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## The Social Experiences of College Students With Autism Spectrum Disorder

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# The Social Experiences of College Students With Autism Spectrum Disorder

Deborah Bogle

*Concordia University - Portland*

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Concordia University–Portland  
College of Education  
Doctorate of Education Program

WE, THE UNDERSIGNED MEMBERS OF THE DISSERTATION COMMITTEE  
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The Social Experiences of College Students With Autism Spectrum Disorder

Deborah Bogle

Concordia University–Portland

College of Education

Dissertation submitted to the Faculty of the College of Education

in partial fulfillment of the requirements for the degree of

Doctor of Education in

Higher Education

Rinyka Allison, Ph.D., Faculty Chair Dissertation Committee

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Concordia University–Portland

2019

## **Abstract**

Through the passage of federal disability legislation, the opportunity to attain higher education exists for individuals experiencing Autism Spectrum Disorder (ASD). Researchers have examined the neurodevelopmental impact of ASD on students and the needs of students at colleges and universities. Since ASD affects the social communication of individuals, the researcher conducted a study to gather lived stories of the social experiences of students with ASD. Through a narrative methodology, three students provided lived stories of their social experiences at a higher education institution. Students provided stories through interviews and journal writing of their social interactions with instructors, peers, and staff. The researcher utilized narrative coding and problem-solution narrative in the analyzation of data. Students reported varied experiences with instructors, peers, and staff. Participants reported low interest and interactions at college events. Through the research, students from a traditionally marginalized population had a voice to share their experiences. The study increased awareness within the Autism community, families, and higher education institutions of the social experiences of students with ASD.

*Keywords:* Autism Spectrum Disorder, Asperger's Syndrome, developmental disability, developmental disorder, high functioning autism, college students, higher education

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## **Chapter 1: Introduction**

### **Introduction to the Problem**

In 1990, the United States passed the Individuals with Disabilities Education Act (IDEA) entitling students to free education and services in public schools as long as the student held documentation of a disability. The government enhanced the law with the passage of the Americans with Disabilities Act of 1990 (ADA) extending Section 504 of the Rehabilitation Act of 1973 which prohibited institutions receiving federal money to discriminate against individuals with a disability (Pillay and Bhat, 2012). In 2015–2016, statistics from the Center for Educational Statistics reported 19% of undergraduate students experienced a disability, compared to 10.8% in 2007–2008 (NCES, 2019; United States Department of Education, 2013). With the doors to higher education open to students with disabilities, Autism Speaks (2019) estimates one-third of young adults with Autism Spectrum Disorder (ASD) attend college.

After execution of an extensive literature review, I determined a body of research into the college populations of ASD students revealed a substantial gap in studies on the college social experience of students with ASD. Researchers focused on the social challenges students experience, needed support programs, and the neurodevelopmental background behind ASD symptoms (Barnhill, 2014; Cai & Richdale, 2016; Fletcher-Watson, Leekam, & Findlay, 2013). The gap in the research occurs in the type of research method employed within the qualitative and type of data collection procedures. The literature review conducted lacked a detailed narrative study focused on two or three ASD students retelling their social experiences in higher education. In the study, the researcher defined social experience as interactions between the participants and college peers, faculty, or staff members. ASD college students shared the opportunity to share their life stories giving the population a voice. The researcher selected the

qualitative narrative method (e.g., personal experience stories) to document ASD college students' social experiences within college settings.

### **Background, Context, History, and Conceptual Framework for the Problem**

The study had several objectives. First, the study gave a voice to traditionally marginalized participants who experienced a disability. Second, the study increased awareness within the Autism community, families, and higher education institutions of the social experiences of students with ASD. Third, the study raised awareness of ASD college students within the higher education community on their needs social needs creating discussion of new programs or improvement on current student support systems.

The researcher conducted the study through the qualitative method of narrative inquiry. Creswell (2013) explained researchers employing the narrative method give a voice to individuals traditionally not heard. Through the narrative method, students with ASD shared stories of their collegiate social experiences through stories. Caine, Estefan, and Clandinin (2013) explained that narrative researchers amass a collection of stories providing intimate accounts of experiences from participants. I utilized semistructured interviews and participant journaling as data collection methods. The interviews served as a method of obtaining life stories from the participants' past, and journaling allowed for participants' reflections on their social experiences. Once data were collected through the narrative method, the researcher organized data chronologically around the participant experience through narrative coding. Next, the researcher re-storied the experience to include the participant and other people's interactions through the method suggested by Creswell (2015). The *problem-solution narrative* method was used to re-story and contained the following literary elements: "Setting, characters, actions, problem, and resolution" (Creswell, 2015, p. 513).

