local people and their associations to build powerful communities. “The process of recognizing these capacities begins with the construction of a new lens through which communities can begin to assemble their strengths into new combinations, new structures of opportunity, new sources of income and control, and new possibilities for production” (Kretzmann & McKnight, 1993, p. 6). Additionally, studies revealed that there is a correlation between human capital development and educational attainment (Coley & Baker, 2013). Studies by Sanchez, Lannan, and Wisley (1999) propose that there is a positive relationship between education, post college salaries, and economic development. Kane and Rouse’s (1995) research, suggests that the economic returns to a sub-baccalaureate degree are roughly 15 to 27 % higher than a high school diploma.

Studies provide evidence that associate degree holders earn more than those with only a high school diploma (Coley & Baker, 2013). This research is similar to House Education and Labor Committee’s findings related to the Student Aid and Fiscal Responsibility Act of 2009. Although some variation exists in the estimated return from postsecondary education, one commonality is the existence of a wage premium for those

who complete a degree. Policy Link's research reveals that prior to the 2003-2004 education funding cuts, California ranked 14th in the nation for awarding science and engineering bachelor's degrees (per 1,000 workers). The state fell to 45th in the nation, by 2010 (Rubin, Lizardo, Jamdar, Washington, & Zeno, 2010). The author asserts that there is a shortage in the middle-skill workforce (Rubin et al., 2010). The literature defines middle skill jobs as positions that do not require a college degree but more than a high school education (Rubin et al., 2010). The study discusses that the middle skills gap is attributed to skilled baby boomers' retirement and a diminishing trained younger workforce (Rubin et al., 2010). Additionally, the study explains that by 2018, California's science, technology, engineering, and mathematical workforce will need to possess a postsecondary education.

Unfortunately, California is awarding 40 % fewer degrees in science and engineering than the national average (Rubin et al., 2010)). Also, the prevalence of autism suggests that an increasing portion of the future workforce will have a range of development disorders. The literature reveals postsecondary pathway options, including 2-year colleges, are available to ASD youth due to open enrollment and access policies (Brown & Coomes, 2015). However, the National Longitudinal Transition Study for 2001 to 2009 indicates that one-third of all young adults with autism attend college in the years right after high school (Wei, Wagner, Hudson, Yu, & Shattuck, 2015).

Postsecondary Transition

Research reveals that the adjustment to a college or university, which can be a difficult task for students without psychological disorders, can be particularly difficult for ASD students (Gobbo & Shmulsky, 2012). Shattuck et al. (2012) investigated the

prevalence and correlation of postsecondary education and employment among youth with an ASD. This study consisted of a nationally representative survey of parents, guardians, and young adults with an ASD (Shattuck et al., 2012). Similar to Briel and Getzel's (2014) findings, this research reveals that ASD youth have the lowest rates of participation in employment and the highest rates of non-participation in college when compared with youth in other disability categories.

Roux et al. (2013) also studied the postsecondary experiences of young adults with an ASD. The finding supports Pena and Kocur's (2013) research that parents play a major role in their ASD student's postsecondary decisions. Due to the perceived lack of services for ASD adults, families with children with autism describe leaving high school as falling off a cliff (Shattuck et al., 2012). Qualitative studies describe many of the challenges ASD college students are likely to face as they transition to postsecondary education.

Empirical research provides recommendations to increase an ASD student's ability to succeed in college. Gelbar, Smith, and Reichow (2014) found that there is a need for academic and non-academic supports to improve the experience of ASD students transitioning to higher education. Research suggests that interventions addressing difficulties with social relationships and educational competencies are crucial during the high school transition (Wilcox, Winn, & Fyvie-Gauld, 2005). Adreon and Durocher's (2007) research indicates that ASD students often have issues with socialization, independent living skills, and self-advocacy. ASD students often lack typical friendships and peer relationships which affects motivation and the meaningfulness of experiences (National Research Council, 2001). Appropriate social

interactions are important lessons to learn for those with a disability and yet some of the most difficult (Wei et al., 2013). Therefore, enhancing social understanding and self-determination skills are essential skills for college success. Engagement is an important predictor of retention for students with disabilities (Mamiseishvili & Kock, 2010).

Brown and Coomes' (2015) research indicates that colleges should view ASD students as unique individuals benefiting from personalized accommodations or services. Colleges create opportunities for ASD students to succeed through valuing neuro-diversity when providing student support services (Robertson & Ne'eman, 2008). Pinder-Amaker (2014) applied a framework reviewing evidence-based programs, practices, and interventions for ASD college students. A theme from this research is that more fluid transitions from high school can be achieved by evaluating existing deficits in community college student service approaches (Pinder-Amaker, 2014).

College Student Support Services

Research reveals that a key factor in college success is the development of appropriate college expectations (Weissberg, Owen, Jenkins, & Harburg, 2003). The Research & Planning Group for California Community Colleges (RP Groups) research reveals that students expressed having substantial problems in figuring out where to go to get accurate information or to access needed support. The RP Group's (2009) study of California Community Colleges revealed how colleges can feasibly deliver support, both inside and outside the classroom, to improve student success. The results indicate that colleges offer a wide range of services, but finding the specific information or services often requires going from office to office. The results confirm that student frustration or lack of knowledge often leads to students abandoning their college program.

College student support services play an important role in shaping student expectations. The ability to effectively use counselors and college representatives as information sources help dispel student misconceptions (Smith, 2005). These support services create meaningful opportunities to communicate academic and nonacademic expectations (Karp, 2011). Students utilizing support services gain a higher degree of understanding of how college will help them achieve career and life goals (Hicks, 2013). College student support programs are rooted in the provision of services to foster college enrollment, persistence, and retention (Scrivener & Weiss, 2009).

A theme in the literature is that awareness of community college student support services assist students in navigating their postsecondary educational experience. Community college student support services provide students access to orientation, assessment, counseling, and follow-up services (California Student Success Taskforce, 2012). There is no single “best” design for the offering of student services. Formally structured programs include student success and dual enrollment courses, academic and career counseling, and financial aid advising (Scrivener & Weiss, 2009). A high school students’ enrollment in student success or first year experience course via dual enrollment provide exposure to the college experience and counseling support (Bailey, Hughes, & Karp, 2002; Schnell & Doetkott, 2003). Evidence suggests that that counseling and advising services assist in developing student expectations (Hicks, 2013).

Students have a better chance of success if all campus services are coordinated as opposed to focusing solely on area objectives or in individual silos. *The Reclaiming the American Dream: Report From the 21st-Century Commission on the Future of Community Colleges* (2012) states that the development of a comprehensive academic

and student support programs that serves the needs of the entire student population are instrumental to student success and asset development (American Association of Community Colleges, 2012). Findings support the development of a comprehensive student services designed to service a wide variety of constituents and their needs in a number of ways.

Student support programs also can be informal activities or meetings that require interaction between faculty and students that encourage academic success but that do not deal directly with academic content (Zhao & Kuh, 2004). The Community College Research Center at Columbia University (2011) identified four primary student support services that promote success. These primary support services are developing college know-how or awareness, making college life feasible or academic access, clarifying aspirations or career development and enhancing commitment or campus membership, and creating social relationships or self-advocacy (Karp, 2011).

College ASD Student Support Services

Autism Speaks, College Autism Speaks, and ThinkCollege websites provide a listing of several United States community colleges and universities that offer post-secondary ASD support programs. Yet, there are limited systematic studies documenting post-secondary college services supporting ASD students (Brown & Coomes, 2015). The majority of the research is based on parental reports, natural observation, or inference/empirical studies (Roux et al., 2013; Shattuck, 2012; Zeedyk, Tipton, Baker, & Blacher, 2014). Non-empirical research on supporting the ASD students is slowly emerging (Ankeny & Lehmann, 2010; VanBergeijk, Klin, & Volkmar, 2008). In the absence of ASD student-based research, studies related to typical developing peers may

be applied with modifications made to the rigor and frequency of the intervention (Pinder-Amaker, 2014).

Karp's (2011) findings support the ThinkCollege Institute's theoretical framework that recommends academic access, career development, campus membership, and self-advocacy supports for ASD college students. Academic access for ASD students addresses issues that impact college course participation such as priority registration, ability to register in credit courses, testing accommodations, and access to mentors or tutors. Career development provides ASD students with the supports and experiences necessary to seek and sustain competitive employment. Campus membership provides access to and supports for participation in existing social organizations, facilities, and technology, including clubs and organizations, community service, and co-curricular activities. Self-advocacy ensures the development of self-determination skills that promote control over experiences (Weir et al., 2013).

