SOCIAL EXPERIENCES OF COLLEGE STUDENTS WITH AUTISM SPECTRUM DISORDERS

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Doctoral of Education in Educational Leadership

By

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Dedication

I dedicate this dissertation to my family, especially to my oldest son Spencer for providing encouragement, support, and love at all of my ceremonies starting with my high school graduation. To my two baby girls, Kinzie and Lindley for their love, patience, and understanding: may you be motivated and encouraged to be independent strong women who believe all dreams are achievable.

I also dedicate this dissertation to my friends who have supported me throughout the process. I appreciate all of your understanding and the encouragement to keep going. A special dedication to all the students with disabilities set your goals high, never give up, and believe in yourself, don't let anyone tell you that it is not possible. Finally, to my chair and committee members for providing advice, being supportive, and taking the time out of your busy schedules to make my goal attainable.
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ABSTRACT

SOCIAL EXPERIENCES OF COLLEGE STUDENTS WITH AUTISM SPECTRUM DISORDERS

By

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Doctor of Education in Educational Leadership

More young adults with autism spectrum disorders (ASD) are transitioning into postsecondary institutions. Some continue to have difficulties engaging in social activities and building meaningful social relationships with age-appropriate peers, resulting in loneliness and the aspiration to develop friendships. The intent of this research was to gain better understanding of social experiences of these young adults on a college campus. This qualitative study found these young adults desire friendships. This study also found participants express loneliness, difficulty with conversation and, in their words; ranking concerns with peers they feel are superior or inferior to them.
Chapter I: Introduction

Today, the fastest growing population of students with disabilities on college campuses is that of students with autism spectrum disorders (ASD) (Adreon & Durocher, 2007; Migliore et al., 2012; Shattuck et al., 2012; Zager & Alpern, 2010). These students have average to high intelligence and may be identified as having high-functioning autism, Asperger’s syndrome, or Pervasive Developmental Disorders-Not Otherwise Specified (PDD-NOS) or the newer designation of Autism Spectrum Disorders (DSM-5). According to the National Center for Education Statistics (2013), almost 11% of students in postsecondary education reported having some type of disability in the 2007-2008 academic term. The 2010 American Community Survey, a national survey used by the U.S. Census Bureau, reported that 27% of 18 to 25 year olds with disabilities were enrolled as undergraduates (Smith, Grigal, & Sulewski, 2012). However, in 2009, 57% of individuals with disabilities were enrolled in postsecondary education, according to the National Council on Disability (2011). The dissimilar methods employed to collect this data may account for the difference in numbers, but it is apparent that there is a significant number of students with disabilities in postsecondary education. A recent estimate is that .7% to 1.9% of college students meet the diagnostic criteria for autism (White, Ollendick, & Bray, 2011). According to the American Institutes for Research (2013), the number of individuals with disabilities entering postsecondary education increased 19.3% between 1990 and 2005.

While this increase in college attendance is exciting, it often appears that American postsecondary institutions are not prepared to meet their social demands, which also affects them academically (Koegel et al., 2013). This puts students with disabilities,
and especially students with autism spectrum disorders, at higher risk of dropping out of postsecondary education as compared to their peers without labels (Barber, 2012; Bolt et al., 2009; DeMatteo et al., 2012; Labor of Statistics, 2012; White et al., 2011).

An *autism spectrum disorder* is characterized as a neurodevelopmental disorder that affects development and manifests with stereotyped behavior and impairments in the areas of social communication and repetitive or restrictive behavior/interests. The Center of Disease Control and Prevention (CDC) found the prevalence of those who meet the criteria for ASD is 1 in 68 children (2014). Under DSM-IV-TR (2000), there were five specific Pervasive Developmental Disorders (PDDs) with one or more of the following: impairments in reciprocal social interactions, impairment in communication, and presence of stereotyped behavior, interests, and activities: (a) Autistic Disorder (b) Rett’s Disorder (c) Childhood Disintegrative Disorder (d) Asperger’s Disorder, and (e) Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) (American Psychiatric Association, 2000).

With the new change in May of 2013 to DSM-5 diagnoses, the four previously separate disorders are now considered to be a single expansive eligibility of autism spectrum disorder (Frazier et al., 2012; Mattila et al., 2011). Autism spectrum disorder (ASD) is now a single repetitive condition with different levels of symptom severity in two core domains. As stated by the American Psychiatric Association, “ASD is characterized by 1) deficits in social communication and social interaction, and, 2) restricted repetitive behaviors, interests, and activities (RRBs). Because both components are required for a diagnosis of ASD, social communication disorder is diagnosed if no RRBs are present (2013, p. 1).” This study looked at students with autism who possess
average-to-high intelligence and who can perform satisfactorily within a college-level curriculum with the support that is available through their college. For the purpose of this research study, the DSM-5 term *autism spectrum disorder* was used.

Due to the increase in enrollment of students with autism spectrum disorder and other disabilities, more college campuses are accessible for these students, and provide specifically designed services to assist with their unique needs. Unfortunately, despite the existence of these programs, college services still remain an issue, as most college campuses do not provide the appropriate social supports (Camarena & Sarigiani, 2009; Migliore et al., 2012). Although there are mandated support services on college campuses, it is imperative that colleges examine the types of social support that are not yet in place, and make the needed changes to support the growing population of students with ASD as they learn the social requirements, expectations, and opportunities present at the postsecondary level.

Failure to support adults with ASD will cause employment to be increasingly more difficult and will cost the United States over 63 billion dollars a year in unemployment, increased and limited access to health care benefits, welfare and lost revenue (Dunn, Chambers, & Rabren, 2004; U.S Census Bureau, 2006). These outcomes are in addition to the profound impact on individuals’ self-worth (Dunn, Chambers, & Rabren, 2004; Migliore et al., 2012; Poon, 2012).

**Problem Statement**

Students with an autism spectrum disorder frequently aspire to attend college, but are concerned that colleges will not be able to meet their social and academic needs (Camarena & Sarigiani, 2009; Dente & Parkinson Coles, 2012). Most students with ASD
are capable of succeeding on a postsecondary campus within an environment that fosters social interactions and provides mentors through trained faculty and staff who understand their unique needs (Koegel et al., 2013; Patrick & Wessel, 2013; Zager & Alpern, 2010).

Although, the social transition experiences from high school to post secondary institutions vary for each student with an autism spectrum disorder, there are some shared experiences. First, many students with ASD leave their high schools having known the same people, both peers and adults, for many years. These students then enter an unfamiliar social environment of unknown people and cultures, therefore disrupting their hard-won relationships made during K-12 years. Second, they may have received inadequate preparation for the independent living skills that college and adult life demand (Wehman et al., 2014). Additionally, most students with autism spectrum disorders also had some type of assistance during their secondary years to access the general education curriculum, including an adult assistant or a special education teacher to schedule their classes, provide them with guidance and monitor their academic progress (Foley, 2006). These forms of assistance have been shown to be crucial to promote independence during their K-12 years, yet on the other hand, these supports can be a hindrance during the transition into adulthood (Adreon & Durocher, 2007). Many individuals with ASD are inadequately prepared to independently develop and maintain friendships. In addition, students with ASD may struggle to identify their academic needs, increased academic demands in college campuses, since adult support is less in college (Adreon & Durocher, 2007).

Legal rights and protections also change substantially when a student moves into postsecondary education. The Individuals with Disabilities Improvement Education Act
of 2004 (IDEA-04) is a federal law that requires schools to support students with
disabilities and ensures that each child receives a free and appropriate public education.
In addition, if the child is eligible for special education services, it is the schools’
responsibility to create an Individualized Education Plan (IEP) and monitor his/her
academic progress. Many students with ASD require support and guidance, not only in
academics, but also in the areas of language and speech, social communication, and
behavior support. However, IDEA is only for students with disabilities ages 0 to 22. For
the 18 to 22 year old group, students are still eligible if they have not yet received a high
school diploma or need further assistance with vocational skills. Contrary to the manner
in which services are provided in the K-12 education system, at the college level, the
responsibility shifts to the students to advocate for their own needs. At this level, it is
now up to the individual student to disclose his/her disability in order to receive services.
In college, students will find services to be different than what they were accustomed to
in high school: now the student will have to request accommodations and will have to
seek advisement when they have questions. Whereas in high school, a special education
teacher was assigned to the student to make sure they were getting accommodations,
accessing the curriculum. It is the responsibility of the college student to take initiative
of their college life and be more independent. College students will have to organize and
be responsible for scheduling their own classes, completing their homework and
assignments on time, managing their time effectively, making their own decisions, and
most importantly, seeking help before crises develop; all of these may be struggles for
students with an autism spectrum disorder (Adreon & Durocher, 2007; Zager & Alpern,
2010).
As young adults move into postsecondary education, the changed social demands can be difficult to decipher and meet. They may continue to struggle with peer interactions, maintaining age-appropriate friendships, initiating and maintaining conversations, problem solving skills and understanding verbal or body language (Dente & Parkinson Coles, 2012; Sansosti, 2010). Examining these students’ social experiences, their feelings about friendships, and their assessment of which services are most effective will contribute to efforts to support them socially and academically.

**Purpose and Significance**

The purpose of this study was to examine the social experiences that students with autism spectrum disorders engage in on a college campus along with what they consider necessary on college campuses to promote more social experiences. College students who registered with disability services and self-identified as having an autism spectrum disorder were asked about their social activities and experiences, including interactions with peers and professors. Information obtained from this study may inform college-aged students with an autism spectrum disorder, their parents, and college personnel, such as college counselors, faculty, and disabilities services professionals, about the social environment within a college campus and possible ways to increase social activities and ways to provide social supports within the classroom and on a college campus.

The objective of this study was to evaluate social experiences on a college campus for students with an autism spectrum disorder. The main objectives are to determine how college students with an autism spectrum disorder view their social experiences on a college campus and identify factors that might potentially improve their social experiences on a college campus. This is significant for advancing understanding
of the support available on college campuses and strategies for encouraging positive college outcomes.

Examining the social experiences of students with autism spectrum disorder is important because a thorough and more accurate understanding should lead to better social support services at the college level. It is known that high school students with disabilities who were involved with a school or community group or had peer support were less likely to drop out (Dunn, Chambers, & Rabren, 2004, Sollitto et al., 2013). In addition, students who had positive relationships with school personnel also had a decreased chance of dropping out (Dunn, Chambers, & Rabren, 2004). Sollitto et al. (2013) found that college students who have connections with peers will assimilate more easily, respond more readily in a classroom discussion, and, in general, be more academically engaged. Overall, there is limited research on social activities among adults with autism spectrum disorders, the forms of their relationships, the factors that may influence their participation in social activities, and the effects these factors have on their social and academic development (Orsmond, Krauss, and Seltzer, 2004; Poon, 2012; Wehman et al., 2014). Preliminary studies have shown that, when peer mentors and faculty mentors provide social and emotional support, students with disabilities are more likely to be academically successful in college coursework and socially integrated into the fabric of campus life (Blumberg & Daley, 2009; DiSalvo & Oswald, 2002; Patrick & Wessel, 2013).

This investigation sought insight into the social experiences of college students with autism spectrum disorders. Research indicated that students who have multiple experiences with communication and group interactions will feel connected when the
culture is supportive and cooperative and, thus, will develop social skills that can be utilized during their college journey and beyond (Sollitto et al., 2013). Ormond, Krauss and Seltzer (2004) and Wehman et al. (2014) acknowledge that few studies have investigated changes in social relationship behaviors in adulthood. For this reason, this research is important for investigating the social experiences of college-aged adults with an autism spectrum disorder. The results can help to determine which supports and/or services are crucial for building a positive social experience during their college years.

**Research Questions**

This study was guided by the following research questions: What are the social experiences that a student with autism spectrum disorders engages in on a college campus? What do college students, in their experiences, consider necessary on college campuses to promote more social experiences?

**Related Terms**

For successful student outcomes, both cognitive abilities and social skills are important (Ivey, 2007). Some variables associated with academic and social success used within this research are presented below.

*Disclosure:* Being able to identify yourself as having a disability to the disabilities resource center on a college campus. In postsecondary education, students legally have the choice of self-identifying with the disability support office. Many students with autism spectrum disorders are reluctant to disclose their disability (Adreon & Durocher, 2007). Disclosing a disability, while necessary to receive support and services in college, also promotes self-advocacy skills.
Schedule and course structure organization: Students are required in college to take responsibility for their academic performance; this includes scheduling classes, organizing and preparing for assignments and project due dates.

Self-advocacy skills: These include being self-reliant, motivated, and being able to speak up for their needs. A large number of studies have been conducted on students' first steps to transitioning. They must be able to self-disclose their disability and develop self-advocacy skills to more likely achieve academic and social success (Eckes, & Ochoa, 2005; Getzel, & Thoma, 2008; Graham-Smith, English, & Vasek, 2002; Grigal, Neubert, Moon, & Graham, 2003).

Self-determination: This is defined as “volitional actions that enable one to act as the primary causal agent in one’s life and to maintain or improve one’s quality of life” (Wehmeyer, 2005, p. 117). By exercising self-determination, other key skills and attitudes are likely to develop, such as choice-making and decision-making skills, problem-solving and self-management skills, and goal-setting and attainment skills (Wehmeyer, 2005).

Student-faculty interactions: How often students visit faculty during office hours or after class to clarify questions and assignments. When students and faculty interact and create meaningful relationships, students engage more and, therefore, are less likely to drop out (Hu & McCormick, 2012).

Student-peer interactions: Having peers support the individual with disabilities socially and academically and provide them with encouragement to pursue academic and social success. Having friends or being a part of group positively influences students (Hu & McCormick, 2012).
Transition process: Has been defined in terms of the need for overlapping support and linkage among high schools and colleges and the world of work (Baer, Flexer, & Dennis, 2007). During the transition process from secondary to postsecondary education, the majority of college faculty, staff, and college peers are not prepared to meet the unique needs of students with ASD, both socially and academically (Barnhill et al., 2011).

Theoretical Basis

Four theories are reviewed to understand and address the challenges related to the social and academic experiences of college students with autism spectrum disorders: ecological theory, transactional theory, medical theory, and theory of mind (ToM). Lequia (2011) argues that, to prevent isolation of students with autism spectrum disorders, researchers “need not choose between one model…rather [be] open-minded with their focus being on the…individual with ASD” (p. 406). Integration of multiple theoretical perspectives is currently a strong trend in the study of students with disabilities and their outcomes in postsecondary education.

The transition into the college environment can be scary. An important framework for studying this major change is ecological theory which was developed by Bronfenbrenner (1979) who believed a person’s development was affected by their environment in five different levels: microsystem, mesosystem, exosystem, macrosystem, and chronosystem.

Microsystem is the system closest to the person. For this research study, the participant’s university, parents, peers, faculty and staff make up the microsystem. The interactions among different aspects of the person’s life are the mesosystem. In this case, they are the active roles the interviewee has with his peers, professors and staff, such as
attending office hours or participating in group activities. The exosystem refers to the setting and other factors happening in the student’s life that cannot be controlled by the student. An example of exosystem can be changes on a class syllabus, cancellation of classes and changes within the school setting or at home. The macrosystem is the cultural environment, such as college life and culture. The transition between high school and college demonstrates a school cultural change, and, along with this change, students are required to independently develop a new set of friends, take on new responsibilities and figure out the new college culture they are now a part of (Onwuegbuzie, Collins, & Frels, 2013). For a college student with ASD, entering a new environment of unfamiliar faces, procedures, and settings can be intimidating and overwhelming. This leads into the chronosystem, which includes the transitions in one’s life. Adults need to know how to determine the factors that influence a person’s ability to cope with a transition from family, friends, and intimate relationships that must be redefined when the student enters college. Other factors which must be considered are maintaining academic levels, making sense of institutional cultures and traditions, and developing practical models for working with college students with disabilities (Graham-Smith, English, & Vasek, 2002).

Ecological and transactional theories, together, can improve the understanding of a wide group of individuals with ASD and their social activities on a college campus. Collectively, ecological theory applies to the systems level, and transactional theory examines the person-environment relationships (Jason, 2013). Transactional model focuses on the changing interaction between nature and nurture, meaning outcomes cannot function independently, but need both the individual and the context together
(Sameroff, 1993). Additionally, the transactional model observes the interaction between the individual and his/her natural traits as well as economic and social factors (Sameroff, 1993).