The psychosocial theory by Chickering and Reisser (1993) of college student development referred to as the *Seven Vectors of Identity* guided the study. Chickering and Reisser (1993) devised seven vectors of development that college students move through at varying times and in no specific order. The *Seven Vectors of Identity* are as follows: *developing competence, managing emotions, move through autonomy towards interdependence, developing mature interpersonal relationships, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity*. To narrow the scope and topic of the research, the study focus was inspired by Vector #4, *Developing Mature Interpersonal Relationships*. Vector #4 involves the development of tolerance of differences among peers and the ability to cultivate intimacy.

Chickering and Reisser (1993) explained that students enter college with interpersonal relationship skills but need to obtain additional skills in order to build long-term relationships. During the college years, students typically experience relationships involving autonomy and attachment (Chickering & Reisser, 1993). While in college, students interact with diverse peers who share similar experiences, and according to Chickering and Reisser (1993) should develop tolerance of intercultural and interpersonal differences. Students developing tolerance avoid the use of stereotypes and biases. Also, Vector #4 involves increasing the capacity for intimacy in relationships with others, which can include “responsibility, respect, and honesty” (Chickering & Reisser, 1993, p. 172). Developing tolerance and intimacy can play a role in students’ ability to experience deeper relationships. Chickering and Reisser (1993) explained that students enter college with some interpersonal skills but need to acquire these additional skills to build long-term relationships.

Attwood (2007) explained that individuals experiencing ASD struggle with social interaction which many researchers and experts in the field recognize as a common deficient. Asperger (1944), a pediatrician whom coined Asperger's Syndrome, stressed social impairment as the most clear indicator of ASD (as cited in Attwood, 2007). When people experiencing ASD interact with others, social understanding and friendship problems may happen (Attwood, 2007). Knowing social interactions are a challenge but also an area Chickering and Reiser recognize as essential in the developmental growth of college students, I gathered data through participant lived stories to analyze the social experiences of college students with ASD.

### **Statement of the Problem**

After a thorough review of the literature available on college students who experience ASD, the researcher formed a problem statement: The study needed to be conducted as there was a scarcity of research giving ASD college students, a traditionally marginalized population in society and education, a voice through unique life stories of their social experiences within the higher education environment.

### **Purpose of the Study**

The purpose of the study was to allow college students with ASD to share their life stories. The stories collected for the study provided the lived experiences of ASD students, while attending an institution of higher education. Furthermore, I anticipated that the data brought awareness to higher education of the social experiences students who have ASD experience.

### **Research Question**

The researcher presented the following research question for the study: What are the life stories of the social experiences of ASD college students? Through the research method of

narrative inquiry, the researcher collected stories from participants for data in the study. Three ASD participants participated in the study. Participants shared their life stories of their social interactions within the higher education environment.

### **Rationale, Relevance, and Significance of the Study**

The utilization of narrative method made the study unique. Narrative researchers gather data sharing findings with the research community through participants lived stories (Zimmerman & Kim, 2017). The study added to the current literature by embracing the narrative method of collecting data of lived stories from a small number of college students with ASD. The current literature already acknowledges that social issues are present within the college environment for students with ASD. For example, professors and instructors experience confusion when ASD students have impaired eye contact (Kelley & Joseph, 2012). The research study gave the university community insight into the ASD student's personal experiences with faculty and staff. The study spurred ideas in other researchers of areas that need exploration through academic research. Another goal the study achieved was the creation of awareness of the social experience of students with ASD. Through awareness, administrative personnel at universities and other institutions of higher education can use the conclusions of the study and personal stories to provide improved or innovative supports to students with ASD.

### **Definition of Terms**

The following operational definitions are provided to increase comprehension of the study:

*Autism Spectrum Disorder (ASD)*: a neurodevelopmental disorder producing social interaction and communication deficiencies along with repetitive and restrictive behaviors (Van Hees et al., 2014).