These types of supports allow ASD students an environment in which students can express concerns with their transition to college, practice social skills, improve peer interactions, and become familiar with campus services (Smith, 2007). Relationship building with campus constituents is important for ASD students at community colleges (Brown & Coomes, 2015). Unlike the mandatory K-12 disability educational provisions, the Rehabilitation Act of 1973 Section 504C allows disabled college students reasonable accommodations as defined in the Americans with Disabilities Act (42 U.S.C. § 121001). However, these accommodations are only made available when they self-disclose their disability to a college's disabilities services office and self-advocate for accommodations. Awareness of rights, responsibilities, and available support services allow ASD students

to develop critical self-advocacy skills (Belch, 2004). A student's educational opportunities are improved with the ability to advocate for themselves during their transition to postsecondary institutions (Aune, 2000).

Chapter Summary

The review of literature presented in Chapter II discussed postsecondary human capital development of ASD students. Several overall findings emerged from the literature review. The research revealed that education is the predominate variable to positively influence human capital development. A theme in the literature is that student support services focusing on academic access, career development, campus membership, and self-advocacy increase an individual's educational performance. Yet, there is no single best college support service or intervention. Furthermore, research reveals the limited studies on postsecondary pathways and persistence highlights the urgent need for future research to introduce evidence-based support strategies and approaches to improve ASD students' college transition.

CHAPTER III

RESEARCH METHOD

Research Design

This study employed a cross-sectional survey research design with one independent variable (relationship to ASD student) and four dependent variables (awareness, satisfaction, delivery mode, and importance of topics). The study was approved by Mississippi State University's Institutional Research Board (IRB). Table 1 provides an overview of the study's analytical procedure. The main purpose of the study was to investigate the perceptions of student support services by parents, high school educators, and community college educators to determine if there are differences in perceptions.

Table 1

Overview of Research Analysis Procedure

| TOPIC | RESEARCH QUESTION | INSTRUMENT | ANALYSIS PROCEDURE |
|-------------------------------|-------------------|-------------------------------|---------------------------------|
| Demographic Information | ----- | Questionnaire Items 1-2 | Descriptive Statistics |
| Awareness of Programs | 1,5 | Questionnaire Items 3-4, 9 | Descriptive Statistics ANOVA |
| Satisfaction with Services | 2,5 | Questionnaire Items 5-8 | Descriptive Statistics ANOVA |
| Delivery Mode | 3 | Questionnaire Items 10- 13 | Descriptive Statistics |
| Importance of Topic | 4 | Questionnaire Items 14- 17 | Descriptive Statistics |

Research Questions

1. What are the perceptions of parents, high school educators, and community college educators regarding awareness of ASD student support services?
2. What are the perceptions of parents, high school educators, and community college educators regarding satisfaction with ASD student support services?

3. What are the perceptions of parents, high school educators, and community college educators regarding the delivery mode of ASD student support services?
4. What are the perceptions of parents, high school educators, and community college educators regarding the important topics of ASD student support services?
5. Are there differences in the perceptions of parents, high school educators, and community college educators regarding awareness of programs and satisfaction with ASD student support services?

Research Site

The research site for this study was the California Central Valley. This site was selected as a result of convenience because the researcher lives and works in this region. SurveyMonkey was used to collect survey responses. The web-based platform allows respondents to complete the survey in any location on their computer, iPad, or mobile device. Also, SurveyMonkey.com was chosen because of its protected electronic format that does not collect identifying information. Therefore, participants had anonymity throughout the survey process.

Participants

The targeted population for this study was parents and educators of ASD students transitioning to community college within the California Central Valley. The participants in the study included parents, high school educators, and community college educators in Tulare and Fresno Counties. The criteria for participation in the study were parents and

educators of 18-21 year old ASD individuals with an intellectual capacity in the Asperger's range based on the Diagnostic and Statistical Manual of Mental Disorders and Intelligence Quotient Score in inclusive educational environments. The participants consisted of parents, high school educators, and community college educators to reduce threats to validity. The list of parents was obtained from the Central Valley Regional Center and high schools. The list of high school educators was obtained from the Tulare and Fresno Counties' school district special services directory. The list of community college educators was obtained from the California Community College Chancellor's Office's college staff directory.

Materials Used

Questionnaires were distributed to parents, high school educators, and community college educators to gather their awareness, satisfaction, and perceptions of community college transitional support services and delivery mode for ASD students. The instrument measured the perceptions that people have regarding the comprehensive student support strategies and approaches to improve ASD students community college enrollment, retention, persistence and completion.

The ability to make a correct inference based on the research data depends on the validity and reliability of the study. Instrumentation is a potential threat to validity and reliability. Threats to validity cannot be controlled in any one study; however, these threats can be minimized. These internal content and construct threats were addressed in several ways. The same instrument tool was utilized throughout study to ensure consistency. The instrument was developed on the ThinkCollege intellectual disability college program evaluation theoretical framework to address the four standard quality

indicators of academic access, career development, campus membership, and self-advocacy (Weir et al., 2013). A limitation is that the theoretical framework is empirical.

To overcome this limitation, the instrument questions were revised from the National Survey of Student Engagement (NSSE). NSSE collects information on educationally purposeful student services activities and of the perceptions of the college environment. It was launched in 2000 and updated in 2013 and collects information at hundreds of 4-year colleges and universities about first-year and senior students' participation in programs and activities (Kuh, Vesper, Connolly, & Pace, 1997). NSSE is derived from the College Student Experiences Questionnaire created by C. Robert Pace (1979, 1998). The NSSE instrument achieved an overall Cronbach's alpha rating of .85. Basing this study's survey instrument on NSSE supports that the instrument has the appropriate content.

The first section of the questionnaire asked about awareness of transition programs on the community college campus for ASD students. The second section measured respondents' satisfaction level with the interventions college ASD students receive, as well as the extent and amount of interventions received. The next section requested the respondent's opinions regarding the necessary postsecondary education support program components for ASD students. The instrument contains 17 items. Participants' responses were measured using a 1-5 Likert Scale for items 3 and 5 - 8; categorical data for items 1, 2, 4, and 9; and ordinal data for 10 - 17. The survey should have taken about 15 minutes to complete.

Collection of Data

The ideal data collection method would be a face-to-face administration. Administering the questionnaire face-to-face would permit the researcher to clarify the respondents' questions. However, face-to-face surveys can increase the potential for bias and prevent anonymity. To overcome these issues and increase the response rate, the survey was distributed via SurveyMonkey.com. The local community college sent the SurveyMonkey URL to all parents of ASD students, high school educators, and college educators via email.

Analysis of Data

The data analysis began with a comprehensive review and assessment of the collected data for accuracy and complete information. Incomplete surveys were discarded and not included in the study. Then the research questions were reviewed to provide guidance in determining the appropriate quantitative measure to interpret the data. The primary objective of the study is to rule out alternative explanations of the findings and develop confidence that the changes in the data are influenced by the measured variables.

Descriptive statistics were used to summarize the data set and carry out inferential statistics. A measure of central tendency was utilized depending on the level of data. The means were computed for the survey data to determine the measurable distance between the responses. However, this statistic is sensitive to a very high or very low value distribution and can result in a somewhat misleading indication of central tendency. Since the mean is very susceptible to the influence of extreme values, the standard deviation was applied to measure the spread of sample data around the mean.

Next, the data measured parents, high school educators, and community college educators' perceptions of awareness, satisfaction, delivery mode, and important topics in ASD students' college transition support services (Research Questions 1-4). The Likert Scale data in items 3 and 5-8 were converted to numerical data and ANOVA used to determine if there were differences among the groups' perceptions regarding awareness and satisfaction (Research Question 5). Item 3 on the survey instrument provides information on awareness perceptions. The perceived satisfaction was determined through ranking of potential effectiveness of various delivery modes (items 10-13) and rank of importance of topics (items 14-17) Additional tests were conducted to determine differences between groups and if ANOVA was significant. These tests provide information regarding the probability that the findings happened by chance. In addition, steps were taken to prevent the occurrence of a Type I error and incorrectly rejecting the null hypothesis.

Chapter Summary

Chapter III presented a discussion of the survey research design used in this study, and the participants of the study were identified. The questionnaire administered was defined along with the components of the instrument. The validity and reliability of the instrument were both assessed. The chapter concluded with specifics on the study's data collection procedures and analysis. The hypothesis test procedure addressed the probability of wrongly rejecting the null hypothesis. The probability value (p-value) of the statistical hypothesis test and significance level of the test was set at a convincing level with sufficient strength of evidence for rejecting the null hypothesis.