Researchers have consistently drawn from medical theory to identify and provide diagnostic labels for individuals with disabilities (Cosier, 2012). Providing a diagnosis to an individual with mental health disorders was originally done to improve statistical data (Kite, Gullifer, & Tyson, 2012). Diagnoses are beneficial when individuals are provided access to educational placement, services, and funding (Kite, Gullifer, & Tyson, 2012). On the other hand, labels can focus on the “dis” in disability, and, for too many individuals, this provides a negative meaning that justifies exclusion from a group or situation (Cochran-Smith & Dudley-Marling, 2012). Scholars have researched the theory of labeling; noting that labeling creates a power for professionals to dominate conversations with educators and parents, yet the stigma that it brings for students with special needs can lower their self-esteem and lead to a negative self-image (Cosier, 2012; Trainor, 2008). Thus, having a negative self-image causes some college students with ASD to resist pursuing the support necessary to attain a diploma. For this study, medical theory is significant as some students with ASD see their disability as negative. These students would benefit from having a more positive perception of their disability, therefore leading to a positive self-image. It is central for college students with ASD to have self-awareness of their condition in order to receive needed services to attain a diploma (Williams, 2010). Baglieri et al., (2011) question the intention of “conventional and naturalized ways of thinking about the difference to bring greater balance to the intellectual grounding for understanding and responding to school failure” (p. 270). It is
important for individuals to understand their disability, as the medical model has shaped the narratives surrounding people with disabilities (Baglieri et al., 2011).

Regarding the college journey for students with ASD, researchers have studied the theoretical framework of theory of mind (ToM) (Sameroff, 1993). ToM is the awareness of one’s own mental state and the mental state of others and the ability to understand thoughts and feelings of self and others (Lequia, 2011; van Buijsen et al., 2011; Wimmer & Perner, 1983). ToM posits that this awareness and ability are necessary in order to explain and predict one’s own behavior and that of others. This awareness is influenced by individuals’ beliefs, intentions, desires, and understanding of differences (Chevallier et al., 2012). This theoretical framework provides an explanation for the social interaction problems experienced by individuals with communication disorders (van Buijsen et al., 2011). In terms of ASD, Williams (2010) claims that autism involves a particular deficit in “awareness of their own state [and] …the mental state of other people” (p. 474). This deficit is highly dependent on an individual’s cognitive abilities and executive functions (van Buijsen et al., 2011). As more students with ASD enter postsecondary settings, there is a necessity for professionals to consider ToM when communicating with and creating support programs for young adults with ASD. For example, support programs may include providing instruction and feedback on utilizing social communication skills that require cognitive empathy; and understanding the thoughts, intentions, and beliefs of others. It is also important to provide instruction on social empathy, understanding the feelings, desires, and potential behavioral reactions to situations of others would be valuable for many students to develop a meaningful relationship and be able to maintain the friendship (Chow, Ruhl, & Buhrmester, 2013).
Every day, students with ASD are confronted with unique social and academic challenges which require educational support and instruction (Lequia, 2011), and it is important during the transition process for college students to be included and integrated into the college environment. Social inclusion means ensuring all people have access to activities, social roles, and relationships as anyone without labels would have (Bates & Davis, 2004). As more students with ASD attend college, social inclusion must be considered a major factor in ensuring equal opportunity. Students with ASD experiencing a new environment amongst peers who are not familiar with their social challenges contribute to higher anxiety (White et al., 2009) and the new school environment may have potential negative effects for students with ASD (Dillon & Underwood, 2012). These same researchers believe, for transition to be successful, social support is the key, and group acceptance is even more critical (2012). Academic researchers argue that, including individuals as part of the community contributes to the development of the social capital of the larger society (Powers et al., 2007). For college students with ASD to prosper both socially and academically, their professors must understand their disability and know how to educate them in a clear and cohesive manner. The authors believe, to develop an underlying framework, it is necessary to pull from many existing theories rather than to focus on one phenomenon, therefore unifying and encompassing their strengths to eliminate assumptions regarding students with ASD (Jason, 2013). For that reason, the use of various theories is needed to appreciate the cognitive and social complexities that each student requires in order to foster a positive college experience.
Overview of Methodology

This qualitative study examined the social experiences of college students on a large urban campus in Southern California. The college offers support for students with disabilities through the Disability Resources and Educational Services (DRES) office. The DRES provided access to current students with autism spectrum disorders by contacting eligible participants through email and through recommendations from their counselors. In addition, an email blast was sent to all students residing within student housing on campus. The data collection was conducted at the beginning of the Spring 2014 postsecondary. This setting was selected to provide an identifiable setting on campus where the participants would feel safe and comfortable.

In this approach, the author used a sample size consisting of nine postsecondary-level participants with ASD, seven who have self-disclosed their disability to the DRES and two who responded from the email blast to student housing, were not registered with DRES, and, therefore, have not disclosed their disability to DRES. This method was used because, with support from the director of DRES and the director of Student Housing, students who disclosed their disability and those who have not could voluntarily contact the researcher to be in the study. Since the study was voluntary, these students had an array of demographic and economic backgrounds and varying levels of academic and social needs.

The qualitative research took place in the field and relied on multiple methods for collecting data. Several students with autism spectrum disorders were emailed and asked to be participants in this research study. The nine participants who agreed were provided with a gift card for their time. The study consisted of eight one-on-one interview
questions. Additionally, a questionnaire based on a review of the literature was provided along with discussions with professionals at the secondary level and professionals at the postsecondary-level. The survey questions consisted of 11 questions with closed- and semi-closed-ended questions. The Personal Growth Initiative Scale (PGIS) by Christine Robitschek was also administered. It consisted of nine questions aimed at learning how participants view their ability to be independent.

Due to the social complexities of autism spectrum disorders, survey questions were combined with one-on-one interviews so that participants had multiple ways to express their ideas. This enabled the construction of a broader picture for the study (Rossman & Rallis, 2012). These data provided useful information to determine which factors contribute to successful social support for students with ASD. Additionally, these data provided information on how students socially navigate the college campus. By focusing on multiple sources of data, one can further research how students with ASD, ranging in age from 18 to 30 years, can thrive at a large urban university in Southern California.

**Limitations and Delimitations**

The most important limitation was the new diagnostic criteria under DSM-5, which contained modifications to DSM-IV-TR. The most dramatic change was creating one diagnosis of autism spectrum syndrome. This change may leave out several individuals with Asperger’s syndrome, which once would qualify under DSM-IV-TR (Beighley et al., 2013; Frazier et al., 2012; Mattila et. al., 2011). For this study, participants were diagnosed prior to this modification. Therefore, there is no way to know if participants would still qualify under the new diagnostic criteria under DSM-5.
Nonetheless, these participants were provided university support services based on an eligibility of ASD.

Another disadvantage is that only one college campus was used in this study. This might give bias to the array of college student services and support provided at this campus, which might not be offered at other campuses. Additionally, information from this study was provided by students self-reporting their social experiences with student services and support in high school; therefore, there may be inaccuracies from some students, depending on the length of time that they have been out of high school, the nature of their disability, and their ability to understand the survey questions. A further area for ambiguity is the student’s awareness of friendship, depending on their perceptions of desired friendships and interaction with peers, due to the severity of disability. Moreover, the students who were surveyed disclosed their disability to the DRES. Reaching students with ASD living on campus who did not disclose their disabilities was possible through Student Housing. Students living off campus who might have ASD and did not disclose their disability to DRES were excluded from the survey, since there was no possible way to identify them. Only males participated in the study. None of the 11 females with ASD responded to the email blast through DRES. Therefore, there was not a female perspective included in this dissertation. Another limitation to this study is that there was not a comparison to current college students without labels.

Organization of the Dissertation

The contents of the remaining chapters are as follows. Chapter 2 presents a review of the literature, which is meaningful for understanding the relevant legislation
pertaining to, and the history of students with disabilities and education. The importance of the increased college population and the high school transition of students with autism spectrum disorders are also investigated. The review of the literature concludes with the examination of the social challenges in postsecondary education and the social challenges faced by students with autism spectrum disorders.

Chapter 3 outlines the study’s research methods used to gather data: unstructured, open-ended interviews, field notes, and audio-recorded interviews with transcription. The open-ended questions were designed to encourage self-analysis and reflection. A short survey was also administered, using closed-and semi-closed-ended questions, to build upon the interview questions and to further investigate the social experiences of students with autism spectrum disorders on a college campus.

Chapter 4 presents an analysis of the data and the findings of this study. Chapter 5 addresses the findings and summarizes the significant aspects of the social experiences of college students with an autism spectrum disorder. Recommendations are made for future research and for program development. The reference list and appendices are provided at the end.
Chapter II: Literature Review

Introduction

This literature review shares current research on the success and challenges of college students with autism spectrum disorder (ASD) and other disabilities, including their social experiences on a college campus. This review covers legislation-affecting students with disabilities, progress in transition to college for students with ASD and other disabilities, and research about these students’ social development and challenges.

According to Shattuck et al. (2012), during 2012 in the United States, approximately 50,000 adolescents with ASD will turn 18 years old; many of these young adults will have aspirations of attending postsecondary education. However, recent research pointed out that students with a wide range of disabilities are at risk of dropping out within their first year of college (Orr & Bachman Hammig, 2009). Students with “autism spectrum disorder had the highest risk of being disengaged from any kind of post-secondary education or employment...[and their] attendance was lower than students with learning disabilities and severe learning impairment” (Shattuck et al., 2012, p. 1046). When people with autism spectrum disorder and other disabilities are not able to complete their education programs, they are also more likely to live in poverty (Barber, 2012). In addition to the effect on the individual’s well-being and self-sufficiency, this creates major social and economic repercussions for society as a whole (Dunn, Chambers, & Rabren, 2004; Powers et al., 2007). Research validates that students with ASD have difficulty figuring out ways to participate in higher education; this data indicates gaps in the transition planning process and the need to examine successful services to include students with ASD on college campuses (Shattuck et al., 2012).
In *Reclaiming the American Dream, A Report From the 21st –Century Commission on the Future of Community Colleges* (2012), authors stress that, only a generation ago, approximately three quarters of employed Americans were able to make a living with a high school diploma or less. According to the U.S. Bureau of the Census (2009) data, students who drop out of college are estimated to earn a minimum of $18,596 less per year than college graduates. Therefore, it is imperative to keep students with ASD and other disabilities motivated to stay in college to improve their potential for employment and a satisfactory quality of life (Powers et al., 2007).

Several scholars noted the increase of students with a wide range of disabilities in the last 15 years entering college and the need to improve education and services (Barber, 2012; Bolt et al., 2011; Floey, 2006; Kohler & Field, 2003; Korbel et al., 2011; Orr & Bachman-Hammig, 2009; Powers et al., 2007; Sweener et al., 2002). Little of this attention in the past 15 years focused on students with ASD who transition to postsecondary education, as over these years, most of the research was conducted on students with learning disabilities, and far less is known about individuals with ASD, which might because of the inability or having enough knowledge to diagnose ASD properly (Adreon & Durocher, 2007; Camarena & Sarigiani, 2009).

This chapter explores the laws, research, and programmatic developments that broadened the possibilities for students with autism spectrum disorders to attend postsecondary education and deepened the understanding of the role of social experiences in college success.
Growing Population on College Campuses

Sweener et al. (2002) documented that students with learning disabilities are the largest and fastest growing population on college campuses. The National Center for Education Statistics (2009) supports this in that it found that close to 11 percent of students enrolled in postsecondary education are students with a wide range of disabilities. As these students enter college campuses, they arrive with varying levels of social skills and degrees of preparation (Foley, 2006). Even though these students are able to enter college, their social and academic skills may be inadequate. Kohler and Field’s (2003) report on transition-focused education indicates that students with disabilities continue to lag behind individuals without disabilities within both academic and social arenas. In order to be successful during the transition, a student must leave his/her former schooling and academically and socially assimilate into the college life (Patrick & Wessel, 2013). However, Foley (2006) indicates there is little documentation about students’ experiences of the transition into college and their path to successfully attaining a degree.

It is important to recognize that the diagnosis of ASD was not initially a category within the child count dataset, but was added in 1990, with states reporting to the U.S. Department of Education in 1991. Nonetheless, with more knowledge and better assessment tools the number of children classified as having autism and receiving special education services increased 1,342% since the early 1990s (Sansosti, 2010). Researchers Camarena and Sarigiani (2009) believe that less is known about students with ASD possibly because some individuals with ASD have been classified as having other disabilities. With improved diagnoses and awareness, more students are classified with
higher-functioning ASD (Adreon & Durocher, 2007). Classification improvement of ASD and the consciousness of individuals’ having a dual diagnosis, research improved (Barber, 2012). Shattuck et al. (2012) clearly state that the college participation rates of students with ASD are “substantially lower than the general population, with previous studies indicating 40% or fewer ever attend postsecondary education and very few receive a degree” (p. 1043).

In the past, access to college for students with ASD was limited. Today, college is more of a possibility for students with higher-functioning ASD with better-developed social skills (Howlin et al., 2004; Zager & Alpern, 2010) because more colleges in the United States offer programs for students with higher-functioning ASD. Students with higher-functioning ASD can gain admission, attend classes, and partake in campus life (Zager & Alpern, 2010). Current scholars suggest that additional research is needed on the relationship between the intensity of the transition service (Baer, Flexer, & Dennis, 2007) and the pathways through postsecondary education. Barber (2012) contends that further research is necessary to identify effective practices, which result in college completion for this population

Legislation

Educating students with disabilities and preparing them for postsecondary education and beyond is an undeniable concern in our society. As identified in current scholarship, Powers et al. (2007) suggest, “experts have a long way to go” (p. 46). There is consensus regarding the complexity educating students with disabilities and preparing them for their future in college and beyond. Since 1954’s Brown v. Board of Education decision, federal legislation created the foundation for equal access to the public school
system for all students. However, in the Carriuolo (2004) interview, Cheryl Brown Henderson, daughter of Oliver Brown, the 10th of 13 plaintiffs in the case, states, “America’s public schools are still unequal;… educational opportunity continues to be denied to students due to inferior facilities, low-quality materials, and inexperienced teachers in such K-12 schools, developmental educators will continue to have a steady stream of underprepared students crossing the thresholds of their college classrooms” (p.26).

Today, the underrepresented continue to advocate for appropriate services. Starting with PL 94-142 in 1975, the Education for All Handicapped Children Act (1975), granted a different future for children with disabilities and their families in this country. The PL 94-142 is known today as The Individuals with Disabilities Education Improvement Act (IDEIA, 2004) and lead to the requirement of least restrictive environment (LRE). Under the LRE, states and districts had to establish procedures “to assure that to the maximum extent appropriate, handicapped children, including children in public or private institutions, are educated with children who are not handicapped” (20 U.S.C. Sec. 1412 [5][B]). This law provided a continuum of services for individuals with disabilities. Students with ASD and other disabilities no longer had to be educated within segregated special education schools or classrooms, but could be placed in grade-level general education classrooms with the appropriate supports.

Subsequent reauthorization and amendments to the Education for All Handicapped Children Act, including the IDEA, P.L. 101-476, passed in 1990, and, later, the Individuals with Disabilities Education Improvement Act (IDEIA, 2004), strengthened and broadened the ideas and ideals of inclusion. These laws provided rights
and protections regarding transition planning and services, and attendant federal and state regulations stipulate the specific process that must be followed to support students as they leave high school and enter either postsecondary education or the work force. However, even with these laws, enforced graduation requirements for high school students with disabilities and the type of support necessary for college transition and success in college are still developing.

As mandated under IDEIA (2004), all students who have a disability are required to have an Individual Education Plan (IEP). A team consisting of a special and general educator, an administrator or student’s counselor, the student, and a parent creates this plan. Once a student reaches the age of 16, an Individual Transition Plan (ITP) is created as part of the IEP to meet the student’s needs after high school. Transition services are defined by the Individuals with Disabilities Education Act (2004), Section 300.18, as based on a student’s strengths and interests. It is a coordinated set of activities for a student with a disability. The ITP is designed within an outcome-oriented process which promotes movement from school to post-school activities, including postsecondary education and includes instruction and the development of employment (IDEA 20 U.S.C. § 1401 118)

Etscheidt (2006) states that the ITP “must be developed to ensure that [students are working towards] meaningful post school benefits for the student” (p. 36). While the student is still in high school, the goal of the transition plan is to prepare him/her for employment or postsecondary education. As a result of the awareness and focus of transition after high school, more students with learning disabilities and other disabilities
experience success in high school and are in a position to consider postsecondary education (Sweener, Kundert, May, & Quinn, 2002).

Once in college, the transition process can be complicated for students with ASD and other disabilities. For example, the Family Educational Rights and Privacy Act (P.L. 93-380) limits communication between a school and parents (Dente & Parkinson Coles, 2012). Parents who were once encouraged to attend IEPs and advocate for their child now have to rely on their child and the college to adequately support their child’s needs. It is important to note once a student with disabilities enters postsecondary institutions, their rights to education change and they no longer have an IEP. Section 504 of the Rehabilitation Act of 1973, the subsequent Americans with Disabilities Amendments Act of 2008 (ADAA, P.L. 110-325) and, more broadly, the Fourteenth Amendment, provide protection for the civil rights of those with disabilities in the college setting. Section 504 and the ADAA focus primarily on anti-discrimination, or access, laws rather than specific special education laws (Eckes & Ochoa, 2005; Etscheidt, 2006).