*Narrative method/inquiry*: a qualitative research method utilizing participant stories as data (Zimmerman & Kim, 2017).

*Narrative coding*: chronological order.

*Problem-solution narrative method*: a method for analyzation of data in a narrative inquiry that allows researchers to organize stories into literary elements of the following: “setting, characters, actions, problem, and resolution” (Creswell, 2015, p. 513; Ollerenshaw & Creswell, 2002).

*Nonverbal*: “lacking or appearing to lack the ability to engage in speech” (Merriam-Webster, 2019, para. 3).

### **Assumptions, Delimitations and Limitations**

The researcher conducted the study with the assumption that college students with ASD have stories to be shared with the academic research community. Clandinin and Raymond (2006) pointed out past experiences of individuals with disabilities have traditionally been discounted and individuals have stories to tell. Through lived stories, individuals with disabilities are retelling their own stories rather than depending on society or other adults to tell their experiences (Clandinin & Raymond, 2006). As the researcher, I assumed the stories were true and accurate from the participants. I believed participants were forthcoming in retelling their life experiences in the form of stories and displayed a genuine interest in relaying their lived experiences. I believed students share stories promptly with thick, rich, descriptions. Furthermore, I assumed that subjects were committed to the study and displayed a high level of participation.

A limitation of the study was instrumentation. The researcher offered phone interviews as an option to accommodate participants who lacked a comfort level appropriate to share

information through video interviews. Attwood (2007) explained that individuals with Autism might not be comfortable making eye contact, so alternative means of gathering data were considered. To guard against any inaccuracies in the retelling of stories, I conducted member checking on the interview data. Member checking allowed participants the opportunity to reread their accounts and make any additions or deletions for accuracy. The second method for data collection was participant journaling. Poor effort in journaling on the participants' part could affect the amount of data collected. To prevent low participation in journaling, I communicated through email or text message when prompts are due.

Delimitations included boundary choices made by the researcher in sampling and setting. College students with a diagnosis of ASD were accepted into the study regarding social experiences of students with ASD. Data collection was limited to participants who experience ASD and not include data from parents or school staff as they have traditionally been used to assess the needs of students with ASD in previous studies. The researcher conducted member checking on data obtained through interview and journaling to ensure accuracy. Triangulation of data sources strengthened the credibility of data. Finally, the data analysis methods utilized in the study were transferable to other types of studies focusing on populations of traditionally marginalized participants.

### **Chapter 1 Summary**

With the passage of disability legislation, the public education system and higher education community are serving citizens with disabilities. The Center for Educational Statistics reported an increase in the percentages of students attending higher education institutions who experience a disability (NCES, 2019; Pillay & Bhat, 2012). Autism Speaks (2019) estimated one-third of young adults who experience ASD attend college. The study employed a narrative

inquiry method to retell the lived life stories of the social experiences of ASD college students attending higher education institutions. The following chapters review the current literature on the topic of ASD college students in higher education then follow with a mythological section detailing the process for data collection and analyzation in the study.

## **Chapter 2: Literature Review**

### **Introduction**

The Centers for Disease Control estimates one in 59 American children experience Autism Spectrum Disorder (ASD) today (Centers, 2018). Van Hees et al. (2014) characterized ASD as a neurodevelopmental disorder, which produces social interaction and communication deficiencies along with repetitive and restrictive behaviors. With the passage of disability legislation, early diagnosis, and improved treatment programs, young adults with ASD possess the opportunity to pursue higher education (Van Hees et al., 2014). Overall, statistics show that more students attending higher education institutions identify as having a disability. In 2015–2016, the Center for Educational Statistics reported that 19% of undergraduate students experienced a disability as compared to 10.8% in 2007–2008 (NCES, 2019; United States Department of Education, 2013). With higher education open to students with disabilities, Autism Speaks (2019) estimates one-third of young adults with ASD attend college.

With higher education as an option for students with disabilities, the ASD community embraced the idea that a college education is possible. The Autism community recognizes the social deficits associated with ASD are significant for college students (Wallace, n.d.). Recently, researchers placed more attention on ASD college students and their needs in higher education environments (Cai & Richdale, 2016; Howlin & Moss, 2012). With more students on campus experiencing ASD, researchers focused on the social challenges students experience, needed support programs, and the neurodevelopmental background behind ASD symptoms (Barnhill, 2014; Cai & Richdale, 2016; Fletcher-Watson, Leekam, & Findlay, 2013).