CHAPTER IV

RESULTS AND DISCUSSION

The overall purpose of this study was to analyze and identify perceptions among parents, high school educators, and community college educators regarding community college support services for ASD students. This chapter presents the data collected and the findings based on that data. This chapter is organized into three main sections. The first section provides an overview of the targeted population's participation in the study. The second section provides additional questionnaire data supporting this research project. The last section contains a description of the data and statistical analysis used in the research study.

Participants in the Study

SPSS Version 20 statistical analysis software was used for all statistical analysis, which was set at the 0.05 confidence level. Parents, high school educators, and community college educators with experience with ASD students in California's Central Valley were questioned regarding their awareness, satisfaction, delivery mode, and importance of topics in community college support services. A total of 63 participants completed the Internet-based surveys out of 69 responses. A total of 6 participants started but did not complete the entire survey. These incomplete surveys were omitted from the data analysis. A total of 352 emails were sent to parents, high school educators, and

community college educators with experience with ASD students. The data obtained from these evaluations were used in the analysis of the five research questions.

There were 20 participants (32%) who identified themselves as parents and 20 (32%) as high school educators and 23 (36%) as community college educators. Of the 20 high school educators, 2 (10%) responded as having less than 4 years of experience; 4 (20%) identified themselves with 4 but less than 7 years; and 14 (70%) with more than 7 years of experience working with ASD students. There were 12 (52%) of the community college educators who said they had less than 4 years of experience; 4 (17.5%) with 4 but less than 7 years; and 7 (30.5%) with more than 7 years of experience with ASD students. Table 2 provides the percentage of parents, high school educators, and community college educators' demographic information.

Table 2

High School and Community College Educators Experience With ASD Students

| | >4 Years | 4-7 Years | 7 + Years | Total |
|-----------------------------|-------------|--------------|--------------|-------|
| High School Educators | 2 10% | 4 20% | 14 70% | 20 |
| Community College Educators | 12 52% | 4 17.5% | 7 30.5% | 23 |

Study Data and Statistical Analysis

The research design in this study included a 17-statement questionnaire. This evaluation instrument solicited responses involving perceptual differences as mentioned in Chapter One. The data were analyzed using SPSS Version 20. The specific findings for the research questions and hypotheses follow.

Research Question 1: What are the perceptions of parents, high school educators, and community college educators regarding awareness of ASD student support services?

Data provided by parents, high school educators, and community college educators in survey items 3, 4, and 9 provided information about their perceptions of awareness of programs for ASD students. Item 3 asked participants to indicate if they felt ASD high school seniors were aware of their local community college's student support services using a series of responses from "not at all informed" which was coded as a "1" to "very informed" which was coded as a "5." The means and standard deviations of the responses given by the participants are indicated below in Table 3.

Table 3

Perceived Awareness of Programs for ASD Students

| | <i>N</i> | Mean | Std. Deviation |
|----------------------------|----------|------|----------------|
| Parent | 20 | 1.60 | .995 |
| High School Educator | 20 | 2.10 | 1.252 |
| Community College Educator | 23 | 2.74 | 1.287 |
| Total | 63 | 2.17 | 1.264 |

Item 4 asked participants to indicate what should be used to promote college support services and programs for ASD high school students. The percentage of respondents to each item is listed in Table 4 below.

Table 4

Perceived Ways to Promote College Support Services

| | Parents | High School Educators | Community College Educators |
|---|---------|-----------------------|-----------------------------|
| No formal, planned promotion of programs | 0% | 0% | 0% |
| Only informal, word-of-mouth | 1% | 0% | 1% |
| Public mass media (such as press releases sent to newspapers, radio; etc) | 14% | 6% | 10% |
| Targeted mailings (letters, brochures, flyers, etc.) sent to high school principals, teachers, and students | 19% | 23% | 17% |
| Online posts on social media (Facebook, Twitter, Instagram, etc) | 15% | 15% | 15% |
| College disability department web pages | 16% | 13% | 20% |
| Presentations at parent-teacher conferences | 19% | 23% | 19% |
| Presentations at college orientation | 16% | 20% | 18% |

Item 9 asked participants which method should be the used to inform ASD students of community college support services. The percentage of predominant teaching method respondents to each item is listed in Table 5 below.

Table 5

Perceived Predominant Teaching Method to Provide College Support Services

Information

| | Parents | High School Educators | Community College Educators |
|--|---------|-----------------------|-----------------------------|
| Lecture or demonstration | 0 | 0 | 0 |
| Experiential (hands-on) learning model (Do-Reflect-Apply) | 50% | 35% | 22% |
| Balance of experiential learning and lecture/demonstration | 50% | 65% | 78% |

Research Question 2: What are the perceptions of parents, high school educators, and community college educators regarding satisfaction with ASD student support services?

Data provided by parents, high school educators, and community college educators in survey items 5-8 provided information about their perceptions of satisfaction with programs for ASD students. Item 5 asked participants to indicate their level of satisfaction with their local community college’s academic access support services for ASD students using a series of responses from “not at all satisfied” which was coded as a “1” to “extremely satisfied” which was coded as a “5.” The means and standard deviations of the responses given by the participants are indicated below in Table 6.

Table 6

Perceived Satisfaction with Academic Access Programs for ASD Students

| | N | Mean | Std. Deviation |
|-------------|----|------|----------------|
| Parent | 20 | 2.15 | 1.631 |
| HS Educator | 20 | 3.35 | 1.631 |
| CC Educator | 23 | 4.04 | 1.397 |
| Total | 63 | 3.22 | 1.718 |

Item 6 asked participants asked participants to indicate their level of satisfaction with their local community college’s career development support services for ASD students using a series of responses from “not at all satisfied” which was coded as a “1” to “extremely satisfied” which was coded as a “5.” The means and standard deviations of the responses given by the participants are indicated below in Table 7.

Table 7

Perceived Satisfaction with Career Development Programs for ASD Students

| | N | Mean | Std. Deviation |
|-------------|----|------|----------------|
| Parent | 20 | 1.80 | 1.436 |
| HS Educator | 20 | 2.65 | 1.814 |
| CC Educator | 23 | 3.61 | 1.725 |
| Total | 63 | 2.73 | 1.807 |

Item 7 asked participants asked participants to indicate their level of satisfaction with their local community college’s campus membership support services for ASD students using a series of responses from “not at all satisfied” which was coded as a “1” to “extremely satisfied” which was coded as a “5.” The means and standard deviations of the responses given by the participants are indicated below in Table 8.

Table 8

Perceived Satisfaction with Campus Membership Programs for ASD Students

| | N | Mean | Std. Deviation |
|-------------|----|------|----------------|
| Parent | 20 | 1.80 | 1.436 |
| HS Educator | 20 | 2.65 | 1.814 |
| CC Educator | 23 | 3.61 | 1.725 |
| Total | 63 | 2.73 | 1.807 |

Item 8 asked participants asked participants to indicate their level of satisfaction with their local community college’s self-advocacy support services for ASD students using a series of responses from “not at all satisfied” which was coded as a “1” to “extremely satisfied” which was coded as a “5.” The means and standard deviations of the responses given by the participants are indicated below in Table 9.

Table 9

Perceived Satisfaction with Self Advocacy Programs for ASD Students

| | N | Mean | Std. Deviation |
|-------------|----|------|----------------|
| Parent | 20 | 1.60 | 1.231 |
| HS Educator | 20 | 2.90 | 1.714 |
| CC Educator | 23 | 2.96 | 1.637 |
| Total | 63 | 2.51 | 1.645 |

Research Question 3: What are the perceptions of parents, high school educators, and community college educators regarding the delivery mode of ASD student support services?

Data provided by parents, high school educators, and community college educators in survey items 10-13 provided information about their perceptions regarding the delivery mode of programs for ASD students. In each item, participants were asked to rank a series of five items with “5 = Yields the greatest impact on student involved” to “1

= Yields the least impact on student involved.” The means and standard deviations of the responses given by the participants are indicated in Tables 10-14.

Academic Access –Delivery Method

Item 10 asked participants to indicate the potentially effective delivery mode to positively impact academic access for ASD students at community college.