In order for students with disabilities to receive support with accommodations, they have to disclose their disabilities, usually through a disability office on college campuses (Bolt, Decker, Lloyd & Morlock, 2011). Support services on college campuses have become more accessible, but the available support shows a discrepancy between student’s needs and the services offered. Since these services are often not able to meet specific needs, there is a resulting gap of services in the college transition process (Garrison-Wade & Lehmann, 2009; Zager & Alpern, 2010). An important piece to supporting students with ASD is training faculty and staff about the disability, adequately providing program services, and training students to understand their disability (Garrison-
Wade & Lehmann, 2009). Contrary to most research, Barber (2012) found that some participants reported they were able to access services to successfully complete their education. These participants found it important to have self-advocacy skills, an understanding of their disability, internal motivation, supportive staff, the skills to be academically and socially involved at school, and the opportunity to not to be stigmatized by the disability in order to receive the necessary supports.

**Transition from High School to Postsecondary Education**

There have been several years of research about preparing high school students with disabilities for the college environment (Foley, 2006). Garrison-Wade and Lehmann (2009) found that students with learning disabilities were significantly underrepresented in postsecondary education, had low expectations, and lacked support services during high school. Many students are accustomed to having services secured and guaranteed by their special education teachers, and are often relatively passive in developing their own ITP (Gil, 2007). In fact, Etscheidt (2006) found that a significant number of students are not invited to their IEP, and those who did attend were often inactive participants. Unfortunately, being passive can hinder a student’s chances of obtaining the tools required to be successful in postsecondary education. Hetherington (2010) found that student participants felt the transition process to be ineffective; participants’ parents felt that schools did not engage them in the transition planning process, and the support that they received was too little, too late.

**Preparedness**

Eckert (2008) investigated a disconnect in perceptions of student preparedness between college professors and high school teachers. To prepare students with a wide
range of disabilities, Etscheidt (2006) articulates that transition services need to be realistic and clearly stated in the IEP starting from as early as age 14, to prepare students with disabilities for life after high school. Preparation usually includes services that will promote individual growth by providing opportunities during high school to be increasingly independent. Opportunities may include having to: independently figure out the accommodations necessary to learn; create knowledge by providing the tools necessary to understand their disability, and acquire new self-advocacy skills, positive behaviors, and attitudes towards postsecondary education (Graham-Smith, English, & Vasek, 2002).

Kohler and Field (2003) found, when students are more involved in developing their own goals, they have a higher chance of achieving those goals. High school students require a collaborative team consisting of the student, parents, administrators, educators, and related services to increase their involvement in their transition planning throughout high school to develop self-advocacy skills (Trainor, 2008). When high school students are involved with their own transition decisions and outlook, they tend to build self-advocacy skills and the personal self-help skills that are needed to be successful (Repetto et al., 2011). Being a part of the team will significantly prepare students with autism and other disabilities to navigate the college system. Prior to exiting high school, the IEP team, should have worked to develop the student’s social and self-advocacy skills to be independent, an understanding of his/her disability, and his/her transition planning strategies to promote a successful postsecondary outcome (Repetto et al., 2011). Together in high school, parents and their children can set long-term transition goals to prepare the child for postsecondary education.
Consequences

As a result of the enactment of laws supporting students with disabilities, Graham-Smith, English, and Vasek, (2002) report that high school students with disabilities are directed by school staff and individually taught by highly trained special education teachers and are then sent to a college environment wherein they are expected to achieve on their own. Bolt et al. (2011) concur and find that an increasing numbers of students with disabilities who enter college are much less likely to graduate than their typical peers. Responding to this challenge, the current literature examines the lack of readiness within high schools and the incomplete transition preparedness for postsecondary education for students with disabilities (McEachern & Kenny, 2007).

A report by deFur (2003) found most of the IEPs studied were primarily focused on academics and contained no obvious links to transition outcomes. In addition, most of the ITPs did not have clear transition roles and responsibilities, no clear timelines for services, no long-term transition goals, and no community or work experiences with nondisabled peers. Repetto et al. (2011) also noted that, as more students with special needs are educated with their typical peers, the IEP focuses on the academic curriculum, which limits their available time and detracts focus from transition skill development.

When students with ASD and other disabilities are not taught the skills necessary for the transition in postsecondary education and methods to advocate for what they need, serious repercussions can result. As Russo-Jameson (2007) found, students will take the negative outcomes and feel a sense of failure, and this will lead to more negative choices, such as not getting the supports required to be successful in postsecondary education. For this reason, it is important for students to have positive experiences in high school. In
order for students with ASD and other disabilities to attain a high school diploma and transition to postsecondary educational settings, these individuals need to perceive their high school experiences as meaningful to their future goals; this, in turn, will keep them motivated to remain in school and continue on to postsecondary education (Dunn, Chambers, & Rabren, 2004). It is important for students with ASD who are interested in college as a postsecondary option to have access to the same curriculum in high school as those without identified disabilities in addition to transition skills to prepare them for the demanding academic classes they take without support from a special education teacher and limited support from the disability center on a college campus.

The Challenges of Postsecondary Education

Responsibility Shift

The big transition upheaval for students with autism spectrum disorder and other disabilities and their parents is the Family Educational Rights and Privacy Act (P.L. 93-380), which limit communication between colleges and parents. Parents have been encouraged to be active participants in their child’s IEP throughout the K-12 grades. Although students can sign a waiver to allow parents to see their records, to a large extent, the parent now must rely on his or her child to make the majority of the educational decisions. The literature stresses that students with disabilities, while in high school, should have developed a thorough understanding of their difficulties before they transition to college (Graham-Smith, English, & Vasek, 2002) and have to take responsibility for their college needs.

Some researchers suggest that the stigma of going to Disability Services to self-disclose is an obstacle for students with disabilities (Barber, 2012; Foley, 2006). Janiga
and Costenbader (2002) report that students with disabilities want to escape the stigma of attending special education classrooms and having to continue carrying the special education label, a burden that shouldered since elementary school. The literature reveals a need to educate students with ASD and other disabilities, along with their typical peers in general education settings, to promote less segregation and eliminate such stigmatization (Zager & Alpren, 2010). As recent literature has shown, students with disabilities taught in inclusive settings, as opposed to segregated settings, make significantly greater developmental gains (Milsom, 2007). This study aimed to investigate the positive support that students with ASD and other disabilities find to benefit their college experience on a fully-inclusive campus.

In college, it is important for students with disabilities to know their rights under Section 504 of the 1973 Rehabilitation Act in order to obtain access to instruction without being discriminated against because of their disability. Without such support, many students with disabilities will be more likely to be derailed on their pathway to graduation. Graham-Smith, English, and Vasek (2002) and others found, in postsecondary education, that students with disabilities could have exacerbated stress levels due to a lack of knowledge, understanding, and awareness of disabilities from faculty and staff (Barber, 2012). The literature addresses why it is important for students with disabilities to “research colleges and universities that will be sensitive to their special needs” and to continue to work with a support system to help make it possible to achieve educational goals (McEachern & Kenny, 2007). Adreon and Durocher (2007) suggest that students with autism spectrum disorder consider attending a small campus in the anticipation that this will allow them to navigate the campus more easily; in addition,
a smaller campus is thought to increase the visibility of students who do not self-disclose and, thus, improve their chances of receiving appropriate support. On the other hand, attending a large university could increase their chances of meeting more individuals with the same common interest and hobbies (Adreon & Durocher, 2007).

**Accommodations**

Veltri et al. (2006) found that educational settings can have a great impact on the behavior, concentration, and motivation of students with ASD. When students with disabilities are aware of and understand federal and state laws, they also realize that there are available accommodations and support that greatly facilitate access to educational programs (McEachern & Kenny, 2007). Students with a wide range of disabilities may be provided with such support as Braille textbooks, books-on-tape, and access to a word processor for tests (McEachern & Kenny, 2007).

Several authors note that most colleges provide accommodations with assignments and assessments (e.g., extra time on tests, extensions on assignments, alternative learning styles [visual, auditory, kinesthetic]) in addition to quiet learning environments for taking exams (Janiga & Costenbader, 2002; McEachern & Kenny, 2007). Accommodations can also take the form of special technological devices to help with visual and orthopedic impairments, such as devices with enlarged print (McEachern & Kenny, 2007).

In college, there are time demands and scheduling challenges that students with ASD and other disabilities did not have to independently navigate in high school without support from an adult. Although, there are some colleges which provide priority registration to ease the anxiety and stress that students with autism and other disabilities
may experience when registering and securing needed classes, to keep students on track for graduation (McEachern & Kenny, 2007) On a college campus, it is solely the student’s responsibility to schedule classes, ask and answer questions for clarification, visit professors’ office hours for extra help, actively participate within groups, and seek out tutoring when needed. Students are required to learn how to independently manage their time to study, complete homework and group activities, organize their schedules in advance to fit in all campus activities and projects, and, most importantly, take on “more rigorous academic demands, greater responsibility for one’s own learning process, and a need for self-initiated social interaction” in college to help them succeed (Dente & Parkinson Coles, 2012, p. 28). 

Some individuals with disabilities require special communication systems; these can be in the form of a sign language interpreter, the ability to record the class lecture, or note takers. (McEachern & Kenny, 2007). Students who have ASD also experience communication challenges (Dente & Parkinson Coles, 2012), which can prevent them from interacting with their peers, faculty, and staff (Adreon & Durocher, 2007). Camarena and Sarigiani (2012) found that students with ASD can benefit from social accommodations, such as mentors, a buddy system, and go-to personnel to help them with questions or concerns. Having social accommodations, such as a peer mentor provides students the access to work in a group setting without having anxiety from fear of entering a group and communicating with unfamiliar individuals. Thus, students will learn how to work with others, learn to listen to others’ viewpoints, interact with people they normally would not have, and have a buddy versus having to work alone (Myers et al., 2010).
Accommodations need to extend beyond the classroom. Professionals must collaborate and problem-solve across the campus to provide appropriate support (Korbel et al., 2011), particularly to help students with ASD articulate their needs to faculty and staff. It is vital that students with ASD and other disabilities develop the social acumen to learn social and advocacy skills, and developing these skills is an ongoing process that is not only necessary within the school, but needs to be connected with parents, too, in order to continue modeling of the value and practice of these skills (Trainor, 2008). Due to the limited amount of available research examining the social experiences of college students with ASD, this study examined the insights of college students with ASD regarding who they turn to for the social support necessary to meet their educational needs.

**Academic Challenges in Postsecondary Education**

Several journal articles suggest that students with learning disabilities face challenges which interfere with academic content, testing needs, learning-styles, organizational skills, concentration levels, time management, study skills, choice-making, scheduling, and disclosing their disability in order to receive support and services from disability centers on college campuses (Adreon, & Durocher, 2007; Dente, & Parkinson Coles, 2012; Zager & Alpern, 2010). Those with ASD experience similar challenges as those with other disabilities. Students with ASD desire routines, daily maintenance, and may have disruptive behavior, sensory difficulties, and social challenges (Camarena & Sarigiani, 2009; Dente & Parkinson Coles, 2012). Numerous researchers suggested that students with ASD are reluctant to sign up for proper support services and disclose their disability more so than are those with learning disabilities (Adreon, & Durocher, 2007;
Camarena & Sarigiani, 2009; Gil, 2007). Gil (2007) referenced The National Longitudinal Transition Study 2, which revealed that two thirds of postsecondary students with disabilities who were interviewed were not receiving accommodations because of the lack of disclosure. This is consequential, since the recent findings of Camarena and Sarigiani (2009) asserted that participants felt “accommodations as being an important form of support in aiding future college success” (p. 124).

Many disability studies frequently document the existence of inappropriate curricula for students with disabilities (Trainor, 2010; Zager & Alpern, 2010). This is particularly the case for students with comorbidity: those identified as having more than one disorder (Shattuck et al., 2012). The current study aimed to examine the opinions of college students with ASD about supports, which are important to them during their college experience, in order to add to the limited number of studies that focus on meaningful college access and support. Zager and Alpren’s (2010) research supports this by identifying students “at the high end of the ASD spectrum, [but] have intellectual disabilities that may prevent them from performing college-level work without substantial modifications” (p. 152). An example of a student with high functioning ASD is one who is extremely knowledgeable in the area of history, but cannot perform college level mathematics. Trainor’s (2010) work also asserts that the “opportunities for inclusion have been described as nominal at best” (p. 156). Beyond accessing the college curriculum in an inclusive environment, in a book review by Lawlor and Fitzgerald (2007), the authors warn that entering college provides a great deal of unstructured time, and it is important for students with ASD to remain focused on their studies as well as to stay socially involved on campus. Furthermore, Reppetto et al. (2011) demonstrated there
are shortcomings in adequately providing accommodation to students with ASD, both academically and socially.

Students with disabilities who received assistance in high school are at risk of adverse effects if they do not disclose their disability to receive the proper support from postsecondary environments to enable them to succeed. Foley (2006) confirms this by demonstrating that students who have become accustomed to specialized, comprehensive instruction in a special education environment, to accommodations in the regular classroom, or to both, are likely to experience difficulty in the less structured, more challenging higher education environment. Even within a special education doctoral-level cohort, faced challenges within postsecondary environments while striving to share their knowledge with others. Their request for accommodations at a state-level special education conference was denied, due to the fact that others in the community did not understand why accommodations were needed (King et al., 2010).

While disclosure is not the complete answer to solve the challenges students with ASD will face in postsecondary education settings, it will provide support. To receive the appropriate accommodations, students need to have self-advocacy skills in order to disclose their disability, sign up with the Department of Disability Services, request the support services they require to help them access college materials and assignments, and inform faculty of the type of accommodations they will need to thrive (Eckes & Ochoa, 2005; Gil, 2007; Wehmeyer et al., 2007).

**Advocacy skills.** Self-advocacy is the ability to understand one’s own needs, such as knowing when more time will be needed on a test or assignment, when a note taker is needed, and effectively communicating those needs to others in order to obtain
appropriate and effective accommodations (Roberts, 2010). Gil (2007) suggests that “self-determination is a key skill that can be developed to assist students with disabilities in becoming strong self-advocates [by] knowing and believing in oneself, making decisions and initiating action to reach goals” (p. 14). Self-determination is an essential factor in postsecondary goal attainment; researchers focus on individuals’ demonstration of making a choice or a decision, ability to self-advocate, and to problem-solve as major factors to achievement (Trainor, 2008). Foley (2006) suggests some challenges in postsecondary education that require self-advocacy skills, such as self-identifying as having a disability and initiating the process for accommodations.

Researchers found that students who have self-determination skills, notably self-regulation and self-realization, showed significantly more positive outcomes in terms of student transition planning skills and knowledge (Wehmeyer et al., 2007). To flourish in postsecondary education, students with disabilities must develop self-awareness and self-determination skills (Milsom, 2007; Roberts, 2010). This was shown in Barber’s (2012) qualitative case study, which found that participants who had an understanding of their disability and were encouraged to self-advocate for their needs improved their academic outcomes.

Acquiring self-advocacy skills is a challenge for most students with disabilities, but even more so for students with ASD (McEachern & Kenny, 2007). Roberts (2010) finds it extremely important to be an effective self-advocate for success in postsecondary education. To be an effective self-advocate, an individual with ASD has to be provided instruction and opportunities to increase his/her self-advocacy skills. Repetto et al. (2011) stressed that social issues are more problematic for students with ASD, which
negatively affects their academic in that refraining from building friendships and from participating in group projects and assignments with peers creates a sense of social isolation.

### Social Challenges

**Social**

Dente and Parkinson Coles (2012) express the importance of social skills in attaining academic achievement, as these are needed to request accommodations, to express needs to faculty and staff, and to have the capability of participating in-group activities at the college level. The idea of communicating one’s needs to others and interacting appropriately within social situations with peers, staff, and faculty can be a challenge for students with ASD and other disabilities (Milsom, 2007), since communicating with others can create a sense of anxiety and frustration (Korbel et al., 2011).

Many students with ASD and other disabilities have difficulty communicating and are aware that their disability might differentiate them from their peers (Milsom, 2007). Roberts’ (2010) recent findings indicate that success in postsecondary education for students with disabilities and, in particular, those with ASD, may require extensive planning and ongoing support because of underlying issues directly related to the individuals' disability, specifically in the areas of communication, social skills, and behavior. Several studies indicate the challenges of students with ASD, especially in the areas of appropriate social interactions and cultural norms for initiating interactions, exchanging turns, and terminating interactions (Dente & Parkinson Coles, 2012; Zager & Alpren, 2010). Zager and Alpren (2010) found that the communication problems for most
students with ASD include staying on topic, extending the topic, and responding to nonverbal social cues. They may also have one-sided conversations, inappropriate intensity when they speak, and an inability to read social cues (Dente & Parkinson Coles, 2012).

**Friendships**

Social and cultural norms are important for developing meaningful friendships; however, only a few students with ASD have friendships with peers of a similar age (Adreon & Durocher, 2007; Dente & Parkinson Coles, 2012). Alpern and Zager (2007) documented that participants who were not identified as having a disability highly valued the communication skills of another person who could comprehend feelings and meanings nonverbally. Unfortunately, Dente and Parkinson Coles (2012) claim, “students with [ASD] are often seen as eccentric or odd” (p. 29). Individuals with ASD convey the desire for positive and meaningful peer interactions, but their social awkwardness increases feelings of rejection and loneliness (Bellinger, Perlman, & DiPerna, 2011). DeMatteo et al. (2012) stated that these feelings can significantly affect students with autism spectrum disorder to develop “lasting and meaningful relationships and [not live in] rejection and isolation” (p. 57). Therefore, it is critical to investigate the insights of college students with ASD about the supports and services they feel are helpful for maintaining social support and for being successful while enrolled at a large public university.