Through the literature review, a gap appeared in the research method and type of data collection procedures. The review did not reveal any detailed narrative study focused on two or

three ASD students to produce and retell their stories on the social experience of college. The researcher defined social experience as the interaction with college peers, faculty, or staff members. As the researcher, the study design offered ASD students the opportunity to share their life stories giving the population a voice. The researcher utilized a qualitative method (e.g., narrative inquiry) to document ASD college students' social experiences within college settings to increase awareness within the Autism community, families, and higher education institutions to create better support systems for this unique population of students (Creswell, 2013). The study had the following problem statement: The study needed to be conducted as there was a scarcity of research giving ASD college students, a traditionally marginalized population in society and education, a voice through unique life stories of their social experiences within the higher education environment.

The literature review followed a thematic and empirical organizational model. The state of the knowledge flowed from analyzing social issues from a neurodevelopmental perspective. Next, literature focusing on the needs of students was examined and concluded with researchers collecting data on the experiences of students from various involved parties.

### **Conceptual Framework**

Many young adults with ASD are attending higher education. These young adults may carry into adulthood impaired social interaction skills (Fleischer, 2012b). Research has shown that students are not receiving the social support needed through higher education institutions (Cai & Richdale, 2016). Cai and Richdale (2016) reported that students and parents believed institutions were not serving ASD students with social impairments through support programs. By hearing the voices of ASD students through a narrative method of qualitative research, their experiences may enlighten institutions on the social needs of this unique population of students

and increase awareness. I refer to the population as unique since students with ASD or any disability previously not afforded education at colleges or universities and due to the increase in ASD diagnoses in the United States (Centers, 2018; U.S. Department of Education, 2010). Zimmerman and Kim (2017) explained that narrative inquiry uses stories as data which brings the human experience into research. When narrative researchers employ the narrative method, the reader experiences real-life situations and the unique lives of participants through life stories (Zimmerman & Kim, 2017).

Through the study, the researcher viewed students' social experiences through a student development lens. The study will be guided by Chickering and Reisser's (1993) revised the psychosocial theory of college student development referred to as the *Seven Vectors of Identity*. Chickering and Reisser (1993) inspired the study framework by providing a human development lens with their theory of college student development. The study focused on Vector #4, but a review of the other vectors was useful in understanding the context of the theory. The *Seven Vectors of Identity* served as a framework of human development created with the knowledge of previous developmental theories (see Table 1). Movement between vectors can occur at any time, and students can revisit previously experienced vectors. In the end, Chickering and Reisser (1993) believed all students would eventually pass through each vector.

Chickering and Reisser (1993) asserted that students do not fit into ridged stages of development. In Vector #1, students *develop competence* in the areas of "intellectual competence, physical and manual skills, and interpersonal competence" (Chickering & Reisser, 1993, p. 45). Vector #2 encompasses *managing emotions*, including recognition of them and self-regulation, which applies to any age student. Students, in Vector #3, *move through autonomy towards interdependence*, which involves self-sufficiency and responsibility.

Chickering and Reisser (1993) address *developing mature interpersonal relationships* in Vector # 4, and the researcher discusses the vector later in detail as it relates to the study. Vector #5, *establishing identity*, depends on the previously mentioned vectors in order to form an identity. Chickering and Reisser (1993) explained once identity is established, “A solid sense of self emerges, and it becomes more apparent that there is an *I* who coordinates the facets of personality, who ‘owns’ the house of self and is comfortable in all of its rooms” (p. 49). When students assess interests and know their goals and interests for life after college, they experience Vector #6, *developing purpose*. Vector #7, *developing integrity*, involves the student taking rules and considering them in light of experiences and current situations. These encompass the seven vectors of college student development from Chickering and Reisser (1993).