Table 10

Perceived Effectiveness of Overnight Summer Camp for ASD students

| | | N | Mean | Std. Deviation |
|-----------------------|-------------|----|------|----------------|
| Overnight Summer Camp | Parent | 20 | 1.80 | 1.152 |
| | HS Educator | 20 | 2.25 | 1.164 |
| | CC Educator | 23 | 2.78 | 1.085 |
| | Total | 63 | 2.30 | 1.186 |

Table 11

Perceived Effectiveness of Special Interest Day Camps for ASD students

| | | N | Mean | Std. Deviation |
|------------------------|-------------|----|------|----------------|
| Special Interest Camps | Parent | 20 | 2.90 | 1.334 |
| | HS Educator | 20 | 3.75 | .550 |
| | CC Educator | 23 | 3.96 | .928 |
| | Total | 63 | 3.56 | 1.074 |

Table 12

Perceived Effectiveness of Organized Campus Clubs for ASD students

| | | N | Mean | Std. Deviation |
|------------------------|-------------|----|------|----------------|
| Organized Campus Clubs | Parent | 20 | 2.20 | 1.056 |
| | HS Educator | 20 | 3.05 | 1.234 |
| | CC Educator | 23 | 3.61 | .722 |
| | Total | 63 | 2.98 | 1.157 |

Table 13

Perceived Effectiveness of Individual Study for ASD students

| | | N | Mean | Std. Deviation |
|------------------|-------------|----|------|----------------|
| Individual Study | Parent | 20 | 4.50 | .889 |
| | HS Educator | 20 | 4.50 | .688 |
| | CC Educator | 23 | 4.26 | 1.054 |
| | Total | 63 | 4.41 | .891 |

Table 14

Perceived Effectiveness of Online Video for ASD students

| | | N | Mean | Std. Deviation |
|--------------|-------------|----|------|----------------|
| Online Video | Parent | 20 | 2.35 | 1.496 |
| | HS Educator | 20 | 3.70 | 1.174 |
| | CC Educator | 23 | 2.78 | .902 |
| | Total | 63 | 2.94 | 1.306 |

Career Development –Delivery Method

Item 11 asked participants to indicate the potentially effective delivery mode to positively impact career development for ASD students at community college. The means and standard deviations of the responses given by the participants are indicated in Table 15 - 19.

Table 15

Perceived Effectiveness of Overnight Summer Camp for ASD students

| | | N | Mean | Std. Deviation |
|-----------------------|-------------|----|------|----------------|
| Overnight Summer Camp | Parent | 20 | 1.80 | 1.240 |
| | HS Educator | 20 | 2.10 | 1.071 |
| | CC Educator | 23 | 2.70 | 1.105 |
| | Total | 63 | 2.22 | 1.184 |

Table 16

Perceived Effectiveness of Special Interest Day Camps for ASD students

| | | N | Mean | Std. Deviation |
|------------------------|-------------|----|------|----------------|
| Special Interest Camps | Parent | 20 | 3.35 | 1.137 |
| | HS Educator | 20 | 3.95 | .887 |
| | CC Educator | 23 | 3.70 | .926 |
| | Total | 63 | 3.67 | 1.000 |

Table 17

Perceived Effectiveness of Organized Campus Clubs for ASD student

| | | N | Mean | Std. Deviation |
|------------------------|-------------|----|------|----------------|
| Organized Campus Clubs | Parent | 20 | 2.25 | 1.372 |
| | HS Educator | 20 | 3.30 | 1.174 |
| | CC Educator | 23 | 3.26 | 1.010 |
| | Total | 63 | 2.95 | 1.263 |

Table 18

Perceived Effectiveness of Individual Study for ASD students

| | | N | Mean | Std. Deviation |
|------------------|-------------|----|------|----------------|
| Individual Study | Parent | 20 | 4.50 | .688 |
| | HS Educator | 20 | 4.25 | .851 |
| | CC Educator | 23 | 4.13 | .968 |
| | Total | 63 | 4.29 | .851 |

Table 19

Perceived Effectiveness of Online Video for ASD students

| | | N | Mean | Std. Deviation |
|--------------|-------------|----|------|----------------|
| Online Video | Parent | 20 | 2.35 | 1.387 |
| | HS Educator | 20 | 3.55 | 1.146 |
| | CC Educator | 23 | 2.70 | 1.020 |
| | Total | 63 | 2.86 | 1.268 |

Campus Membership –Delivery Method

Item 12 asked participants to indicate the potentially effective delivery mode to positively impact campus membership for ASD students at community college. The means and standard deviations of the responses given by the participants are indicated in Tables 20 – 24.

Table 20

Perceived Effectiveness of Overnight Summer Camp for ASD students

| | | N | Mean | Std. Deviation |
|-----------------------|-------------|----|------|----------------|
| Overnight Summer Camp | Parent | 20 | 2.25 | 1.293 |
| | HS Educator | 20 | 2.45 | 1.432 |
| | CC Educator | 23 | 2.91 | 1.164 |
| | Total | 63 | 2.56 | 1.305 |

Table 21

Perceived Effectiveness of Special Interest Day Camps for ASD students

| | | N | Mean | Std. Deviation |
|------------------------|-------------|----|------|----------------|
| Special Interest Camps | Parent | 20 | 3.30 | 1.302 |
| | HS Educator | 20 | 3.65 | 1.137 |
| | CC Educator | 23 | 3.74 | 1.176 |
| | Total | 63 | 3.57 | 1.201 |

Table 22

Perceived Effectiveness of Organized Campus Clubs for ASD student

| | | N | Mean | Std. Deviation |
|------------------------------|-------------|----|------|----------------|
| Organized Campus Clubs | Parent | 20 | 3.35 | .988 |
| | HS Educator | 20 | 4.10 | .968 |
| | CC Educator | 23 | 3.70 | 1.020 |
| | Total | 63 | 3.71 | 1.023 |

Table 23

Perceived Effectiveness of Individual Study for ASD students

| | | N | Mean | Std. Deviation |
|---------------------|-------------|----|------|----------------|
| Individual Study | Parent | 20 | 4.25 | 1.020 |
| | HS Educator | 20 | 3.75 | 1.118 |
| | CC Educator | 23 | 3.74 | 1.096 |
| | Total | 63 | 3.90 | 1.088 |

Table 24

Perceived Effectiveness of Online Video for ASD students

| | | N | Mean | Std. Deviation |
|-----------------|-------------|----|------|----------------|
| Online Video | Parent | 20 | 2.35 | 1.387 |
| | HS Educator | 20 | 2.85 | 1.348 |
| | CC Educator | 23 | 2.43 | 1.080 |
| | Total | 63 | 2.54 | 1.268 |

Self-Advocacy –Delivery Method

Item 13 asked participants to indicate the potentially effective delivery mode to positively impact self-advocacy for ASD students at community college. The means and standard deviations of the responses given by the participants are indicated in Tables 25 - 29.

Table 25

Perceived Effectiveness of Overnight Summer Camp for ASD students

| | | N | Mean | Std. Deviation |
|-----------------------|-------------|----|------|----------------|
| Overnight Summer Camp | Parent | 20 | 2.00 | 1.338 |
| | HS Educator | 20 | 2.15 | 1.348 |
| | CC Educator | 23 | 3.35 | 1.229 |
| | Total | 63 | 2.54 | 1.424 |

Table 26

Perceived Effectiveness of Special Interest Day Camps for ASD students

| | | N | Mean | Std. Deviation |
|------------------------|-------------|----|------|----------------|
| Special Interest Camps | Parent | 20 | 3.00 | 1.124 |
| | HS Educator | 20 | 3.40 | 1.095 |
| | CC Educator | 23 | 4.26 | .752 |
| | Total | 63 | 3.59 | 1.116 |

Table 27

Perceived Effectiveness of Organized Campus Clubs for ASD student

| | | N | Mean | Std. Deviation |
|------------------------|-------------|----|------|----------------|
| Organized Campus Clubs | Parent | 20 | 2.75 | 1.251 |
| | HS Educator | 20 | 3.35 | 1.089 |
| | CC Educator | 23 | 3.39 | 1.158 |
| | Total | 63 | 3.17 | 1.185 |

Table 28

Perceived Effectiveness of Individual Study for ASD students

| | | N | Mean | Std. Deviation |
|------------------|-------------|----|------|----------------|
| Individual Study | Parent | 20 | 4.45 | .887 |
| | HS Educator | 20 | 4.10 | 1.071 |
| | CC Educator | 23 | 4.17 | .887 |
| | Total | 63 | 4.24 | .946 |

Table 29

Perceived Effectiveness of Online Video for ASD students

| | | N | Mean | Std. Deviation |
|--------------|-------------|----|------|----------------|
| Online Video | Parent | 20 | 2.50 | 1.539 |
| | HS Educator | 20 | 3.60 | 1.465 |
| | CC Educator | 23 | 2.87 | 1.058 |
| | Total | 63 | 2.98 | 1.408 |

Research Question 4: What are the perceptions of parents, high school educators, and community college educators regarding the important topics of ASD student support services?

Data provided by parents, high school educators, and community college educators in survey items 14-17 provided information about their perceptions regarding the importance of topics for programs for ASD students. In each item, participants were asked to rank a series of five items with “5 = Most important” to “1 = Least important.”