Lawlor and Fitzgerald (2007) expressed, that it was reassuring and relieving for students with high functioning ASD to know that, in college, students are more respectful of others who are intelligent and have a desire to learn, unlike some negative experiences.
students may have had during high school. Nonetheless, accurately perceiving and meeting the social demands of relationships is a critical area for students with ASD (Blanchett, 2001), both romantically and platonic (Adreon & Durocher, 2007). Thus, the difference between platonic friendships and a romantic relationship is frequently very confusing for students with ASD, since they may misread or misunderstand the intentions of someone who is nice to them (Lawlor & Fitzgerald, 2007).

Many students with ASD and other disabilities may not have been very active in social or extracurricular activities before postsecondary education, which tends to limit them from developing meaningful friendships (McEachern & Kenny, 2011). However, strengthening their academic skills and successfully completing college requires that students with ASD successfully navigate the nuances of social relationships (Blanchett, 2001). To be successful, it is recommend by several research groups that students with ASD and other disabilities involve themselves in clubs, social activities, and groups to develop friendships (Korbel et al., 2011; Lawlor & Fitzgerald, 2007; McEachern & Kenny, 2011).
Chapter III: Methodology

This qualitative research was conducted with students with ASD who attend a public university in Southern California. This study aimed to investigate the support students with ASD and other disabilities find to benefit them during their college years. Most individuals with ASD experience fewer friendships, which increases loneliness and, thus, creates a negative self-perception, hindering their academic success (Nevill & White, 2011). With the increase of students with autism enrolling in college over the last few years and their low retention rate, this area of research has become significant. Even with the accommodations and support present on college campuses, the literature identifies the need for accommodations to go beyond the classroom and requires professionals to collaborate and problem-solve across the campus to provide appropriate support (Korbel et al., 2011).

The research analyzed two demographic variables to determine whether any significant differences exist among students of various ethnicities. Additionally, grade point averages were asked to determine how participants fare academically. These demographic variables provide important information to build on the medical theory if the individuals understand their disability and are able to access their college environment. It also builds on ToM and transactional ecological theory, which focuses on the awareness of interacting with others socially and academically, and transactional ecological theory focuses on the interactions and transactions between individuals and shapes individual development and adaptation to successfully intergrade into the college culture.
Research Questions

This research is guided by two qualitative questions:

1) What are the social experiences that students with ASD engage in on a college campus?

2) What do college students, in their experiences, consider necessary on college campuses to promote more social experiences?

Population and Sample

The sample of students was enrolled at California State University, during the Spring Semester 2014. This university has an ethnically diverse student body: 33.4% Latino, 28.7% White, 10.6% Asian-Pacific Islander, and 6.7% African-American. All others reported “unknown.” The median age is roughly 24 years, 56.6% of the population is female, and in the fall of 2013, the total student body was nearly 37,000. In addition, the student-to-teacher ratio is approximately 21:1. The participants were drawn from the Disabilities Resources and Educational Services (DRES) on campus, as these participants registered and self-identified with ASD. There was also an email blast sent through Student Housing on campus to reach students who were not enrolled with DRES. At the time of this study, according to the Spring 2014 census at this large suburban university, there were 1,161 college students with a wide range of disabilities registered with DRES. Out of the 1,161 students, 11 are females with ASD and 46 are males with ASD.

Human Subject Research Approval

In order to obtain these data, approval was granted through the California State University’s Institutional Review Board (IRB) to protect the rights of human subjects an
email went out to all potential subjects with a diagnosis of autism to participate in a 60-minute study. Those who volunteered were offered a small gift card for their time ($25.00). Descriptions and permissions were obtained from all participants in writing before any data were collected and analyzed. A copy of the Consent to Act as a Human Research Subject on Social Experiences of College Students with Autism Spectrum can be found in Appendix A.

**Instrument and Data Collection**

As described above, an email invitation was sent out through DRES. The email participation letter stated that participation in this research study was voluntary and confidential. A copy of the email invitation can be found in Appendix B. Data for the evaluation of the program were collected from semi-structured interviews, with open-and-closed-ended questions, in addition to semi-closed-ended questions designed for this study. The researcher designed the instrument to ask the participants questions about their personal opinions to hopefully make the participants less nervous and at ease during the interview process. Since one-on-one interviews do not protect the confidentiality of the subjects, and this could increase the anxiety level of individuals with ASD and overwhelm or confuse them during the interview (Adreon & Durocher, 2007; Creswell, 2012; White et al., 2012). The purpose of the instrument’s design was to support data collection and analysis to answer the research questions of this study.

A main rationale for the questions on the instrument is to expand understanding of the participants' perspectives of their social experiences. Other rationales are to learn about and gather more insight into the participants' thoughts about friendships,
assignments, college activities, and participation on the college campus (Rossman, 2012) in order to ascertain what they consider necessary to promote social experiences.

**Survey Instrument**

The instrument consisted of 19 questions, 11 of which were semi-closed questions with an option to fill in the blank. The purpose of the semi-closed questions, in addition to the interview questions, was to provide another method of collecting data in case the participants encountered anxiety or engaged in only limited dialog during the interview. The semi-structured interview, with open-ended questions, provided the participants with an opportunity to elaborate on their views of social interactions on a college campus (Rossman, 2012). A copy of the data collection instrument can be found in Appendix D.

A Personal Growth Initiative Scale (PGIS) was administered to obtain how the participants viewed themselves on independence and the ability to adapt to life changes. This instrument consisted of nine questions with which participants were asked to agree or disagree using a scale from 1 to 6 where 1 meant definitely disagree and 6 meant definitely agree. The purpose of PGIS instrument was to serve as a supplement to the qualitative interviews to capture participants’ active and intentional involvement in changing and developing as a college student. A copy of the data collection instrument can be found in Appendix C.

**Data Analysis**

This section discusses the procedures for data analysis. The purpose of this qualitative study was to examine the social experiences of students with ASD on a college campus and that which they consider necessary to
promoting more social experiences. The data for this research study were composed of interview transcripts and surveys from nine one-on-one interviews with students with ASD who attend a large public university. All interviews were recorded and then transcribed by the researcher. The data gathered from the interviews and surveys were analyzed and interpreted by the researcher through a process of immersion, analysis, and interpretation (Rossman & Rallis, 2012). First, through the analysis, recurring words emerged; themes were obtained that brought meaning to the interviewees’ college lives. Next, the researcher coded the themes by hand to capture words and short phrases to link the data to the conceptual framework (Rossman & Rallis, 2012). Finally, in Chapter 4 of this dissertation the researcher expanded and provided interpretation of the analysis to tell a story of the participants’ lives and offered suggestions for future research.

**Role of the Researcher**

In the role of the researcher, I approached this study as an attentive listener to identify the best practices for promoting social and academic success for students with ASD. I came to this study having been in the societal roles of a K-12 special education teacher for 15 years and of an adjunct faculty member of a community college. These roles produce biases that affect the authenticity and credibility of my interpretations, collection, and analysis of the research data. Therefore, as the researcher, I considered
necessary strategies to acknowledge and compensate for my biases, opinions, and prejudices, and to define my role in this research study.

My biases, opinions, and prejudices as a researcher derived from my experience as a mother of a child with a disability for 25 years, a special educator for 15 years, and from my educational background. All of these experiences influence my attitude towards providing support and services to students with disabilities. As a mother, I experienced a desire to protect the participants and wanted to be the point person they could turn to when they needed something. As an educator, I wanted to inform the subjects of activities, clubs, and support services on campus, which would heighten their college experience. My personal and professional biases, opinions, beliefs, and assumptions offered a unique way of seeing the world and made me aware of my perspectives (Rossman & Rallis, 2003).

**Strategies to Minimize Bias**

An effective strategy to minimize these biases, opinions, beliefs, and assumptions was to recall my personal and professional knowledge of the research topic as a professional, but listen with the intent of learning, which is an advantage when conducting qualitative research (Creswell, 2007). As a knower, I shaped the research questions to be able to explore and understand my research topic. I had to listen with the intent to learn by limiting my opinions to refrain from shaping the data collection. By learning new information, I had to clearly and deeply understand the participants’ views and opinions and avoid drawing conclusions and interpreting the data of their world (Rossman & Rallis, 2003). As another strategy to minimize biases and assumptions, I
confirmed my interpretations with my chair and members of my committee before reaching conclusions.

**Ethical Issues**

To protect all human subjects, the proposal for this research study was submitted to the University’s Institutional Review Board for approval before any data were collected. To respect individuals, each participant volunteered and was provided with a copy of the Consent to Act as a Human Research Subject (Appendix A). Assigning a code to keep their identity confidential protected the identities of the participants, and research data were not shared with anyone outside of the research committee (Creswell, 2012). Participants were allowed to decline to answer any of the questions with which they were not comfortable. The participants also had the option to stop the interview process at any time.

**Summary**

Qualitative methods were used in this study to learn about the social experiences of students with ASD at a large suburban university and about what they consider necessary to promoting further social experiences. The outcome of this project may identify how students with autism view their social experiences. The results of this project will offer recommendations for supporting satisfactory social experiences for students with autism.

The outcomes of this project may be significant to the field of education of individuals with ASD, as well as to universities and governmental and community interests, through its identification of the support required on college campuses for
students with ASD. This knowledge may aid students with ASD aid in gaining access to and success within a college education and, then, productive employment.
Chapter IV: Findings

Introduction

This chapter presents results of the findings of this qualitative research. Data were collected on the social experiences of nine college students with autism spectrum disorders from a large California State University campus. The data were collected using an interview protocol with 19 questions consisting of eight open-ended questions, and 11 semi-closed questions. There was also a Likert-scale questionnaire consisting of nine questions, and data from the interviewees’ thoughts, experiences, ideas, and perceptions of their college social experiences were analyzed and coded according to themes which developed from the two research questions: 1) What are the social experiences that students with ASD engage in on a college campus? and 2) What do college students, in their experiences, consider necessary on college campuses to promote more social experiences?

These questions guided the study and produced the results presented in this chapter. This chapter is organized according to the themes through the data. Information having social significance for analysis is included in this chapter. The interview and questionnaire are presented in the following systematic chart to guide the research questions.
Table 1

Alignment of Survey and Interview Questions with Research Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Interview Questions</th>
<th>Questionnaire Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) What are the social experiences that students with ASD engage in on a college campus?</td>
<td>Questions 1, 2, 3, 4, 5</td>
<td>Questions 11, 12, 13, 14, 15, 16, 17, 18, 19</td>
</tr>
<tr>
<td>2) What do college students, in their experiences, consider necessary on college campuses to promote more social experiences?</td>
<td>Questions 1, 5, 6, 7</td>
<td>Questions</td>
</tr>
</tbody>
</table>

Demographics

Due to issues of confidentiality, the real names of the nine male participants were not used. The ethnicity breakdowns of the nine male participants were four White, three Latino, and two Asian. Three of the participants had a GPA of 2.50 to 2.99, and six of the participants had a GPA of 3.00 or better. A breakdown of the nine participants majors is as follows: accounting, child and adolescent development, cinema and television arts with a focus area of screenwriter, computer science, engineering, general business, kinesiology, linguistics, and psychology.

Profiles

Participant number 002’s ethnicity is White. During the interview participant 002 said he was a computer science major. This participant had on an unbuttoned dress shirt with a white un-tucked T-shirt under and blue jeans on with untied tennis shoes. His hair was grown out just covering his right eye. He lives at home with his parents 5 miles away from school. This participant has an older sister who attends the same campus. The sister tries to introduce him to her friends, but it has not been working out. He does sell energy drinks with other peers from the same college, and, through this activity, he has
developed friendships. In addition, he started working at McDonald’s and he has met two other young men from the university. Although he has been able to have conversations at work, he has not been able to spend time with coworkers outside of work.

Participant number 003’s ethnicity background is Asian. During the interview he indicated he was a super senior in his eight year majoring in engineering. He lives off campus and his mother drives him to school every day. He was dressed in a white T-shirt tucked into his blue jeans with slip-on tennis shoes. This participant is extremely lonely and is not focused on friendship at this point. What he really would like is to have an intimate relationship with a female. When 003 found the researcher at the designated meeting place, he stood approximately ten feet away and did not approach the researcher. The researcher watched as he rocked back in forth staring at her. After a minute, the researcher introduced herself and asks him if he was looking for her. The participant was very nervous throughout the interview as evidenced by his body language; he was constantly moving, and at times he would stutter when he was not sure until he said, “I don’t know.”

Participant 004’s is a Latino male who lives off campus. Currently, his major is undecided, but he believes he will major in kinesiology. This young adult was attending a fraternity rush function after the interview. His dress was a very pleasant combination of a black shirt and tie and a shiny pair of grey slacks. He had on dress shoes without socks and his laces were undone. He also forgot to zip his zipper. During the interview, the participant was eating a hamburger and fries. He talked with food in his mouth. Instead of using a napkin, his nice clean clothes did the trick. He is excited about club rush and being in a fraternity. He is hopeful to be part of a fraternity and confident he would
develop friends his own age. The classmates he currently engages with are older.

“They’re like 26. I mean. I’m trying to get with people my own age, you know.”

Through the fraternity, he hopes are to meet others who are, “nineteen, twenty, and freshmen as well.”

Participant 005 is a White male. This interviewee was dressed presentable with a long sleeved thermal tucked into blue jeans. He tried living in student housing with peers within the same major, but it was an unpleasant situation for him. The participant now lives at home and commutes 45 miles to campus. He is majoring in cinema and television arts and would like to be a screenwriter. He has an attraction to rollercoasters and provided a website he finds fascinating, http://www.incrediblecoasters.com. This participant enjoys rollercoaster so much that he got a part-time job an amusement park. This particular student does not think college is a place to meet friends and spends a significant amount of time on the Internet finding places and people to visit through Couchsurfing.org.

Participant number 006 is a White male who transferred from a community college. This participant commutes from home approximately 20 miles. During the interview he was dressed semi-formal with a long sleeved white dress shirt and a black bow tie, tucked into black slacks and shinny black shoes. He is highly interested in “neurology or psychology or anything dealing with the brain.” His professor was impressed with his knowledge and sent an email stating, “You ask a lot of insightful and interesting things in class. I think you would make a great research assistant. Would you actually be part of our research team?” The participant’s response to his professor, “I gladly-I gleefully accepted.” The research is mostly involving the psychology of
stereotyping and intergroup prejudice. “I am looking at how we form our moral judgments and how we react physiologically when we see certain stimuli versus other stimuli. Basically, how one’s upbringing can completely change how they perceive something.”

Participant number 007 is a White male who lives at home with his father and commutes 10 miles to school. This interviewee had long hair pulled back into a ponytail. He was dressed in a white T-shirt tucked into a pair of blue jeans. He is a transfer student from a local community college majoring in accounting. He enjoys playing video games with others, but does not interact with them when not playing video games. He was very short with his answers during the interview, and it was difficult to get him to elaborate.

Participant number 008’s ethnicity is White. He is majoring in linguistics. He lives off campus with his parents and commutes 30 miles to school. Before meeting 006, the researcher saw him in the lobby sitting on a chair with his arms folded and eyes closed. He was dressed in a long sleeve dress shirt tucked into blue jeans with new looking tennis shoes. The interviewee met the researcher at the conference room exactly at the scheduled interview time. Once the interview started, the interviewee was very forthcoming and wanted to share how lonely he was. He really missed his high school friends and was aware of his challenges of interacting with new people to develop friendships.

Participant number 009 is a Latino male. He currently lives in the dorms, but, every weekend, will go back and forth two hours to be with his mother and little brother. He has an interest in child and adolescent development. He said, “My mom helps families with children with autism or down syndrome or other developmental disorders. I
want to do something similar and help others that have a difficult life.” This participant went on to share his little brother has autism, too, but the little brother is nonverbal and has a lot of behavioral difficulties.

Participant number 010s is an Asian male majoring in general business. He lives in the dorms without a kitchen and makes the most of his meal card. Even though he lives in the dorms, this college was chosen for the proximity to his aunt’s house, which is within 5 miles of campus. This participant was extremely excited to be part of the interview, since he has made a lot of friends. He also participated in different clubs just to meet friends. This interviewee will call and text people every day. After the interview, the participant was spotted walking back and forth near the food court area talking and texting as he smiled.

Interview Setting Descriptions

Due to the possible sensitivity of the participants, the researcher made the participants as relaxed as possible by having each participant choose from having a one-on-one interview on campus or on Skype. All nine participants wished to meet in person. It was up to the interviewee to pick the time, date, and place on the college campus that was most convenient for him to have the interview. With the aim of finding the most comfortable and relaxed atmosphere for the students, the researcher also provided the interviewees with suggestions for where to meet for their interview. The researcher asked each participant, “Where would you like to meet?” and then added, “We can meet in a class near your major, the conference room in the education building, the library, or the student center.”
To alleviate any anxiety stemming from meeting a stranger, the researcher offered to send a “selfie” through email or through cell phone, whichever the participant wanted. A selfie is a self-portrait taken using a digital phone and which is shared instantly. Three participants asked to receive a selfie. One participant reciprocated with a selfie of his own. In addition, the researcher provided all interviewees with a description of the researcher’s own physical build, clothes, and hairstyle. All participants were on time and polite during the interviews. They were well dressed with neat and clean clothes and clean-cut hairstyles.

The researcher conducted all of the interviews, and each session was recorded using a digital recorder. For each interview, the students were asked to sign a consent form, and were reminded that they could stop at any time or skip any questions they felt were inappropriate or made them feel uncomfortable. Participants were also asked if having a recording device between the researcher and the participant would make them feel uncomfortable; all participants said, “No.” During the interview, three participants frequently stared at the recording device. Checking for possible anxiety, participants were asked again if the device made them feel uncomfortable; again, the answer was “No.” This could be from the novelty of being recorded, the extra level of attention, or possibly the need to watch the length of time of the interview. Sessions ranged from 20 minutes to 45 minutes, with an average of 30 minutes.

Four of the nine students provided extremely short answers. Therefore, questions were restated and posed again to make certain that they provided as much information as possible. During the interviews, all of the participants needed to be further probed to check for understanding and clarity of their answers. One participant stuttered through
the interview, making it difficult to understand him at times. This required the researcher to rephrase many of his answers. This participant was aware of his stuttering delay and expressive communication as he was answering questions for the researcher. Due to the sensitivity of the participant, the researcher tried not to repeat or rephrase every question; therefore, some of the participant’s answers were not fully understood. Consequently, the transcriber was not able to understand some of his answers, even at slow speeds and with rewinding the recording several times.

**Conference room.** Four participants chose a small conference room in the education building as the location. A phone call was made to the Educational Leadership and Policy office to reserve the time and date. Each interview was private, with only the researcher and the interviewee present. The conference room was extremely quiet, and there were no interruptions. There was a dining room size table with nine cushioned chairs. Participants chose their seat first, and the researcher asked if she could sit at about a 30-degree angle to provide enough space to allow a face-to-face dialogue.

**Empty classroom.** Three participants chose an empty classroom near their major. The classrooms were not reserved, and participants were aware that the interview would be held in a random open class. Participants provided the researcher with the building and floor of the meeting place. Before walking into an empty classroom, there was a short dialogue between the researcher and the participant in which the researcher stated that, “There is a possibility a class may start.” In cases in which the classroom was used for a class, the interview would cease, and the participant and researcher would have to relocate. All three participants were amenable to the idea of relocating in these cases. One participant had to relocate to another empty classroom when a professor came in
early to prepare. Another interview was interrupted by two audio maintenance personnel, which stopped the interview for approximately five minutes. During all of the interviews, the door would occasionally be opened by someone who would just take a look into the classroom to see what was going on. This caused the interview to stop briefly, and questions were restated when needed. The researcher positioned two movable desks facing each other, and the recording device was placed on a third desk perpendicular to the two facing desks.

Student Center

Two of the participants chose a student study area, which was semi-private, with occasional people passing by. This area was above a food court, and there were several students walking about. There was also noise that carried from below to up above. There were two sections at the top: one section for students, and the other for faculty and staff. Together, we chose to sit in the area for faculty and staff, since it had the least amount of people. At most, two to three faculty or staff members were there. These two students did not seem to be distracted by the noise from the other college students. When asked by the researcher, “Do you feel that this will be private enough to have a personal interview about your social experiences?” the two participants felt that it was quiet enough and far enough away from the other students. One participant said, “I come up here all the time. No one will bother us.” The other participant felt that the place was pretty empty and stated, “I should be okay.” There were small tables for two people to sit at in the corner of the room. Both interviews were held at the same table in the same corner of the room. The interviewee and the interviewer sat across from each other with the recording device in the middle of the table.
Results of the Interviews

Positive Analysis of College Social Experiences

Question 1 focused on positive and negative moments during college. The question asked the participants to tell about their most memorable moment during college and why it is so memorable, both positively and negatively. Participants were asked to recall one positive and one negative moment since their enrollment in college. Although there were a variety of responses to positive moments, a general perspective emerged from the data related to positive moments that encompassed “learning to be an adult.” For example, one participant felt that he was “learning who I am and what I want to do with my life.” Some participants expressed feeling a sense of freedom. This freedom consisted of having a flexible schedule, and an environment that promoted choice. Another interviewee stated that, “You are given a lot more freedom, but also you are expected to be an adult and take initiative.” One participant was now more comfortable with his disability.

A few participants voiced that studying in a field of interest promoted positive feelings, with one stating that he “took some interesting classes.” Moreover, one of these participants said that he had a “connection on an intellectual level. Peers are able to talk about a subject of interest.” Peers would engage in conversation on topics that participants were familiar with, and this provided them with the opportunity to express their thoughts and participate in a dialogue. For example, one participant said excitedly, A memorable moment was probably last semester. I finally met someone that I kind of connected with on an intellectual level. He was in a couple of my classes, as we were in the same classes together. There was a point where we would go
from one class to the next and we would talk about certain subjects we had interest in. We did that throughout the semester. So, like that first day, I finally found someone very nice I can talk too.

Another interviewee commented, “There’s been a lot of interesting people that were positive; a good class, a good time.” Overall, the participants expressed that they were able to take the first steps towards being able to develop friendships with other college peers with the same interests and that this was a distinctly positive experience. However, several interviewees still were not able to take the next step in developing friendships outside of “small chit-chat.” Saying for example, “how did you do on the test?”

Two of the participants talked about “rushing” a fraternity. “Rushing” a fraternity or a sorority refers to the process of prospective members meeting with members of a fraternity or sorority and deciding if they are a good match for each other. One participant had a positive experience with rushing. This participant does not have any friends and met a fraternity member on campus who was trying to get the interviewee to rush. Since the fraternity member was being nice and expressed interest in the participant, the participant referred to him “as a true friend.” Since the interviewee had only just met the participant, I was curious to know why he already referred to him as a friend. Therefore, I asked, “What makes him your friend?” He looked at me as if I just did not get it, and responded, “We were talking about, talking and talking and talking until he, he talked about something that is in his personal life.” As a researcher, I persisted in trying to figure out what they were talking about and what would make this a memorable moment for the participant other than this fraternity member trying to get him to rush. He said,
“the fraternity.” This fraternity member then introduced the participant to an alumnus of the fraternity. The participant stated that the alumnus greeted him by saying, “What’s up, bro?” The participant was very excited and declared, “He called me bro, and I don’t even know this guy! That’s how I connected with them.” When asked if the participant knew any of the fraternity brothers, he replied, “No.” However, he expressed that he felt that he “belonged there.” When asked if he interacts with anyone at home, he answered, “No. That’s why I am checking out the fraternity.” In summary, although this was clearly a positive experience for the participant, and, hopefully, he will develop meaningful relationships or acceptance in the fraternity, the interviewee may misinterpret somewhat superficial or undeveloped social relationships as being deep or robust.

**Negative Analysis of College Social Experiences**

Although there were a variety of responses to negative moments, the data indicated that some deeply meaningful experiences of college students with ASD had endured. Most participants felt there were still professors who did not understand their disability and were hesitant to help them or explain the material effectively. It was also asserted that professors do not take into account the involvement it takes and that they frequently experience when needing to form groups. One participant explained, “Like groups of four people each, and there are 21 people registered in the class. Then, one person is going to be left out.” The negative experience of being left out was amplified when the participant went to the professor and said, “I can’t find a group…he just completely ignores me and says, ‘Hey, it’s your problem.’”

Two participants expressed feeling anxiety when having to speak in front of others and getting into groups independently. A participant explained, “So far, my least
memorable moment was the first day of this semester my speech class. Very anxious, not only was it the first day of the new semester, but also just because I have very little confidence, I hate speaking in front of people. It’s very nerve racking, very anxiety ridden.” Participants felt that it was difficult to get past more than two sentences or to even engage in any small talk.

There were a few participants who felt that having to find their own identity and the campus culture caused them to feel “isolated and lost” during their first year of college. One participant described his feelings as a

negative experience coming into college. Like the first day, I didn’t know where the resources were and how to like, um, articulate what I want to people. Uh…uh, I would be like be more isolated, but slowly started to get I felt more comfortable to do so because of the more liberal environments of college and like, um, people acknowledge freedom of speech and all of that.

This participant did attend freshmen orientation, but felt that it was not enough.

Trying to make friends and fit into the college culture has been frustrating for a few participants. Wanting to be part of the fraternity life to make friends, one participant “went to a party. It helped me learn something about myself…It was really overwhelming; I felt like I just didn’t belong there…maybe it’s just because I had confidence problems. I was shaking in my own, like, self.”

There was also a participant who had a very difficult time with his living situation. He was trying to develop friendships and thought that living near school with other peers in his major would be a good idea. Unfortunately, he had a bad experience. During his
second year in college, he “lived near the dorms and could hear sounds from the local high school every 30 minutes.” To make matters worse for this interviewee, he had a horrible roommate…the guy was very rude. He was very hypocritical…He would bring in his girlfriend with me there, and they will still be making…everyone mocking me, because the walls were very slim, so you could easily overhear. I mean, they can’t just assume that I can’t hear. The door is closed, so I can’t hear them even though it’s paper-thin.

He ended up moving back home and made no social connection at college.

Through listening to the different experiences that these students have gone through, it was evident by the tone in their voices and their body language that the majority were still very nervous starting conversations. However, they were aware of how others were treating them and able to express when they felt they were being made fun of, knew they had few friends, and felt alone. Moreover, they did attempt to engage socially even though it was difficult for them to interact with others. The following quote accurately represents the feelings of the majority of the participants; in response to the question, “What social experiences make your college experience positive?” one participant added, “Or lack thereof…(laugh).”

**Social Activities**

**Analysis Highlights**

Questions 2 and 3 examined friendship and the activities that students participated in during their college years. Question 2 asked, “how many college friends do you hang out with? What kind of activities do you do together? What places do you like to go?” Question 3 asked, “how did you meet your new friend(s) at college?” Data were coded
into three themes that emerged from the interviews: 1) “already has friends” 2) “trying to meet people,” and 3) “no friends.” In the process of having friends or trying to meet people, “eating” was the top activity that six of the nine college students reported as doing with a peer or peers in college. The three individuals who did not eat with a peer did not engage in any social activity on campus. Instead, they would go home after class.

Has Friends in College

Two participants who had already established a friendship or gotten to know a classmate made it a point to go out with classmates to have lunch at least once a month. However, they expressed wanting to go out more frequently if they were invited more often. An outgoing participant claimed that he went out twice a week for lunch. He stated that he would go out “usually between classes, try to make everything fit in between our schedules.”

The second participant lived in a university dormitory. He had a meal card and would eat lunch and dinner with his dorm-mates every day. He said, “Hanging out with dorm-mates (friends) was easier since I lived on campus.” This participant was very excited to be meeting people in college. He stated, “Now in college I have a lot of friends. We always go and eat together.” Probing to understand his high school experience, the researcher asked, “Did you have friends you ate with in high school?” He looked down and, with a low vocal tone, replied, “Not really.” He then looked up and said, “That’s why it’s so amazing I have friends now in college.”

Trying to Have a Friend in College

Some of the participants reported only going out once, possibly twice, during a school year or two semesters. Participants did not always have a friend they would call
up to share lunch, but would tag-along with classmates or find someone to talk to while they ate. Interestingly, one of the participants trying to make friends would approach “a complete stranger” and start a conversation. In college, he found it easier to initiate a conversation. He explained, “Half the time it works out, and half of the time I feel, like, super awkward.” When the researcher asked him, “What makes you want to approach that person?” he replied, “I just, I just, I hate eating alone.” He continued to share his feelings about eating alone, “Maybe it goes back to elementary school, when I, like, ate alone…cause I got bullied as a kid.” He expressed that he wondered, if he lived in the dormitories, maybe it would be different, “I don’t live in the dorms, and so I don’t have automatic people that I have to be with.” Another student stated that he wanted to go out, but only went out once a semester if he knew about the outing; mostly, however, he would go straight home from school.

In the process of trying to meet new people, one participant stated, “I try to go, you know, meet more people.” This participant does “a lot of networking” by trying to call someone every day to say hello. He calls someone every day to make sure he is not isolating himself from the world. He said, “I want to improve, and if I stay the same (without communicating with others), I won’t improve. Improving is a form of change. So, I have to change.” This participant did not have any friends in high school and has found it easier to talk to people at college. There was one other participant who also would call or text with a goal of 10 people. However, depending on how busy he was, it would at least be one to two people a day.

Does Not Have a Friend in College
Four of the nine participants admitted to not having a true friend. However, these four were trying to develop some type of friendship, and some were able to openly identify their areas of weakness in developing social relationships. For example, one of these participants explained that, “I really do not really get past two sentences. I feel like there is not enough topic to talk about to keep a conversation going.” A different participant said, “What I am thinking now is that socializing would be easy, but, first, the process of starting and the process of starting is difficult.” More than one participant stated “Most of the time I will not start (a conversation). Somebody will go to me” and “I do not make conversation to have conversations.” The same student said, “I make them to…my idea of a conversation is to have a purpose and get straight to the point.” Along the same line, another participant also claimed, “Conversations have to have a point, not nonsense.”

The other participant explained why he did not have any friends:

I can say, like, I know people, but I do not hang out with anyone. Um, I usually isolate myself because I feel it is easier. Just my personality; I blame autism for that. Um, like, I want to socialize with people, but it feels easier not to.

As a researcher, I wanted to know if he had any friends in high school. He replied, “In the past, I haven’t had any really friends or met people, and I am trying to tackle going out more.” He clearly wanted to meet people, but felt that “my own personal experience, the difficulties with socializing was definitely a hindrance…I subconsciously push people away because I do not keep a conversation going on that long; I want to get to the most important details.” This same participant also lived in the dorms; however, he did not have a meal plan, but, rather, a kitchen in his unit. When asked if he plans any of
his meals with his dorm-mates, he responded, “No, they have a meal card. They go and eat together.” Therefore, he would cook and eat alone. His first year in the dorms, however, he did have a meal plan. When asked if he ate with his dorm-mates then, he responded, “Yes.” As the researcher, I probed, asking if his previous dorm-mate still lived in the dorms, he responded, “I am not sure.” When asked, “Did you get along with your dorm-mate?” He replied, “Yes. I just don’t keep in touch.” Investigating further, I asked “Did you get his phone number or connect with him through social media?” His response was “No. I did not get his phone number, and I do not use social media.” When asked how he connected with his dorm-mate to eat with him, he replied, “If I saw him, then we would go.”

There was a concern regarding one participant in particular and his surroundings at school, as he was trying to develop friendships every day. He was part of an engineering club or network. He actively helped students with their homework. His mother dropped him off at 8:00 am and picked him up at 5:30 pm. During the day, he attended classes or was at the “hangout area.” At the time of this study, he had been in college for eight years and had only attended ten functions throughout his college experience. Sadly, although he was on campus all day until 5:30 pm, he still did not have anyone he could call a true friend. When he was asked about how he met the people he considered friends, he replied, “We all hung out in the engineering lab and when we hanged out, we started talking with each other. That’s how I got to know them….Sometimes they’re going to be taking, like, several classes that are with mine.” Probing more into the conversations that this participant had with individuals that he called friends, he says, “Sometimes will even, will even try to work on problems together
or try to study together.” As the researcher, I was trying to accurately visualize the conversation and situation. Therefore, I asked the participant to give me an example of a conversation. He answered:

I would say, like, usual socializing, talking. I know with one group they talk, talk about this morning (unclear) which was, which was having a party and then, and then me drinking and getting drunk and they were like, yeah, they were, like, saying they want to see me drunk and see what I’m like drunk.

This participant stated, “I don’t drink a lot. So, I don’t even drink.” When asked how this made him feel, he said, “I guess, I guess not really anything. I guess the fact that they’re interested to see something.” When I asked what he said in response to them, he answered,

Well, I guess I don’t say, “okay,” that’s what you want to try out. I mean, I mean, I would be completely agree[able] and what they want to do what they say, but then if they want to see what I’m like, I’ll go, “okay,” and that’s what you want to know about.

When asked if he said this verbally to them or just thinks it in his head, he replied, “I just think it.” Inquiring about other conversations and how he contributed to them, he reported a conversation about politics such as “Obamacare.” However, although he listened to the conversation, he did not contribute verbally to the dialogue. Another topic that came up concerned personal issues, one being his desire for a girlfriend. When asked if his friends were able to give him advice about this, he stated, “No, because they can’t really give any suggestions…They just give me ideas, but their ideas are always something that I’m afraid to do.”
One of the other participants had an interesting way of making friends. He spoke about using the website Couchsurfing.org, which is an Internet site that allows people throughout the world to travel by sleeping on a strangers “couch” or whatever sleeping arrangements they are able to provide. Couchsurfing’s 2014 first statement about how they work states, “You have friends all over the world, you just haven’t met them yet.” He associates having true friends through this website. With that said, this participant felt that he had friends, stating that “All my friends are from [my home town], and I have a lot of friends that live across the country and some friends overseas, who I meet traveling.”