Academic Access –Topic Importance

Item 14 asked participants to indicate the perceived importance of college application workshops, financial aid seminars, dual enrollment courses, orientation, and senior day campus tours on academic access for ASD students at a community college. The means and standard deviations of the responses given by the participants are indicated in Tables 30-34.

Table 30

Perceived Importance of College Application Workshops for ASD students

| | | N | Mean | Std. Deviation |
|-------------------------------|-------------|----|------|----------------|
| College Application Workshops | Parent | 20 | 4.55 | .945 |
| | HS Educator | 20 | 4.30 | .733 |
| | CC Educator | 23 | 4.39 | .839 |
| | Total | 63 | 4.41 | .835 |

Table 31

Perceived Importance of Financial Aid Seminars for ASD students

| | | N | Mean | Std. Deviation |
|------------------------|-------------|----|------|----------------|
| Financial Aid Seminars | Parent | 20 | 4.55 | .826 |
| | HS Educator | 20 | 3.85 | 1.182 |
| | CC Educator | 23 | 4.00 | 1.044 |
| | Total | 63 | 4.13 | 1.055 |

Table 32

Perceived Importance of Dual Enrollment Courses for ASD students

| | | N | Mean | Std. Deviation |
|-------------------------|-------------|----|------|----------------|
| Dual Enrollment Courses | Parent | 20 | 4.60 | .598 |
| | HS Educator | 20 | 4.20 | .894 |
| | CC Educator | 23 | 4.13 | .920 |
| | Total | 63 | 4.30 | .835 |

Table 33

Perceived Importance of Orientation for ASD students

| | | N | Mean | Std. Deviation |
|-------------|-------------|----|------|----------------|
| Orientation | Parent | 20 | 3.40 | 1.392 |
| | HS Educator | 20 | 3.90 | 1.021 |
| | CC Educator | 23 | 4.48 | .730 |
| | Total | 63 | 3.95 | 1.142 |

Table 34

Perceived Importance of Senior Day Campus Tours for ASD students

| | | N | Mean | Std. Deviation |
|-------------------------------|-------------|----|------|----------------|
| Senior Day Campus Tours | Parent | 20 | 3.60 | 1.142 |
| | HS Educator | 20 | 4.45 | .999 |
| | CC Educator | 23 | 4.30 | 1.185 |
| | Total | 63 | 4.13 | 1.157 |

Career Development –Topic Importance

Item 15 asked participants to indicate the perceived importance of career coaching, one-on-one counseling, group counseling, peer tutoring, and student/faculty interaction on career development for ASD students at community college. The means and standard deviations of the responses given by the participants are indicated in Tables 35 - 39.

Table 35

Perceived Importance of Career Coaching for ASD students

| | | N | Mean | Std. Deviation |
|--------------------|-------------|----|------|----------------|
| Career Coaching | Parent | 20 | 4.75 | .444 |
| | HS Educator | 20 | 4.55 | .759 |
| | CC Educator | 23 | 4.70 | .559 |
| | Total | 63 | 4.67 | .596 |

Table 36

Perceived Importance of One-on-One Counseling for ASD students

| | | N | Mean | Std. Deviation |
|------------------------------|-------------|----|------|----------------|
| One-on- One Counseling | Parent | 20 | 4.70 | .923 |
| | HS Educator | 20 | 4.25 | .716 |
| | CC Educator | 23 | 4.35 | .935 |
| | Total | 63 | 4.43 | .875 |

Table 37

Perceived Importance of Group Counseling for ASD students

| | | N | Mean | Std. Deviation |
|------------------|-------------|----|------|----------------|
| Group Counseling | Parent | 20 | 2.65 | .813 |
| | HS Educator | 20 | 3.15 | 1.309 |
| | CC Educator | 23 | 3.17 | 1.072 |
| | Total | 63 | 2.65 | .813 |

Table 38

Perceived Importance of Peer Tutoring for ASD students

| | | N | Mean | Std. Deviation |
|---------------|-------------|----|------|----------------|
| Peer Tutoring | Parent | 20 | 3.25 | .967 |
| | HS Educator | 20 | 3.60 | 1.095 |
| | CC Educator | 23 | 3.65 | 1.027 |
| | Total | 63 | 3.51 | 1.030 |

Table 39

Perceived Importance of Student Faculty Interaction for ASD students

| | | N | Mean | Std. Deviation |
|-----------------------------|-------------|----|------|----------------|
| Student Faculty Interaction | Parent | 20 | 4.40 | .940 |
| | HS Educator | 20 | 3.75 | .639 |
| | CC Educator | 23 | 4.13 | 1.014 |
| | Total | 63 | 4.10 | .911 |

Campus Membership –Topic Importance

Item 16 asked participants to indicate the perceived importance of first-year experience workshops, personal learning community, club rush activities, time management skills, and co-curricular activities on campus membership for ASD students at community college. The means and standard deviations of the responses given by the participants are indicated in Tables 40 - 44.

Table 40

Perceived Importance of First-year Experience Workshops for ASD students

| | | N | Mean | Std. Deviation |
|---------------------------------|-------------|----|------|----------------|
| First-year Experience Workshops | Parent | 20 | 3.65 | 1.137 |
| | HS Educator | 20 | 3.75 | .910 |
| | CC Educator | 23 | 4.39 | .722 |
| | Total | 63 | 3.95 | .974 |

Table 41

Perceived Importance of Personal Learning Communities for ASD students

| | | N | Mean | Std. Deviation |
|-----------------------------|-------------|----|------|----------------|
| Personal Learning Community | Parent | 20 | 3.55 | 1.191 |
| | HS Educator | 20 | 3.85 | 1.040 |
| | CC Educator | 23 | 4.13 | 1.014 |
| | Total | 63 | 3.86 | 1.090 |

Table 42

Perceived Importance of Club Rush Activities for ASD students

| | | N | Mean | Std. Deviation |
|----------------------|-------------|----|------|----------------|
| Club Rush Activities | Parent | 20 | 2.25 | 1.293 |
| | HS Educator | 20 | 2.90 | 1.294 |
| | CC Educator | 23 | 3.35 | .832 |
| | Total | 63 | 2.86 | 1.216 |

Table 43

Perceived Importance of Time Management Skills for ASD students

| | | N | Mean | Std. Deviation |
|------------------------|-------------|----|------|----------------|
| Time Management Skills | Parent | 20 | 4.45 | .945 |
| | HS Educator | 20 | 3.80 | .894 |
| | CC Educator | 23 | 4.22 | .850 |
| | Total | 63 | 4.16 | .919 |

Table 44

Perceived Importance of Co-curricular Activities for ASD students

| | | N | Mean | Std. Deviation |
|--------------------------|-------------|----|------|----------------|
| Co-curricular Activities | Parent | 20 | 4.40 | .821 |
| | HS Educator | 20 | 4.00 | 1.076 |
| | CC Educator | 23 | 3.74 | .964 |
| | Total | 63 | 4.03 | .983 |

Self-Advocacy –Topic Importance

Item 17 asked participants to indicate the perceived importance of personal care, money management, nutrition and meal planning, communication skills, and personal safety/boundaries on self-advocacy for ASD students transitioning to community colleges. The means and standard deviations of the responses given by the participants are indicated in Tables 45 - 49.

Table 45

Perceived Importance of Personal Care for ASD students

| | | N | Mean | Std. Deviation |
|---------------|-------------|----|------|----------------|
| Personal Care | Parent | 20 | 3.60 | 1.046 |
| | HS Educator | 20 | 4.05 | 1.050 |
| | CC Educator | 23 | 4.35 | .647 |
| | Total | 63 | 4.02 | .959 |

Table 46

Perceived Importance of Money Management for ASD students

| | | N | Mean | Std. Deviation |
|------------------|-------------|----|------|----------------|
| Money Management | Parent | 20 | 4.55 | .887 |
| | HS Educator | 20 | 3.60 | 1.501 |
| | CC Educator | 23 | 4.52 | .593 |
| | Total | 63 | 4.24 | 1.118 |

Table 47

Perceived Importance of Nutrition Meal Planning for ASD students

| | | N | Mean | Std. Deviation |
|-------------------------------|-------------|----|------|----------------|
| Nutrition Meal Planning | Parent | 20 | 3.10 | 1.021 |
| | HS Educator | 20 | 3.40 | 1.353 |
| | CC Educator | 23 | 4.39 | .722 |
| | Total | 63 | 3.67 | 1.178 |

Table 48

Perceived Importance of Communication Skills for ASD students

| | | N | Mean | Std. Deviation |
|-------------------------|-------------|----|------|----------------|
| Communication Skills | Parent | 20 | 4.85 | .366 |
| | HS Educator | 20 | 4.65 | .813 |
| | CC Educator | 23 | 4.70 | .703 |
| | Total | 63 | 4.73 | .653 |

Table 49

Perceived Importance of Personal Boundaries/Safety for ASD students

| | | N | Mean | Std. Deviation |
|----------------------------------|-------------|----|------|----------------|
| Personal Boundaries Safety | Parent | 20 | 4.75 | .444 |
| | HS Educator | 20 | 4.50 | .827 |
| | CC Educator | 23 | 4.61 | .891 |
| | Total | 63 | 4.62 | .750 |

Research Question 5: Are there differences in the perceptions of parents, high school educators, and community college educators regarding awareness of programs and satisfaction with ASD student support services?