This participant did have one friend who seemed more genuine. He knew him since middle school and also has ASD. This friend started college with him but, unfortunately, dropped out of college and has not returned. When asked why his friend dropped out, the participant responded, “He (his friend) really, really, did not like that (classes). (His friend) took two classes, and both the classes he took were very bad classes.” Other than that one close friend, this participant had not met any other friends in the college setting. He met “acquaintances way back in my freshman year” (four years ago) and will “occasionally, sometimes” talk to them, as these acquaintances graduated. He was asked once more if he had any friends at the college he was attending. He answered, “Some.” I then inquired into how the participant kept in contact with them, to which he replied, “Facebook.” Reverting back to the types of activities that he did with his friend from middle school, the participant explained places that they would go, such as “Dinner at cheap places, like Denny’s and Red Robin…Occasionally, I go to the movies.” When asked, “How many friends do you hang out with at college?” he answered, “Not too many on campus.” He did speak of an internship he had on campus.
He stated, “They got into a habit going out to dinner every week, and then I joined them.” After the semester, he did meet up with them in Los Angeles, but was not able to elaborate any further other than that he keeps in touch with some of them through Facebook. He stated, “I usually look for a friend outside of the college scene.” To him, “College mostly seems to be about just taking classes and not a place to make friends.” When asked how many friends he has outside of college, he claims “about like 10 good friends from Southern California and around 70 more scattered throughout the rest of the world.”

There is a fascinating comparison of the two participants who lived in the dormitories. One had a meal plan and would eat lunch and dinner with dorm-mates every day. He considered himself to have a lot of friends in college. On the other hand, the other participant who lived in the dorms, but did not have a meal plan while his dorm mates did, did not have any friends. When this participant had a meal plan, however, he did have someone he would go eat with.

There were other activities that participants discussed during the interview. Table 2 highlights the activity that participants were engaging in and the places where participants were finding out about the activities and how often they were meeting peers while in college.
Table 2

*Participants’ Activity*

<table>
<thead>
<tr>
<th>Activities</th>
<th>How did they find out about activities?</th>
<th>How often did they participate?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lunch</td>
<td>Class peer will invite the student to walk to a local eatery near campus.</td>
<td>Twice a month</td>
</tr>
<tr>
<td><em>Dinner</em></td>
<td>One participant lived in the dorms and had a meal card. Dorm-mates would go together.</td>
<td>Twice a week, Once a semester, Nightly</td>
</tr>
<tr>
<td>School Clubs</td>
<td>Counseling services, Academic counselor, Professor in their major, Signs/posters on campus.</td>
<td>Zero: “Want to go, but don’t feel comfortable.” Once within the semester, Once a month within the semester, Daily</td>
</tr>
<tr>
<td>Fraternity Functions</td>
<td>Sister, Rush week</td>
<td>Went to two rush parties/gatherings</td>
</tr>
<tr>
<td>Movies</td>
<td>High school friends, College peers</td>
<td>During school breaks 1-2 a semester</td>
</tr>
<tr>
<td>Game Ogre</td>
<td>College peers</td>
<td>Once a month</td>
</tr>
<tr>
<td>Fire Dancing</td>
<td>College peers</td>
<td>“I haven’t been able to really get into it in a while, but I would really like to try again.” Tried last semester.</td>
</tr>
<tr>
<td>Meetup.com</td>
<td>A counselor on campus, helping to find friends with the same interest, suggested this link.</td>
<td>Zero: “Have not tried. Still working on it.”</td>
</tr>
<tr>
<td>Couchsurfing.org</td>
<td>High school friend with ASD, attended college for one semester, and then dropped out.</td>
<td>Twice-a-month not with college peers: “Two weeks ago, I was at a party and I drank and passed out. The people did not know who I was and called my parents to pick me up in L.A.”</td>
</tr>
</tbody>
</table>

Out of the nine participants, only three currently engage in activities outside of campus with other college peers more than two times a month. Nevertheless, every interviewee mentioned the importance of developing friendships and wanted to have some type of friendship.
Acquiring Information

Analysis

Question 4 students were asked who you will go to when you have questions about assignments, and projects, college life, and college activities. A few participants reported “swapping…communicate who’s doing what” and “Then, once they finished the project, the group disbands and that’s it.” Another participant said, “If we have to get into groups, then I will. We will plan to meet somewhere and that’s that.” Most reported just going straight to the “professor.” When asked during office hours or directly after class? Most participants said after class or will send an email.

When asked where do you get your information about college life? The majority mentioned seeing flyers within their department or signs on the campus. One participant said, “Mostly all the clubs I’ve seen are all sports related and sororities, fraternities. So, I don’t really take an interest in them.” When the researcher asked another participant stated, “…like I said, I have difficulty socializing, I have a difficult socializing getting or going into clubs or anything to make friends.” There was an interesting response from one participant when asked this same question. He said, “It’s a learning process. At least in my case it’s a learning process that uh…My suggestions are to look up clubs and organizations on campus or connections.” When the researcher probed further asking him what do you do? He replied, “I don’t do any of those, I am trying to.” Overall participants stated they really do not ask about college life or activities. Question 4 was not an area of conversation interviewees’ wanted to take part in.

Question 5 asked participants what types of activities make your college social experiences positive and what other activities could a college offer to make your social
experiences better? Table 2 lists the activities that participants felt were the most positive social activities in college. One participant without friends stated that “walking randomly” by himself near and around the campus is a positive activity of him. Another participant said that being an intern increased his self-esteem because he was able to understand the material on an intellectual level very well and was valued for his insight. When the researcher asked one of the interviewees what activities he likes to do with his peers? He responded, “I don’t know, I guess—I just want to have friends you know. I mean, I don’t know, whatever, if someone says: do you want to go see a movie? I don’t know whatever people do. Whatever, whatever comes to mind.”

When the researcher asked the engineering major if he did anything else outside of his major, he answered, “I would say not really because I don’t hang out with anyone else outside of engineering and, you know, I wouldn’t know, or there wouldn’t be anything else that would be said to start talking to people outside of engineering.” The researcher kept probing for any other activity and asked if there was anything he did when he left campus at 5:30pm. He answered, “No, no, just, I mean maybe talking to mom, but that’s it.” He said he sometimes logged on to Facebook and “I used to play computer games a lot, but, not recently…I got tired of the games.” He said, “Most of the time, I just study, do homework, and then I’ll hang out with friends if they are here on campus.”

**Background of Educational Services**

Question 6 asked about support services received in high school that participants felt would support their college experiences. This question sought to increase understanding of different background experiences of college students with ASD. It is important to comprehend their diverse backgrounds and the services they received which
might have benefited their educational journey during the K-12 years. Strategically, this question was asked last to have a complete comprehension of their social experiences in high school, to determine if there were any services they considered were lacking within their college experience. When asked about services participants might have received during high school, a few participants did not view receiving services in a general education classroom with a special education teacher monitoring their progress as having support. One participant said, “I was not in a special education class, but I had an IEP.” A few participants did state that they could receive extra time on tests, but did not use the service often. Participants felt that they were capable of taking classes without having extra time on tests, assignments and projects.

One participant did not have an IEP during high school. It was not until his second year of college that he was diagnosed with Asperger’s syndrome. When asked how he learned about his diagnosis, he stated that “My parents researched it (support services), and then they got into the program (at the university), and then, ever since then, I’ve been staying with the program (DRES).” He continued to say, “I’m not really autism (autistic) because one doctor who said I had Asperger or something similar. I don’t know if…I had another psychologist who said I don’t have Asperger. It’s not even 100% sure if I would have Asperger’s.” Even though this interviewee does not think he has autism, he was referred by DRES as a student who has autism and responded to the email blast that went to all students enrolled with the eligibility of autism. The researcher asked about his high school GPA. He replied, “They were not that great, but still good. My GPA in high school was a 3.6.” When asked if he had any friends in high school, he said “no.”
Insight into Improving Social Experiences

Question 7 asked participants what else they felt was needed to support their social experience? Some of the participants did not know of any activities, which would promote more social experiences on a college campus. One the participants stated, “I really can’t think of much. I don’t know if there is anything…that really appeals to me.” The other participant stated, “I really don’t know….I really don’t know. I really think it is all on me. I need to take initiative and try to make friends in some way or join clubs would be the start.”

A separate participant started out thinking, “I actually don’t know. I know there is something out there.” After thinking about what a college could offer to promote social experiences, he acknowledged, “Maybe perhaps like a talk or group to focus on how to cope with college life and all that.” When asked what the focus group would look like, the interviewee described the group would consist of “a mix of people to get different perspectives, but I do want to see more people that have autism that have the difficulty making a conversation.” The researcher then asked, “Would it bother you if an email went out that said, come meet other college students with autism?” This participant said, “No, it wouldn’t bother me. I think support groups are important. If there are people like you, then you are not alone. I think that makes life easier and you feel more emotionally firm and strong.” The researcher asked, “Who would you want to lead this focus group?” The interviewee stated, “If it was a support group, then a senior or a higher up student that has experience with the college and how to organize clubs and all of that.” He did not believe a freshmen or lower class college student would have enough experience, both socially and in understanding the college campus.
This participant conveys a typical developing college student’s social desires of friendships. This participant expressed he does not want just a friend, but an actual girlfriend to go out with. The participant stated, “a girlfriend service would be helpful”, although he was not able to describe what a girlfriend service would look like on a college campus. He continued to express, “Like I was saying, maybe a girlfriend, but I don’t know if the school is going to help. I really don’t think the school can help.” The researcher then asked, “How could the school help, or club help you to meet a girl?” The participant stated, “to find a way to get me to start talking to someone that I like. Just introducing them to me.” Then, the participant shrugged his shoulders and said, “I guess, I don’t really know because it’s never happened. I don’t know what ideas to come up with.”

Another participant able to elaborate on ideas to promote social experiences expressed wanting friends and shared avenues that might help him to make a friend. This participant added, “When there are events on campus, like the concerts in the USU sometimes. Maybe they should make it more social friendly. You know, make it easier to meet people or be social in general.” An example of making it more social friendly would be to “have booths out there, or something interesting that can spark a conversation…brings people together with the same interest.” When asked what can bring people to a booth, the participant added, “Something to spark conversations, such as a questions on a poster, on the booth, and that’s the conversation starter. There [will] probably [have to] be someone, like pretty outgoing leading it [the booth].”
A different participant presented a similar idea, “Something that would be nice would be to make the student more aware of the activities on campus.” He went on to explain there needs to be

Some sort of way to actually make the activities that do go on campus more apparent to the sense like. I don’t want to make it sound like I want high school to happen all over again, but something I did like about high school is that they have like a little television program that would advertise all the events that were going on, on campus for anybody to join.

This same participant continued with the idea that information needs to be brought to the students’ attention every day. I …sometimes in [school] email I’ll get the occasionally email about a single event that’s going on, on campus but nothing really else. I think sending out maybe a daily or weekly catalog of different events that are going on, on campus would really help. I am interested in checking out things. It’s just that if I don’t know what’s going on, then I’m not going to try to find a time for it (social events) over everything else. I’m not going to prioritize it (social events).

The individual who was involved with Couchsurfing.org suggested, “meet-ups that introduces you to other college students; perhaps day trips within L.A. to different places.” When asked how to get college students to show up to these events, this individual suggested “More advertising, like a [school] Facebook.”

**Being Part of this Study**

Question 8 asked participants why they wanted to be part of this study. This question was not asked of all students, but only of six participants. The question was
asked because the first few students seemed to have much information and stories to share, but the researcher was not asking the participants directly why they wanted to share their personal information for the research. When the researcher did ask the question informally, there was a sincere tone in his voice and look in his eyes when the interviewee responded that he truly wanted to help others with ASD and educate the community about ASD. A participant who lived in the dorms felt he was an anomaly. When asked why he wanted to be part of the research, he excitedly said, “I made a lot of friends, it is a big accomplishment. I want to share my success. Maybe it can help others so they won’t be sad, lonely, and depressed.” This particular participant really enjoyed living in the dorms and the friends he interacted with on a daily basis.

Most of the participants also felt this study would be of assistance for others with autism. Like one participant stated, “I wanted to help others with autism and share what it is like for our life.” Another participant said, “I mentioned it to my parents. They thought it was a good idea since I am diagnosed with Asperger’s to go out and help someone.” A different participant believed, “I am always a strong believer of awareness towards people with disabilities, and I am always happy to help in any way I can.” This participant was very truthful as to why he wanted to be part of this study, “I chose to be a part of this because, usually, when people put out surveys I just have a tendency to do them. I guess I wasn't very assisted to doing this, like I have to, but I thought that if it was a research being done and involves something related to me then I could be a part of it to help out the person. I guess I just have that tendency to participate when someone needs it. And little bit of the reward too.”
Involvement in School Activities

The next section provides the findings for questions 11 through 19, which used a Likert scale to examine involvement both academically, and socially on a college campus and whom the participants received encouragement from in college. For students to have a successful postsecondary transition they have to integrate themselves both academically and socially (Patrick, 2013). The contributions from the nine participants in this study indicate the following.

11. Who decided what college that you would attend? The majority of students (n=6) decided on their own where to attend college. Two of the participants’ parents decided for them where they would attend college. One participant made the decision with their parents.

12. Who decided what major you would choose? The majority of students (n=6) decided their major on their own. One of the participant’s parents decided his major for him. Two of the participants made the decision with their parents.

13. In college, who helps you to choose your classes? Students were almost equal when choosing their classes. Five of the participants decided what classes to take with a counselor. The other four participants chose classes on their own.
14. In college, do you participate in class discussions? The majority of students (n=4) seldom participated in class discussions. Two of the participants often participated and the other three always participated in class discussions.

15. In college, do you participate in class group activities, projects, and/or assignments? Majority of students (n=5) often participate in class activities, projects, and assignments. Three always participated and only one participant seldom participated.
16. In college have you participated in clubs or sports? Students were almost equal when asked if they participated in clubs or sports. Four participants participated in clubs, not sports. The other five participants never participated in clubs or sports.

17. In college, do you have a friend who gives you encouragement? Students were divided when asked if they received encouragement from a friend. Five participants declared they receive encouragement from a friend. The other four participants did not receive encouragement from a friend.

18. In college, do your parents offer support? The majority of students (n=7) often to always received encouragement from their parents. Two of the participants seldom received support, since they see their parents once a month.

*Figure 2. Club or Sports Participation*
19. In college, do you have a professor who gives you encouragement? The majority of students (n=6) do not receive encouragement from their professors. Only three participants claimed to have some encouragement from at least one professor.

**Analysis**

Participants in this study felt they seldom participated in classroom discussions. However, they would have participated if it had been mandatory. Two participants stated that they were either “superior” or “inferior” to others. As the researcher, I was probing to obtain a better understanding of their idea of ranking. One of the two participants stated that he was not able “to integrate his friends” because of their interests. He also had difficulty with those that were not as superior as he, “need(s) to have friends at my level or higher.”
The other participant expressed ranking as a barrier to interacting socially with other peers in his classes. Trying to understand why he would not speak to someone based on his or her class rank was perplexing. He explained, “With them (peers) though in class, they are upper classmen. I am not on their level. I am a freshman; I am not part of your peer group. I feel like that is a social barrier.” He continued by describing himself through his parents’ perspective, “Like my parents say, I have always been that way, I’ve been easy to approach adults and speak with adults, but, when it comes to my peers, I always had a difficult time connecting with my peers.” Trying to understand his reasoning, I asked if it had anything to do with their age. He did not think so, stating:

It’s not really age. More like…possibly where they are academically or also their experience. Being a sophomore or junior implies having more college experience…being there (in college) more. While me, being I started my second semester, I have less experience, I feel lower… I am just a freshman and you guys are sophomores or juniors.

I realized that he interacted fine with his professors. As the researcher, I pointed out to him that he enjoyed having conversations with his professors, and they had a higher ranking than he did. I asked him, “Why wouldn’t their ranking trouble you?” He agreed and did not know why it was easier for him to speak to his professors than to his peers. He said, “It has always been a puzzle for me. I put all these barriers up between myself and others that would be easy to connect with.” He sat there thinking as he was shaking his head, but all he could say was, “I do not know. Professors and teachers are easier to connect with.”
Three participants elaborated on the clubs they attended. One participant shared he went once and would like to attend the Lesbian, Gay, Bisexual, and Transgender club (LGBT), because he said, “I am confused about my sexuality.” Since his sexuality was not part of this study, the researcher asked if he was able to develop friendships through the club? His answer, “They are all nice, but, no, I have not made any friends.” Another shared he was attending clubs to make friends and for the free food, not necessarily the topic. A third participant claimed he wanted to join a club, but, when it came down to the truth when asked if he would just drop into the club, he responded, “I don’t know where they are.” The researcher asked if he would go if he knew where they were. “I don’t think I would, it would be too awkward, too weird…uncomfortable.” Trying to figure out what would support attending a club he said, “Being officially signed-up, then, maybe, then I feel like I am official, then, compared to someone in the department. Like, I am supposed to be here. Whereas someone in the department…a barrier. I need to sign a form or something.” Then the researcher asked, “what if I say sign this form?” He stated, “Okay there’s a bit of apprehension.”

When the participants were asked if they participate in class activities, projects, and/or assignments? One of the participants answered, “It’s not like I want to participate. It is part of my grade. If it wasn’t, I would not participate.” Another participant felt high anxiety while answering this question. He claimed, “I have high anxiety when having to work on class activities. It is extremely difficult to get into a group situation. It would be better if the professor would put us into groups.”
Personal Growth Initiative Scale

Using the Personal Growth Initiative Scale (PGIS), participants circled a number 1 through 6 where 1 indicated definitely disagree and 6 definitely agree to answer nine questions. The following descriptions emerged from the PGIS survey.

1. I know how to change specific things that I want to change in my life. Most students (n=4) somewhat agreed they knew how to change specific things in their life. The other participants somewhat disagreed (n=1), mostly agreed (n=2), and definitely agreed (n=2).

2. I have a good sense of where I am headed in my life. Students (n=9) were diverse on their sense of where they were headed in life. Participants somewhat disagreed (n=1), somewhat agreed (n=3), mostly agreed (n=2), and definitely agreed (n=3). Overall, the majority agreed they had some sense of where they were headed in life.

3. If I want to change something in my life, I initiate the transition process. Most students (n=4) mostly agreed they could change something in their life and initiate the transition process. The other five participants’ choices were somewhat disagree (n=2), somewhat agree (n=1), and definitely agree (n=2).

4. I can choose the role that I want to have in a group. Two participants (n=2) somewhat disagreed, whereas most students (n=5), and (n=2) mostly agreed they could choose the role they want to have in a group.

5. I know what I need to do to get started toward reaching my goals. Of the participants, 4 definitely agreed, 4 mostly agreed, and one participant 1
somewhat agreed they know what to do to get started toward reaching their goal.

6. I have a specific action plan to help me reach my goals. Students (n=9) answers varied on the specific action plan to help them reach their goals. Participants somewhat disagreed (n=2), somewhat agreed (n=2), mostly agreed (n=2), and definitely agreed (n=1). Taken as a whole, the majority agreed they had an action plan to help them reach their goals.

7. I take charge of my life. Two participants 2 somewhat agreed, most students (n=5) mostly agreed, and 2) definitely agreed they took charge of their life.

8. I know what my unique contribution to the world might be. One participant 1 mostly disagreed and three of the participants 3 somewhat disagreed on knowing their contribution to the world. The other five participants somewhat agreed (n=2), mostly agreed (n=2), and definitely agreed (n=1).

9. I have a plan for making my life more balanced. One participant (n=1) definitely agree, most participants (n=4) mostly agree, (n=3) somewhat agree, (n=1) somewhat disagree; they have a plan for making their life more balanced.

Analysis

Using the PGIS, most participants saw themselves as in charge of their lives and as knowing how to reach their goals. Although the majority of participants knew what it took to be in charge of their lives, four did not know their unique contributions to the world. Since most participants answered the survey with an average response of somewhat agree, question 8 had four participant disagreeing with knowing their
contribution to the world. It is possible question 8 was more of an abstract question that possibly confused the participants, or the four participants truly did not know their contribution to the world. Overall, this instrument indicated that the self-perception of these nine participants tend to be positive.

Summary

The PGIS showed participants felt confident and positive about their life direction. However, in the one-on-one interview, the majority of participants contradicted this survey by expressing their desire for friendships, being bullied by others, feeling lonely, and having difficulty with conversation.
Chapter V: Discussion And Conclusion

Introduction

This chapter will provide a summary of the problem statement, purpose, research questions, and methodology. Next, this chapter will discuss major findings and limitations from the interviews. Finally, chapter 5 will conclude with implications for educational policy and practice and recommendations for future research.

Summary of the Major Findings

Finding from interviews in this study indicated adults with ASD may continue to struggle with developing and maintaining friendships and socializing with others. Based on the research questions, themes that emerged were related to having a social disability and were central to the diagnostic criteria of ASD. The main theme that emerged from social experiences on a college campus was building friendships. In the journey to develop friendships, interviewees expressed their thoughts on starting conversations, anxiety, loneliness, and wanting to have a friend or a partner.

Some of the participants in this study continue to struggle with having conversations they consider meaningless. Koegel et al. (2013) state students with ASD are “aware of their social skill deficits…are less likely to feel satisfied with their socialization” (pg. 899). Participants in this study claimed there “needs to be a point to their conversation.” Findings on anxiety in adults with ASD stem from having to speak in front of others, misinterpreting social cues, difficulty initiating interaction with others, desiring content specific conversations, and having high expectations they place on themselves (DeMatteo, 2012; White & Roberson-Nay, 2009).
Discussion

Based on the research questions and findings, the discussion is organized to include (1) Personal Growth Initiative Scale (PGIS), and (2) interview questions.

The PGIS is a scale, which examines a participants’ active and intentional involvement in changing and developing as a person. Based upon the participants’ answers, the majority expressed they were familiar with their goals and life decisions and were optimistic about their life. This is an important finding since, even though they find themselves as positive, active and developing as persons, they were still struggling with developing meaningful friendships.

The most noteworthy finding in this study is that parents of college students with ASD were still very involved in helping their adult children to make decisions and provide encouragement in college. Although students claimed to have made choices regarding what college to attend, six of the nine participants still lived at home with their families. Studies have indicated adults with high functioning ASD still rely heavily on others for support, and there is a concern this may give rise to limited independence performance (Hume et al., 2014). In addition, the two students who lived in the dorm chose this university due to location. One had an aunt who lived down the street in case of an emergency and would still go home on the weekends to be with his family. The other participant lived within driving distance and would take public transit for two hours to see his family every weekend. Therefore, it is highly likely this university was chosen for the locality to all of the families’ home.

When it comes to classroom discussion, the majority of participants only participated because they had to for a grade. If given the choice, the majority would not have
participated, especially given topic they were not interested in. The same holds true for activities, projects, and assignments. This is important to note because having a letter grade assigned to a task will allow students, especially those with ASD, contribute, communicate, and become more involved with others.

Engaging in clubs and receiving support from the college environment is important to academic success (Baker, 2013). Four of the participants participated in clubs, and one of the four participated in two clubs. Two of the other participants would have liked to attend clubs, and one did sit in on a club meeting. The other participant claimed he wanted to be part of the Linguistics Club; however, it caused him too much anxiety to sign up and become a member of the club. Koegel et al. (2013) found individuals with ASD continue to participate in their preferred interests alone. Unfortunately, this holds true with data, as an interviewee from this research finds it is difficult to get involved independently, thus causing him high anxiety entering into an unknown situation.

Studies have indicated encouragement from a friend, family member, or a professor is extremely important during college, as it improves the quality of life and provides higher expectations for individuals (Ivey, 2007). The findings from this research show parents as the main source of encouragement for college students with ASD. Five participants stated they received encouragement from a friend. When encouragement was discussed, it was minimal, such as someone living in the same dorm building saying, “Good luck!” The concept of another person acknowledging the individual with ASD was enough for the participant to say, “I have a friend who gives me encouragement.” This is extremely important, since rejection from their peers can cause
students with ASD to have depression, aggression, and school dropout (Nevill & White, 2011). Having peer support establishes greater cohesion, connections, and relationships; it also decreases anxiety and increases communication (Sollitto, Johnson, & Myers, 2013).

In this study, 67% of participants found no encouragement from professors. In fact, this data is not uncommon: Walker (2009) study found 93% of students in grades K-12, did not experience high-quality instruction and a supportive classroom climate whereas, in a socially supportive and cooperative classroom, where students and peers work together they improve “socializing with their peers and …are motivated to perform their best academically” (Sollitto, Johnson, & Myers, 2013, p. 321). Only three of the nine participants received some type of encouragement from their professors. This is significantly low considering research has found persistent rates for individuals with and without disabilities are higher when a staff member or professor provides some type of mentorship.

Lastly, the findings from the one-on-one interviews found seven themes which are: has friends, trying to meet people, has no friends, has experienced being bullied, expressed being lonely, difficulty with conversations, and feeling superior.
Table 3

Themes

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<th>Participant</th>
<th>Friends</th>
<th>Trying to meet people</th>
<th>No friends</th>
<th>Bullied</th>
<th>Lonely</th>
<th>Difficultly with conversations</th>
<th>Ranking</th>
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Connections to Research Topics

As stated in the literature, college age students with ASD desire and want meaningful friendships and social experiences throughout their life, but continue to have ongoing challenges with developing and maintaining these social relationships (Bellinger, Perlman, & DiPerna, 2011; Dente & Parkinson, 2012; Korbel et al., 2011; McEachern & Kenny, 2011; Zager & Alpren, 2010). This research supports current literature as some interviewee’s social difficulties create an unsatisfactory college experience of loneliness and “high anxiety.” This research supported previous findings that for those students who reached out to clubs of their interest or to fraternities, there was a sense of belonging and having true friends. However, this data from this study can not confirm the level of social engagement each participant partook during club or fraternity activities. Nevertheless, participants affirm their story with excitement and enthusiasm of interacting with their peers and their awareness of being involved in activities they would not have been involved with otherwise.
Medical theory is important to this research. While society might still have a negative perception of individuals with ASD; it is necessary to continue to educate society to be inclusive and accept others for their differences. A couple of the participants in this study were still not convinced or comfortable to say they have a diagnosis of ASD. As one participant stated, “I am not the same as those with autism” and the other participant said, “I am not really autistic.” These remarks might have possibly materialized from the participants not clearly understanding their unique differences. It is also possible that, throughout their K-12 years, it was a negative label they had to tolerate and be referred to as different or a person with special needs. Medical Theory is significant for this research, as the participants were comfortable with their diagnosis and understood their disability. Medical Theory shows to be important, as these individuals understand what supports and services are necessary to maintain a healthy social and academic growth in college to attain a diploma.

ToM holds true for this research, as participants were able to express the difficulties in establishing friendships. All of these participants desire to have friendships but are aware that they are socially awkward, and some do not want to engage or do not have the ability to engage in small talk. While most of these participants were aware of their own mental state, it was difficult for them to understand the mental state of a peer. As in the case of the one participant who was not able to approach the researcher. He was aware of her presence, but was not able to initiate communication. This could be the next step and possibly the hardest, was to predict the behavior of the person. What if he approached her/him and it was the wrong person? It was safer for him to wait until the researcher approached him to start the conversation. Another aspect of his difficulty with
communication was the ability to start and continue conversation with his peers. He does not add to the conversation until someone will ask him a question, which demonstrates he might not be aware of the dialog and the communicative intent of the speaker.

ToM plays in to mind of the perception of their social status. Another example within this research is the freshman student who felt he was inferior to his classmates who were sophomores, juniors and seniors. While this participant was highly intelligent and was aware of his own abilities, he did not understand the thoughts and beliefs of classmates with more experience than he had. Then there were also incidents of misinterpretation of social cues. For example there was the participant rushing the fraternity just because one of the fraternity brothers called him “bro”. He misinterpreted his slang or social cue as being a true friend. For the participant who lives in the dorms, a female walking down a hall saying, “Good luck on your test!” meant a friend who provides encouragement.

Lastly, transactional ecological theory in this research deals with the immediate people in the person’s life and their environment. The data from this research demonstrate a lack of interactions with faculty and peers, since only three participants felt encouragement from their professors. Having a mentor during the transition into college has proven to produce better college outcomes (Patrick & Wessel, 2013). Since most participants still live with family members, their immediate environments form the basis to their social and communication activities. Because participants did not live in a college environment, participants expressed it would be easier to make friends if they lived in a college setting. Living at home hinders the chances of developing natural age-appropriate friendships, since research shows more individuals with ASD stay at home
alone, never saw friends, and never received phone calls, whereas living on a college campus with appropriate supports will foster more peer interactions and build friendships (Auger, 2013; Shattuck et al., 2012).

One support mentioned in the literature is support from another peer or adult. None of the nine participants reported having had extra support from an adult during high school, and, still, none of the nine participants had an adult or peer to assist them at the college level. Seven of the participants lived at home. When asked if they would want to live in the dorms, most said yes, but several reasons were mentioned. It is not clear if social economic factors play a part in participants’ actually being able to live in the dorm, since family income was not asked about. Some participants thought it would be a better idea to live in the dorms than at home. However, their parents, particularly their mother’s were against it or it was not financially feasible. While it might hold true for most of the participants that they were living at home to not be an extra expense or burden on their families, some of the participants indicated they traveled from affluent cities into school. While one of the participants from an affluent city did attempt to live in off-campus student housing, his experience was not positive. Now, he commutes 45 miles to attend college. The uncomfortable living situation he experienced might not have happened if he had lived in a dorm setting with educated and trained support staff and peers and his experience would have been positive.

**Implications for Policy and Practice**

It is imperative for the social and academic success of college students with ASD to have social support services available to them as early as possible and continued in college. There is a gap between K-12 and the transition to postsecondary education,
since there is a change in accommodations from high school due to the laws governing postsecondary education for students with ASD (Patrick, 2013). Findings from this research indicate students enter college and they are unprepared to navigate an unfamiliar environment independently, meet the social demands to develop new friends, proactively get involved in clubs and organizations, successfully take classes outside of their interest area without guidance, and meet other academic demands postsecondary education requires. There is a need for more social skills training during their K-12 years and into their postsecondary years to develop independence, through skills like self-advocacy, self-determination, self-help and social interactions and practice within the community or large group situations. As many adults with ASD want to engage with others and may be aware of their social skill deficits, they, therefore, are less likely to feel satisfied and successful during their college years and beyond (Koegel et al., 2013).

Findings from this study led to implications for policy and practice as follows: bridge between high school and postsecondary education, on campus living, enrolling in a cohort for undergraduate classes, and a communication class as an option to meet college requirements.

**Bridge Between High School and Postsecondary Education**

This study found there is a need for a bridge program designed to support students with ASD to enter college during their last semester of high school. There are several benefits for a bridge program. The first is to have an adult with knowledge of the individual student and his unique needs as he transitions onto a college campus. Next, it is beneficial to have a relationship with personnel from the K-12 system with the disability center on the college campus. Third, this person will serve as a buffer to
familiarize the student to the resources available through disability services and campus activities (Contreras, 2011). When there are concerns or questions about academic and social activities, the student with ASD will have a mentor to point them in the right direction. Students with ASD will be exposed to staff and peers and begin the process of developing peer relationships, which are critical in college persistence (Walker, 2009).

**On Campus Living**

Participants in this study thought it would be better if they lived on campus instead of being at home with family. As one participant explained, “I think it is problematic, because I do not live on campus. …it is much easier to make friends when you are constantly hanging around the same people.” When thinking of the transition into college, researchers found parents and individuals with ASD feel managing social relationships with roommates as a more challenging task than the academic demands (Auger, 2013). Findings from this study indicate there is a need for an environment or program, which fosters social activities and a supportive staff to oversee daily concerns. While some parents worry about the social relationships with roommates, participants seemed eager to begin their independence. One of the participants showed interest in living in the dorms; however, he reported his mother “wants to shelter” him by keeping him at home. Thus, parents may inadvertently create a barrier towards independence when, in actuality, the student is ready for more social independence. Having a peer or staff mentor as an intervention is one way to get students with ASD socially involved and increase persistence of graduation rates (Patrick, 2013). A recent study on peer-focused intervention to socially engage individuals with ASD found students were more likely to develop friendships with typical peers (Auger, 2013). Based on having a trained peer to
reinforce social engagement, it appears that living in a dorm and eating with the same
people for a year would help to foster these friendships.

**Cohorts**

Evidence from this research indicates participants found it easier to develop
friendships when they had the same classes with other classmates. In particular, one
participant found freshman connection to be helpful in making friends, but it was only
one semester. He said it was helpful because the classes were back-to-back and that was
when conversations would happen. Researchers Nevill and White (2011) believe
“universities should make efforts to prevent social isolation of students with ASD” (p.
1619). A way to prevent social isolation on college campuses is to have a cohort that will
habituate with their peers. Establishing cohorts for incoming freshmen with ASD in a
college setting for at least one year will help with transition into a larger unfamiliar
setting, develop acquaintances with other age appropriate peers with and without
disabilities and to familiarize themselves with the school culture. The establishment of
peer support helps students with stress they may experience entering a new social
situation on their own and provides encouragement with understanding class assignments
and projects (Sollitto et al., 2013).