ANOVA was performed to test for a statistically significant difference between each group's perceived awareness. The one-way ANOVA of perceptions of high school seniors who are aware of their local community college's student support services revealed a statistically significant effect, $F(2, 60) = 4.995$, $p < .05$, indicating that not all

three groups believed that ASD high school seniors had the same level of awareness. Further analysis, Games-Howell Test, was performed to test for the variability within the means and to determine which groups had statistically differing opinions. Results are listed in Table 50 below.

Table 50

Post Hoc Test for Awareness of Programs

| (I) Relationship | (J) Relationship | Mean Difference (I-J) | Sig. |
|------------------|------------------|-----------------------|------|
| Parent | HS Educator | -.500 | .352 |
| | CC Educator | -1.139* | .006 |
| HS Educator | Parent | .500 | .352 |
| | CC Educator | -.639 | .238 |
| CC Educator | Parent | 1.139* | .006 |
| | HS Educator | .639 | .238 |

The findings summarized in Table 50 reveal that the parents and high school educators, and high school educators and community college educators, were not statistically significant. These findings indicated that there is a statistically significant difference in the perceptions of parents and community college educators' awareness of programs for ASD students.

Academic Access – Satisfaction

Data provided by parents, high school educators, and community college educators were used to determine the satisfaction with community college programs for ASD students. ANOVA was performed to test for a statistically significant difference between the groups. The one-way ANOVA revealed a statistically significant effect, $F(2, 60) = 8.087, p < .05$, indicating that all three groups had different satisfaction levels.

Further analysis, a Games-Howell Test, was performed to test for the variability within the means and to determine which groups had statistically differing opinions.

Table 51

Post Hoc Test for Satisfaction with Academic Access Programs for ASD Students

| (I) Relationship | (J) Relationship | Mean Difference (I-J) | Sig. |
|------------------|------------------|-----------------------|------|
| Parent | HS Educator | -1.200 | .064 |
| | CC Educator | -1.893* | .001 |
| HS Educator | Parent | 1.200 | .064 |
| | CC Educator | -.693 | .309 |
| CC Educator | Parent | 1.893* | .001 |
| | HS Educator | .693 | .309 |

The findings displayed in Table 51 reveal that parents and high school educators, and high school educators and community college educators' satisfaction level with academic access were not statistically significant. Thus, this study failed to reject the null hypothesis for the perceptions between these groups. However, the study rejects the null for the hypothesis for the relationship between parents and community college educators. These findings indicated that there are statistically significant differences in the perceptions of parents and community college educators' satisfaction with academic access of community college support services for ASD students.

Career Development – Satisfaction

Data provided by parents, high school educators, and community college educators determine the satisfaction with community college programs for ASD students. To test for statistical significance of the difference between the groups ANOVA was performed. The one-way ANOVA of the level of satisfaction with community college's

career development support services for ASD students revealed a statistically significant effect, $F(2, 60) = 6.312, p < .05$, indicating that not all three groups had the same level of satisfaction. A Games-Howell Test was also performed to test for the variability within the means and to determine which groups had statistically differing opinions.

Table 52

Post Hoc Test for Satisfaction with Career Development Programs for ASD Students

| (I) Relationship | (J) Relationship | Mean Difference (I-J) | Sig. |
|------------------|------------------|-----------------------|------|
| Parent | HS Educator | -.850 | .241 |
| | CC Educator | -1.809* | .002 |
| HS Educator | Parent | .850 | .241 |
| | CC Educator | -.959 | .193 |
| CC Educator | Parent | 1.809* | .002 |
| | HS Educator | .959 | .193 |

The findings shown in Table 52 reveal that parents and high school educators, and high school educators and community college educators', satisfaction level with academic access were not statistically significant. Thus, this study failed to reject the null hypothesis for the perceptions between these groups. However, the study rejects the null for the hypothesis for the relationship between parents and community college educators. These findings indicated there are statistically significant differences in the perceptions of parents and community college educators' satisfaction with career development community college support services for ASD students.

Campus Membership – Satisfaction

To test for statistical significance of the difference between the groups opinion, ANOVA was performed. The one-way ANOVA of the level of satisfaction with

community college's campus membership support services for ASD students revealed a statistically significant effect, $F(2, 60) = 6.312, p < .05$, indicating that not all three groups had the same level of satisfaction. Further analysis, a Games-Howell Test, was performed to test for the variability within the means and to determine which groups had statistically differing opinions.

Table 53

Post Hoc Test for Satisfaction with Campus Membership Programs for ASD Students

| (I) Relationship | (J) Relationship | Mean Difference (I-J) | Sig. |
|------------------|------------------|-----------------------|------|
| Parent | HS Educator | -.850 | .241 |
| | CC Educator | -1.809* | .002 |
| HS Educator | Parent | .850 | .241 |
| | CC Educator | -.959 | .193 |
| CC Educator | Parent | 1.809* | .002 |
| | HS Educator | .959 | .193 |

As illustrated in Table 53, the findings indicated that parents and high school educators, and high school educators and community college educators', satisfaction level with academic access were not statistically significant. Thus, this study failed to reject the null hypothesis for the perceptions between these groups. However, the study rejects the null for the hypothesis for the relationship between parents and community college educators. These findings indicated that there are statistically significant differences in the perceptions of parents and community college educators' satisfaction with campus membership community college support services for ASD students.

Self-Advocacy – Satisfaction

To test for statistical significance of the difference between the groups, ANOVA was performed. The one-way ANOVA of the level of satisfaction with community college’s self-advocacy support services for ASD students revealed a statistically significant effect, $F(2, 60) = 5.055, p < .05$, indicating that there was variability in the perceptions of the three groups. Further analysis, a Games-Howell Test, was performed to test for the variability within the means and to determine which groups had statistically differing opinions.

Table 54

Post Hoc Test for Satisfaction with Self Advocacy Programs for ASD Students

| (I) Relationship | (J) Relationship | Mean Difference (I-J) | Sig. |
|------------------|------------------|-----------------------|------|
| Parent | HS Educator | -1.300* | .025 |
| | CC Educator | -1.357* | .010 |
| HS Educator | Parent | 1.300* | .025 |
| | CC Educator | -.057 | .993 |
| CC Educator | Parent | 1.357* | .010 |
| | HS Educator | .057 | .993 |

As shown in Table 54 the findings indicated that there are not statistically significant differences in the perceptions of high school and community college educators’ satisfaction with self-advocacy support services for ASD students. Thus, this study failed to reject the null hypothesis for the perceptions between these groups. However, the findings reveal that parents have differing perceptions in relation to both high school and community college educators’ satisfaction level with self-advocacy

support services for ASD students. This study rejects the null for the hypothesis for these groups.

Chapter Summary

Chapter IV presented the results of the statistical analysis along with a discussion of the data. The research questions were examined. Parents, high school educators, and community college educators participated in this study. This allowed the researcher to investigate responses across the three groups. An Internet survey was made available to all participants to complete. All the research questions from the study were analyzed using descriptive statistics. Additionally, research questions 3, 5-8, and 10-17 measuring awareness and satisfaction were analyzed using ANOVA. The data indicate a trend towards high school and community college educators both having similar perception of community college support services but significantly different opinions than parents.

CHAPTER V

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter is a summation of the research data. The discussion begins with a summary of the findings of the study, followed by conclusions drawn from the study's findings. The chapter also includes implications for practice and recommendations for further research. The findings show, regardless of the student support service, that all respondents perceive special interest day camps and individual study as the delivery modes to have the greatest impact for ASD students transitioning to community college. Also, evidence suggests that parents' perceptions of community college support services for ASD students differ from the perceptions of high school and community college educators.

Summary of Findings

The results of this study yielded both significant and insignificant statistical differences between parents, high school educators, and community college educators' perceptions of community college transition support services for ASD students. Also, the respondent's opinions regarding the necessary delivery modes for postsecondary education support services and topic importance for ASD students were reviewed. The research questions are discussed as follows:

Research Question 1: What are the perceptions of parents, high school educators, and community college educators regarding awareness of ASD student support services?

This study reveals that ASD students are perceived by all groups to be somewhat uninformed (mean =2.17) of community college support programs. The low variation in the responses indicates that parents, high school educators, and community college educators respectively have similar perceptions. The parents, high school educators, and community college educators unilaterally responded that there needs to be a balance between experiential learning and lecture/demonstration to address ASD students' community college awareness (Table 6).

Also, the respondents all agreed that there needs to be an awareness program that includes targeted mailings, social media, and presentations. Community college educators' ranked the college's disability web pages highest to improve awareness (Table 5). In addition to the foregoing, all respondents ranked presentations at parent teacher conference as the perceived methodology to promote awareness and access to accurate support services information (RP Group, 2009). This finding supports previous research that indicated that parents play an instrumental role in the postsecondary educational transition of ASD students graduating from high school (Pena & Kocur, 2013).

Research Question 2: What are the perceptions of parents, high school educators, and community college educators regarding satisfaction with ASD student support services?

The low variation in the satisfaction responses indicates that parents, high school educators, and community college educators respectively have similar opinions on academic access, career development, and campus membership services for ASD students. The community college educators' mean for academic access satisfaction was

4.04 and 3.61 for career development and campus membership. This mean reveals that community college educators' are very satisfied with academic access services support they provide to ASD students. The data shows that high school educators were somewhat satisfied.

Whereas, parents were only slightly satisfied with the community college's academic access services (mean = 2.15) and not satisfied with (mean = 1.80) support services career development and campus membership. Furthermore, parents (mean = 1.60), high school educators (mean = 2.90), and community college educators (mean = 2.93) reported an overall lack of satisfaction with self-advocacy programs that support ASD students at community colleges. This data concurs with previous research documenting the perceived lack of services for ASD students leaving high school (Shattuck et al., 2012). The study's findings support the literature documenting the need for academic and non-academic student supports services that improve ASD student transitions to community college (Gelbar, Smith, & Reichow, 2014; Karp, 2011).

Research Question 3: What are the perceptions of parents, high school educators, and community college educators regarding the delivery mode of ASD student support services?

All respondents believed that individual study followed by special interest day camps have the greatest impact on academic access, career development, and campus membership for ASD students. This supports Brown and Coomes' (2015) research that establishing collaborative and personal relationships helps ASD students navigate the transition to college. Yet, the academic access and career development means associated with overnight summer camp programs (mean = 2.30, 2.22), organized campus clubs

(mean = 2.98, 2.95), and online video (mean = 2.94, 2.86) indicate a perception that these delivery modes have little to moderate impact on assisting ASD students.

Similar to the findings of VanBergeijk et al. (2008), a perception exists that one-on-one services are the optimal approach for ASD students to learn college social norms. As discussed in the literature, overcoming social challenges require that ASD students receive support services focused on the social expectations of the college transition (Gobbo & Shmulsky, 2012). This study's data on self-advocacy delivery modes further confirms the belief that individual study provides the greatest impact for ASD students.

Research Question 4: What are the perceptions of parents, high school educators, and community college educators regarding the important topics of ASD student support services?

The high means and low variation of the responses reveal that each group perceives academic access and career development topics of coaching, one-on-one counseling, peer tutoring, and student/faculty interaction as important in increasing the college readiness of ASD students. As discussed in the literature review, community colleges can promote academic access for ASD students through embracing first year experience courses (mean =3.95) that provide diverse student service approaches (Robertson & Ne'eman, 2008; Schnell & Doetkott, 2003). Group counseling was perceived by all groups as having minimal impact on ASD students. This contradicts Hicks' (2013) that suggests that counseling and advising services assist in developing student expectations.

As discussed in the literature review, disabilities services can serve as the main department to coordinate ASD support services along with other student service areas playing an important and collaborative role (Longtin, 2014). Informal student support

services encourage interaction between faculty and students that aid in the development of college readiness (Zhao & Kuh, 2004). The campus membership data for personal learning communities, time management, and co-curricular activities supports Gobbo and Shmulsky's (2012) assertion that ASD students require non-academic assistance to navigate the college environment.

Furthermore, the high means and low variation of the self-advocacy responses reveal that each group perceives personal care, money management, nutrition and meal planning, communication skills, and personal safety/boundaries as important topics to increase the college readiness of ASD students (Ciccantelli, 2011; Robertson & Ne'eman, 2008). Self-advocacy ensures the development of self-determination skills that promote control over experiences (Weir et al., 2013).

Research Question 5: Are there differences in the perceptions of parents, high school educators, and community college educators regarding awareness of programs and satisfaction with ASD student support services?

These results provide information about the perceived ASD students' awareness of community college support programs. There was not statistical significance substantiating perceptual differences between high school educators and community college educators' satisfaction level with awareness, academic access, career development, campus membership, and self-advocacy. A key finding is that there is statistically significant evidence substantiating that parental perceptions are different from those of community college educators towards awareness and satisfaction with community college student support services. Parents responded that they are dissatisfied with community college ASD student support services. Therefore, the null hypothesis

was rejected regarding the differences in parents and community college educators' perceptions.

Best practice research suggests that transitioning an ASD student requires parent and community college collaboration (Brown & Coomes, 2015). The statistical data illustrated in Tables 50 – 54 provide evidence to suggest that the low ASD student college attendance rates (Wei et al., 2015) may be the result of parents and community colleges operating in silos (RP Group, 2009).

Conclusion

This study was conducted to determine if parents, high school educators, and community college educators have perceptual differences regarding awareness, satisfaction, delivery mode, and importance of community college support services for ASD students. The literature review revealed that academic access, career development, campus membership, and self-advocacy support services are critical in the postsecondary educational transition for ASD students. The awareness and satisfaction data indicate a trend towards high school and community college educators both having similar perceptions of community college support services. The data reveal that parent perceptions on the topics of academic access, career development, and campus membership are statically different compared to those of community college educators.

The findings show, regardless of the student support service, that all groups perceive special interest day camps and individual study as the delivery modes to have the greatest impact for ASD students transitioning to community college. Community college educators' perception of the effectiveness of overnight summer camps differs from both parents and high school educators. This suggests that community colleges

should re-evaluate the utilization of expensive summer programs for ASD students and investigate shorter duration summer bridge programs. A more effective use of student success and equity fiscal resources may be the development of special interest day camps and individual study programs that minimize ASD high school student's transitional barriers.

The limitations of the study may explain the findings obtained from this research. The study was limited to California's Tulare and Fresno Counties parents, high school educators, and community college educators. If additional parents, high school educators, and community college educators in Northern and Southern California were included in the study, the significance factor may have improved. Northern and Southern California have larger ASD populations and ASD students transitioning to college than the Central California region. Thus, parental awareness may be sensitive to the regional ASD population. Also, an examination of the parent's educational backgrounds and training may have impacted the findings. Parents who have attend colleges and universities may be more aware of the importance and variety of college student support programs available for ASD students than those that did not attend postsecondary institutions.

Recommendation for Future Research

This study provides a foundation for future research related to student support services for ASD students transitioning to community college. As California has a coherent system of public community colleges, this study needs to be repeated to include all regions of California. Also, future research is recommended to aid legislators in instituting policies that provide fiscal incentives to both high schools and community

colleges to provide dual enrollment opportunities that foster academic access via a seamless transition.

Although this study has revealed informational data associated with the research question found within this research project, it has introduced other inquiries in return. Further research is recommended to determine how to effectively utilize California's community college student success and equity funds to redesign student support services to increase the prevalence of ASD high school students transitioning to college. This recommendation supports the research of Longtin (2014) which asserts that traditional accommodations for ASD students are often insufficient to impact these students' broader educational experience. It is recommended that future studies are done to establish student support services that facilitate term-to-term retention for ASD students. Once transitional barriers are overcome and ASD students enter college, there must be protocols in place to foster college completion. This approach will positively address the human capital development and earnings potential of the ASD population.

Recommendations for Policymakers and Practitioners

Many differences exist between what parents and community college educators perceive about academic access, career development, and campus membership. These gaps could possibly be minimized or eliminated through a dialogue between parents and community college educators. This dialogue allows parents to explain to community college educators the postsecondary support needs of their ASD students. Also, community college educators can make parents aware of existing supports. Working together, both groups can aid in the implementation or redesign of support services to assist ASD students. Additionally, the differences in high school and community college

educators' perspectives on promoting ASD students' self-advocacy can serve as a knowledge base for future and broader dialogue.