A cohort will also prevent social isolation and will facilitate the transition from
high school to postsecondary education. Current literature stresses there is a need to
increase knowledge regarding individuals with ASD by building and educating not only
teachers, but teams to recognize differences in others and to work with their strengths
(Hart & More, 2012).
Communication Class

Data from this research revealed participants’ desires to have more opportunities to communicate with their peers. One potential way to address this issue would be for universities to offer an entry level communication class which is required for all students to gain awareness of social disabilities and methods or proper etiquette to communicate. Not only will this class discuss social differences without identifying individuals with ASD or other disabilities, but create an environment, which gets students together to work on conversation skills to facilitate social interactions (Koegel et al., 2013). Possibly having students work in teams to help the community in ways such as collecting clothes for the homeless, feeding the less fortunate, car washing to raise money for a charity or whatever the team decides to do are some viable options. Having peers facilitate social skills in a natural setting will allow peer modeling and reinforcing of the appropriate social skills (DiSalvo & Oswald, 2002). When students are enrolled in a class which has a climate that is supportive and cooperative, individuals report higher satisfaction; in addition, the connections help students with ASD assimilate into the classroom and helping students develop friendships (Sollitto et al., 2013). Most importantly, this will be an effective social intervention that can be easily studied to add to the body of literature that is currently lacking such data (Koegel et al., 2013).

Recommendations for Future Research

Supported by the results of this qualitative study the following recommendations for further study are suggested.

- Include more universities. Having more than one university will provide an array of different opinions regarding what students experiencing within those colleges.
• Include a larger sample size. A small sample size only provides a glimpse of the possibilities of the social experiences of individuals with ASD. Having a large sample size will provide more insight to overall experiences of college students with ASD.

• Include females to determine if they are having similar experiences on the college campus. The majority of individuals diagnosed with ASD are males. There are fewer studies, which include females with ASD. Having the outlook of a female will broaden research and heighten educators’ awareness of the social experiences of females with ASD.

• Include a focus group with other students with ASD. Due to the potential sensitivity of individuals with ASD not wanting their disability disclosed to others, this research study did not include a focus group. However, during this research study, participants suggested the importance of meeting others with the same disability, so they knew they were not alone. They expressed they wanted to know how others were faring social. This would be an avenue for those with ASD to communicate with each other and, hopefully, develop meaningful friendships.

• Interview typical peers who interact with the interviewees to include their perceptions on their social relationship with the interviewee. Interviewing their typical peers will provide awareness of how they perceive individuals with ASD and possible ways to improve social relationships as well as ways to include individuals with ASD.
● Compare persistence rates between 2-year and 4-year college pathways to investigate the factors that affect persistence rate. It would be helpful to understand if it is better to stay in an environment with higher expectations of student abilities or to be at a college that fosters support for remedial education to prepare students for a 4-year college?

● Compare persistence rates with college students involved with clubs versus those of students not involved. Do clubs help students persist and develop friendships? Are students developing meaningful friendships and feeling a part of the college environment when they are involved with clubs?

● Examine the familiar and social factors that support completion. What other factors do students with ASD need to support their college experiences?

● Include a longitudinal study starting with incoming freshmen to determine persistence rates and what factors promoted persistence.

● Collect data from professors who educate students with ASD to understand their concerns and beliefs.

● Include data from parents of college students with ASD to understand their perceptions of their child’s high school and college social experiences to determine what is working and areas for improvement. This is important, since parents have been an integral part of their young adults’ lives. The parent might be able to express what social experiences worked for their young adults and those that did not.

● Include actions and steps parents are taking to prepare their young adults with ASD to be independent adults. Verify whether there is a trend or similarities with
preparing individuals with disabilities during the transition into post-secondary education. Determine whether or not their actions helped in the transition into post-secondary or if parents feel it is up to the school system to prepare their young adult for post-secondary education.

- Compare social loneliness and anxiety in adults with ASD to determine whether there is a correlation between social loneliness and anxiety, and what strategies are adults using to cope and manage the anxiety and social loneliness.

- Include measures that assess degree of loneliness and levels of depression. During this research, some participants willingly shared how lonely they were. It is important to determine how many students with ASD feel lonely and what supports can alleviate their loneliness.

- Gather more data on perceptions of social ranking and the importance of this perceived hierarchy amongst individuals with ASD.

- Include observations of the interviewee during a social function. Observations during a social event will provide another lens for the research to explore to determine if the interviewee truly has meaningful friendships or if the interviewee is merely an observer and standing on the outside of a conversation.

- Study programs which support social interactions on a college campus. Successful campuses can be used as models to promote social acceptance and interactions on all college campuses. Participants on a college campus that promotes social interaction will have a different experience than those on a college campus that does not promote social interactions. Comparing the two
types of programs will make available more social experiences of participants and data, which will assist in the development of interventions for these youth.

- Include programs, which support living opportunities in a college dorm to determine the social experience for students with ASD in a supported environment versus one, which does not provide additional support. Are there differences in social activities, friendships, loneliness, anxiety, and persistence?

- Compare persistence rates with college students living at home versus living on a college campus. Determine whether living at home or in a dorm setting effects social independence. In addition, compare whether the persistence rates are the same in the different environments.

- Compare students’ experiences with the transition process to college. This will provide researchers with understanding regarding the experiences individuals with ASD faced. In addition, this will shed light to possible positive practices in the transition process.

- Take the PGIS then have participants elaborate on each of the nine questions. Since the survey contradicted the one-to-one interviews, a follow-up one-to-one interview would be in order. This would be on a deeper level to their thoughts on how they are able to change things in their life, where they are headed in life, examples of how they initiate the transition process and the role they play in a group. Additionally, understanding what they believe is needed to reach their goals, examples how they see themselves taking charge of their life and the plan to making it balanced would also be explored.
Conclusion

Most of the participants in this study wanted to share their experiences and the positive advances, which occurred to them in communication and friendships since the enrollment in college. Some participants have indicated they made social progress in the area of friendships, whereas some have not been able to make friends; however all of the participants continue to try to seek friendships. These young adults have crossed the threshold into college; however, they continue to be confronted with social challenges. The majority of the participants continue to be lonely and struggle in their quest to build friendships. At least half of the participants acknowledged the difficulty with reciprocal conversations with their peers. While not required, there is an urgency to have more college environments with programs that foster effective social communication skills; which include bridge programs from high school to postsecondary education, classes with trained faculty and peer mentors, cohorts, and on campus living to support the transition into college and the social challenges these individuals will face. We hypothesize, that with these supports in place young adults with ASD will be more likely to persist in college both socially and academically with better prospects for their future.
References


Individuals with Disability Education Improvement Act (IDEIA) of 2004


https://nces.ed.gov/fastfacts/display.asp?id=60


Patrick, S., & Wessel, R. (2013). Faculty mentorship and transition experiences of students with disabilities. *Journal of Postsecondary Education and Disability, 26*(2), 105-118.


Appendix A: Informed Consent Form

California State University, Northridge

CONSENT TO ACT AS A HUMAN RESEARCH PARTICIPANT

Social Experiences of College Students with Autism Spectrum Disorder

You are being asked to participate in “Social Experiences of College Students with Autism Spectrum Disorders,” a study conducted by Karolanne Asmus as part of the requirements for the Ed. D degree within the Michael D. Eisner College of Education. Participation in this study is completely voluntary. Please read the information below and ask questions about anything that you do not understand before deciding if you would like to participate. A researcher listed below will be available to answer your questions.

RESEARCH TEAM

Researcher:
Karolanne Asmus
Michael D. Eisner College of Education
Department of Educational Leadership and Policy Studies
818-421-2161
katek052@gmail.com

Faculty Advisor
Dr. Virginia Kennedy
Michael D. Eisner College of Education
Department of Special Education
18111 Nordhoff St.
Northridge, CA 91330-8265
818-677-2532
Virginia.kennedy@csun.edu

PURPOSE OF STUDY

The purpose of this study is to examine the social experiences of college students with autism spectrum disorder.

SUBJECTS

Inclusion Requirements
You are eligible to participate in this study if you:
1) Attend California State University at Northridge (CSUN);
2) Are 18 years or older;
3) Receive services through DRES.
**Exclusion Requirements**
You are not eligible to participate in this study if you: 1) Do not attend CSUN or 2) Do not have a diagnosis of autism.

**Time Commitment**
This study will involve one hour of your time.

**PROCEDURES**
- You will receive a confirmation email with interview date, time, and location of the interview.
- At the location of the meeting, you will be greeted by the researcher, Karolanne Asmus.
- You will be walked back to the interviewing room at DRES.
- The interview consists of 18 questions and will take 60 minutes.
- At the end of the interview, you will be compensated with a $25.00 gift card and thanked for your participation.

**RISKS AND DISCOMFORTS**
This study involves no more than minimal risk. There are no known harms or discomforts associated with this study beyond those encountered in normal daily life. Your participation will not affect your classes, enrollment at CSUN, or your ability to receive services from DRES. The researcher is not affiliated with DRES. You are free to take breaks during the interview at any time without any consequences. You are free to stop the interview at any time without any consequences. You can skip any questions without any consequences. If this study causes you any stress and or discomfort, you will be provided with a referral to DRES or CSUN counseling services at the following locations:

**Disabilities Resource and Educational Services**  
Bayramian Hall 110  
18111 Nordhoff Street  
Northridge, CA 91330-8264  
Telephone (818) 677-2684  
Fax (818) 677-4932  
dres@csun.edu

**University Counseling Services**  
Bayramian Hall 520  
18111 Nordhoff Street  
Northridge, CA 91330-8217  
Telephone (818) 677-2366  
TTY (818) 677-7834  
coun@csun.edu
BENEFITS

Subject Benefits
You may not benefit financially from participation in this study. You will not benefit directly from this research. This research will contribute to the body of knowledge by identifying communication and social support that are imperative for successful college outcomes for students with autism.

Benefits to Others or Society
Researchers interested in the field of education, social support, and autism spectrum disorder can build on the data for further research in the area. In addition, professional educators, theorists, and law makers may be informed by support and services that can encourage successful college outcomes for students with autism spectrum disorder.

ALTERNATIVES TO PARTICIPATION
The only alternative to participation in this study is not to participate.

COMPENSATION, COSTS AND REIMBURSEMENT

Compensation for Participation
You will receive a $25.00 gift card for your participation in this research study.

Costs
There is no cost to you for participation in this study.

WITHDRAWAL OR TERMINATION FROM THE STUDY AND CONSEQUENCES
You are free to withdraw from this study at any time. If you decide to withdraw from this study, you should notify the research team immediately. The research team may also end your participation in this study if you do not follow instructions, miss scheduled visits, or if your safety and welfare are at risk.

CONFIDENTIALITY

Subject Identifiable Data
All identifiable information that will be collected about you will be kept confidential. You do not need to provide your date of birth, social security number, or any personal identification. All interviews will be kept confidential, and the identity of the participants will be confidential. Karolanne Asmus, the researcher, will be the only person to have access to the interview recordings.

Data Storage
All data graphs and data generated from the interview will reside on a locked password-protected computer and deleted after three years. All interview recordings will be kept in a key-locked cabinet and deleted at the end of the study. All interviews will be kept confidential, and all names will be confidential. There will be no identifiable information related to this study written within the research.

Data Access
The researcher named on the first page of this form will have access to your study records. Information derived from this research project does not personally identify you. Publications and/or presentations that result from this study will not include identifiable information.

The audio recordings will also be stored on a password-protected recording device, and then transcribed and erased at the end of this study.

Data Retention
The researcher intends to keep the research data until the research is published and/or presented, and then all data will be destroyed after three years.

IF YOU HAVE QUESTIONS
If you have any comments, concerns, or questions regarding the conduct of this research, please contact the research team listed on the first page of this form.

If you have concerns or complaints about the research study, research team, or questions about your rights as a research participant, please contact Research and Sponsored Projects, 18111 Nordhoff Street, California State University, Northridge, Northridge, CA 91330-8232, or phone 818-677-2901.

VOLUNTARY PARTICIPATION STATEMENT
You should not sign this form unless you have read it and been given a copy of it to keep. Participation in this study is voluntary. You may refuse to answer any question or discontinue your involvement at any time without penalty or loss of benefits to which you might otherwise be entitled. Your decision will not affect your relationship with CSUN. Your signature below indicates that you have read the information in this consent form and have had a chance to ask any questions that you have about the study.

_____ I agree to participate in the study.  _____ I do not agree to participate in the study.

_____ I agree to be audio-recorded.  _____ I do not wish to be audio-recorded

___________________________________________________  ____________________
Participant Signature  Date

___________________________________________________
Printed Name of Participant

___________________________________________________  ____________________
Researcher Signature  Date
Printed Name of Researcher
Appendix B: Participant Recruitment Letter

Dear Potential Participant,

I am a doctoral student in the Educational Leadership and Policy program here at CSUN. My dissertation is focused on “Social Experiences of College Students with Autism Spectrum.”

I am looking for college students with autism spectrum disorder to take part in my research study. The study will consist of a 60 minute one-on-one interview, asking about your social experiences at CSUN. You will be compensated for your time with a $25.00 gift card.

Participation in my research study is voluntary. All information from the interview will be strictly confidential.

I would truly appreciate your interest, help, and cooperation in participating in my research.

If interested in participating, please email me at katek052@gmail.com

Thank you,

Karolanne K. Asmus, Doctoral Student
Michael D. Eisner College of Education
Department of Educational Leadership and Policy Studies
Appendix C: PGIS

Personal Growth Initiative Scale (PGIS)
By Christine Robitschek, Ph.D.

Using the scale below, circle the number which best describes the extent to which you agree or disagree with each statement.
1 = Definitely disagree
2 = Mostly disagree
3 = Somewhat disagree
4 = Somewhat agree
5 = Mostly agree
6 = Definitely agree

1. I know how to change specific things that I want to change in my life.

2. I have a good sense of where I am headed in my life.

3. If I want to change something in my life, I initiate the transition process.

4. I can choose the role that I want to have in a group.

5. I know what I need to do to get started toward reaching my goals.

6. I have a specific action plan to help me reach my goals.

7. I take charge of my life.

8. I know what my unique contribution to the world might be.

9. I have a plan for making my life more balanced.
Appendix D: Interview Questions

18 questions

These interview questions are about your social activities in college. Please refrain from using names during the interview. Please refer to your friends as “my friend” and professors as “my professor” to keep the interview as confidential as possible.

Do you have any questions before we begin? Please feel free to ask me to repeat the question if you do not understand. If you need a break, I will gladly stop.

1) Tell me about your most memorable moment during college and why it is so memorable for you a positive and negative experience.

2) How many college friends do you hangout with? What kinds of activities do you do together? What places do you like to go?

3) How did you meet your new friend(s) at college? Can you give me some examples about the new friends that you have met?

4) Who do you go to when you have questions about assignments and projects, college life, and college activities? (Can you please elaborate?)

5) What types of activities make your college social experiences positive? What other activities could a college offer to make your social experiences better?

6) Are there any support services that you received in high school that you feel would support your college experience?

7) What else do you feel is needed to support your social experience? Why did you want to be part of this study?

8) With which ethnicity do you most identify as?
   0=White
   1=Black/African American
   2=Latino/a
   3=Asian
   4=Other
   5=Prefer not to state

9) What is your current GPA?
   0=Below a 2.00
   1=From 2.01 to 2.49
   2=2.50-2.99
   3=Above a 3.00
10) Who decided what college that you would attend?
0=I decided where to attend on my own.
1=My parents decided where I would attend college.
2=My parents and I decided together.
3=The high school college counselor decided.
4=The high school college counselor and I decided.
5=The high school special education teacher decided.
6=The high school principal decided.
7=A friend in high school decided.
8=Other (Who?)_______________________________________

11) Who decided what major you would choose?
0=I decided on my own.
1=My parents decided.
2=My parents and I decided on my major.
3=My high school college counselor decided.
4= Other (Who?)_______________________________________

12) In college, who helps you to choose your classes?
0=I choose classes on my own.
1=My parents choose my classes.
2=A close peer helps me.
3=My parents and I choose.
4=I choose my classes with my college counselor.

13) In college, do you participate in class discussions?
0=I never participate in class discussions.
1=I seldom participate in class discussions.
2=I often participate in class discussions
3=I always participate in class discussions.

14) In college, do you participate in class group activities, projects, and/or assignments?
0=I never participate in class group activities, projects, and/or assignments.
1=I seldom participate in class group activities, projects, and/or assignments
2=I often participate in class group activities, projects, and/or assignments.
3=I always participate in class group activities, projects, and/or assignments.

15) In college have you participated in clubs or sports?
0=No, I have never participated in any clubs or sports.
1= Yes, I have participated in the following clubs or sports:

___________________

16) In college, do you have a friend who gives you encouragement?
0=No
1=Yes. (Please tell me about that).

17) In college do your parents offer support?
0=Never. They do not provide support.
1=Seldom. I see them once-a-month.
2=Often. I see them once-a-week.
3=Always. I see them everyday.

18) In college do you have a teacher who gives you encouragement?
0=No
1=Yes. (Please tell me about that).

*Thank you for taking the time to answer these questions. Your input is very important and has helped me out a lot.

*Here is a $25.00 gift card for your time today.

*Have a nice day.