Chapter Summary

Chapter V summarized the research study findings and presented conclusions drawn by the researcher. Each of the research questions were examined in more detail. A discussion of the study findings was compared to other extant research studies. Implications of the research study were presented for institutions to place in practice. The chapter concluded with recommendations for researchers interested in future research relating to the effective allocation of student support services resources for ASD high school students that promote a seamless transition to college.

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APPENDIX A
IRB APPROVAL

From: jroberts@orc.msstate.edu <jroberts@orc.msstate.edu>
Sent: Friday, October 16, 2015 7:22 AM
To: ch3swife@hotmail.com
Cc: jroberts@orc.msstate.edu; jroberts@orc.msstate.edu; sking@colled.msstate.edu
Subject: Study 15-357: Student Support Services for Autistic Students Transitioning To Community Colleges
Protocol Title: Student Support Services for Autistic Students Transitioning To Community Colleges

Protocol Number: 15-357

Principal Investigator: Ms. Arlitha Williams-Harmon

Date of Determination: 10/16/2015

Qualifying Exempt Category: 45 CFR 46.101(b)(2)

Dear Ms. Williams-Harmon:

The Human Research Protection Program has determined the above referenced project exempt from IRB review.

Please note the following:

- Retain a copy of this correspondence for your records.
- An approval stamp is required on all informed consents. You must use the stamped consent form for obtaining consent from participants.
- Only the MSU staff and students named on the application are approved as MSU investigators and/or key personnel for this study.
- The approved study will expire on 12/31/2016, which was the completion date indicated on your application. If additional time is needed, submit a continuation request. (SOP 01-07 Continuing Review of Approved Applications)
- Any modifications to the project must be reviewed and approved by the HRPP prior to implementation. Any failure to adhere to the approved protocol could result in suspension or termination of your project.
- Per university requirement, all research-related records (e.g. application materials, letters of support, signed consent forms, etc.) must be retained and available for audit for a period of at least 3 years after the research has ended.
- It is the responsibility of the investigator to promptly report events that may represent unanticipated problems involving risks to subjects or others.

This determination is issued under the Mississippi State University's OHRP Federalwide Assurance #FWA00000203. All forms and procedures can be found on the HRPP website: www.orc.msstate.edu.

Thank you for your cooperation and good luck to you in conducting this research project.

If you have questions or concerns, please contact me at jroberts@orc.msstate.edu or call 662-325-2238.

Finally, we would greatly appreciate your feedback on the HRPP approval process. Please take a few minutes to complete our survey at <https://www.surveymonkey.com/s/PPM2FBP>.

Sincerely,

Jodi Roberts, Ph.D.
HRPP Officer

cc: Stephanie King, Advisor

APPENDIX B
QUESTIONNAIRE

1. Which of the following best describes you? Please check only ONE answer:
 - Parent of an ASD student (Skip to Question #3)
 - High School Educator
 - Community College Educator

2. How many years have you worked with ASD student (s)? Please check only ONE answer:
 - 0 to 3 years
 - 4 to 7 years
 - 7 or more years

3. Do you feel ASD high school seniors are aware of their local community college's student support services? Please check only ONE answer:
 - Not at all informed
 - Somewhat uninformed
 - Informed
 - Somewhat informed
 - Very informed

4. Which of the following ways SHOULD BE used to promote college support services and programs for ASD high school students? Please check ALL that apply:
 - No formal, planned promotion of programs
 - Only informal, word-of-mouth
 - Public mass media (such as press releases sent to newspapers, radio; etc)
 - Targeted mailings (letters, brochures, flyers, etc.) sent to high school principals, teachers, and students
 - Online posts on social media (Facebook, Twitter, Instagram, etc)
 - College disability department web pages.
 - Presentations at parent-teacher conferences
 - Presentations at college orientation

5. *ACADEMIC ACCESS for ASD students addresses issues that may impact college course participation such as priority registration, ability to register in credit courses offered to non-disabled students, testing accommodations, and access to mentors or tutors.* What is your level of satisfaction with your local community college's ACADEMIC ACCESS support services for ASD students? Please check only ONE answer.
 - Not at all satisfied
 - Slightly satisfied
 - Somewhat satisfied
 - Very satisfied
 - Extremely satisfied

6. *CAREER DEVELOPMENT provides ASD students with the supports and experiences necessary to seek and sustain competitive employment.* What is your level of satisfaction with your local community college's CAREER DEVELOPMENT support services for ASD students? Please check only ONE answer.
 - Not at all satisfied
 - Slightly satisfied
 - Somewhat satisfied
 - Very satisfied
 - Extremely satisfied

7. *CAMPUS MEMBERSHIP* provides access to and support for participation in existing social organizations, facilities, and technology, including clubs and organizations, community service, and co-curricular activities. What is your level of satisfaction with your local community college's CAMPUS MEMBERSHIP support services for ASD students? Please check only ONE answer.
- Not at all satisfied
 - Slightly satisfied
 - Somewhat satisfied
 - Very satisfied
 - Extremely satisfied
8. *SELF ADVOCACY* ensures the development of self-determination skills that promote control over experiences. What is your level of satisfaction with your local community college's SELF ADVOCACY support services for ASD students? Please check only ONE answer.
- Not at all satisfied
 - Slightly satisfied
 - Somewhat satisfied
 - Very satisfied
 - Extremely satisfied
9. Which method should be the predominant teaching method used to inform ASD students of community college support services? Please check only ONE answer:
- Lecture or demonstration
 - Experiential (hands-on) learning model (Do-Reflect-Apply)
 - Balance of experiential learning and lecture/demonstration
10. How would you rank (1-5) the potential effectiveness of the below delivery mode in having the most positive impact on ACADEMIC ACCESS for ASD college students? (5 = Yields the greatest impact on student involved, 1 = Yields the least impact on student involved)
- _____ Overnight Summer Camp Programs
 - _____ Special Interest/Short-Term Day Camps
 - _____ Organized Campus Clubs
 - _____ Individual Study/Mentoring/Learning Programs
 - _____ Online Instructional Video Program
11. How would you rank (1-5) the potential effectiveness of the below delivery mode in having the most positive impact on CAREER DEVELOPMENT for ASD college students? (5 = Yields the greatest impact on student involved, 1 = Yields the least impact on student involved)
- _____ Overnight Summer Camp Programs
 - _____ Special Interest/Short-Term Day Camps
 - _____ Organized Campus Clubs
 - _____ Individual Study/Mentoring/Learning Programs
 - _____ Online Instructional Video Program
12. How would you rank (1-5) the potential effectiveness of the below delivery mode in having the most positive impact on CAMPUS MEMBERSHIP for ASD college students? (5 = Yields the greatest impact on student involved, 1 = Yields the least impact on student involved)

- Overnight Summer Camp Programs
 Special Interest/Short-Term Day Camps
 Organized Campus Clubs
 Individual Study/Mentoring/Learning Programs
 Online Instructional Video Program
13. How would you rank (1-5) the potential effectiveness of the below delivery mode in having the most positive impact on SELF ADVOCACY for ASD college students? (5 = Yields the greatest impact on student involved, 1 = Yields the least impact on student involved)
- Overnight Summer Camp Programs
 Special Interest/Short-Term Day Camps
 Organized Campus Clubs
 Individual Study/Mentoring/ Learning Programs
 Online Instructional Video Program
14. How would you rank (1-5) the importance of the below ACADEMIC ACCESS topics on increasing ASD students' college readiness? (5 = Most Important, 1 = Least Important)
- College Application & Registration Workshops
 Free Application for Federal Student Aid (FAFSA) & Financial Aid Seminars
 Dual/Concurrent Enrollment Courses
 Orientation
 Campus Tours or Senior Day Activities
15. How would you rank (1-5) the importance of the below CAREER DEVELOPMENT topics on increasing ASD students' retention and persistence? (5 = Most Important, 1 = Least Important)
- Career Coaching
 One on One Counseling
 Group Counseling
 Peer Tutoring
 Interaction between students and faculty
16. How would you rank (1-5) the importance of the below CAMPUS MEMBERSHIP topics on increasing ASD students' college retention and persistence? (5 = Most Important, 1 = Least Important)
- First-Year Experience Workshop/Courses
 Personal Learning Communities
 Club Rush Activities
 Time Management Skills
 Co-curricular Opportunities
17. How would you rank (1-5) the importance of the below SELF ADVOCACY topics on increasing ASD students social intelligence? (5 = Most Important, 1 = Least Important)
- Personal care (grooming, dress, hygiene)
 Money Management (banking, purchases, budgeting)
 Nutrition/Meal Planning
 Communication Skills
 Personal Boundaries/Safety