Table 1

*The Seven Vectors*

Vector	Description
Vector #1	Developing competence
Vector #2	Managing emotions
Vector #3	Moving through autonomy towards interdependence
Vector #4	Developing mature interpersonal relationships
Vector #5	Establishing identity
Vector #6	Developing purpose
Vector #7	Developing integrity

The researcher utilized Vector #4 to guide the research study. According to Chickering and Reisser (1993), students develop relationships that balance autonomy and attachment during their college years. At times, students discover diverse peers who share similar experiences. These relationships affect students’ ability to have deeper relationships, manage feelings, resolve or process first impressions, and reconcile differences. Chickering and Reisser (1993) postulated students have some interpersonal skills but still need to acquire skills to build long-term relationships which require “other kinds of skills and attributes” (p. 145).

Chickering and Reisser (1993) revised the original framework, first published in 1969, to recognize the diversity of student populations and how diversity relates to the *Seven Vectors of Identity*. Chickering and Reisser (1993) explained with multicultural communities growing higher education holds responsibility for producing graduates competent in tolerance and appreciation for differences. Tolerance means individuals pass on the judgment of others and work to understand ideas foreign to their ways of thinking.

The study focused on Vector #4 as the conceptual framework to explore social, interpersonal relationships among Autistic college students who are known to have social impairments. Asperger (1944) characterized social impairment as behavior that typically is the most significant indicator of ASD (as cited in Attwood, 2007). Social understanding and friendship issues occur when people are experiencing ASD interact with others in one-on-one or group situations (Attwood, 2007). Attwood (2007) noted that one-on-one interactions might be more successful since the intellectual capacity to deal with social and nonverbal cues might be adequate. Social situations involving more people generally pose a greater challenge. Attwood (2007) explained that intellectual capacity might not be enough to juggle multiple interactions that require more time to process information.

Vector #4 centers on “developing mature interpersonal relationships” (see Figure 2; Reisser, 2013, n.p.). Within Vector #4, students develop “tolerance and appreciation of differences” and the “capacity for intimacy” (Chickering & Reisser, 1993, p. 146). Tolerance of differences involves understanding intercultural and interpersonal differences rather than communicating with stereotypes or unconscious bias. Understanding differences with friends can transfer tolerance to new acquaintances. The goal is to “refine first impressions, reduce bias or ethnocentrism, increase empathy and altruism, and enjoy diversity” (Winthrop University,

2007, para. 13). Chickering and Reisser (1993) cited the importance of multicultural competence in the increasingly diverse college and university settings across the United States today.

Colleges acknowledge the underrepresentation of non-European and female contributions to society by incorporating requirements into curriculums to address these populations by examining discrimination and inequality issues (Chickering & Reisser, 1993).

Bennett (1986) influenced the inclusion of tolerance in Chickering and Reisser's work through his work on six ethnocentric and ethno-relative tolerances (as cited in Chickering & Reisser, 1993). An examination of these states aids the research in the development of questions in the narrative research method proposal. Bennett (1986) stressed resistance to diversity follows along with the following developmental states: "Denial of Differences, defense against differences, and minimization of differences" (as cited in Chickering & Reisser, 1993, pp. 151–152). Denial of differences includes not accepting new acquaintances based on the fact that their behaviors are different from the norm (Chickering & Reisser, 1993). Bennett (1986) suggested in these situations, new acquaintances are considered less intelligent and segregation can occur between people (as cited in Chickering & Reisser, 1993). In defense against differences, people acknowledge differences but hold stereotypes about the other group. In Bennett's (1986) minimization of differences state, people rationalize that all people are the same such as physiologically similar (as cited in Chickering & Reisser, 1993). As people move through Bennett's model, they reach the ethno-relative stages.

The later stages encompass acceptance, adaptation, and integration of differences (Chickering & Reisser, 1993). In the acceptance state, people seek out the causes of differences, while accepting diversity. With the adaptation state, people use communication skills to interact within an intercultural environment. In the final state, multicultural recognition becomes

internalized by the person. Chickering and Reisser (1993) noted that tolerance development is not only relevant in multicultural relations but the realm of disability relations. Chickering and Reisser (1993) accepted Bennett's (1986) theory which aids in the understanding of tolerance. Chickering and Reisser (1993) listed tolerance as one of two components of the fourth vector. Chickering and Reisser (1993) utilized Bennett's theory as a springboard to define the tolerance component of the fourth vector. Identifying bias and stereotypes is at the forefront of the tolerance component and can be gained through understanding the ways individuals generate and continue intolerance (Chickering & Reisser, 1993). Chickering and Reisser (1993) cited previous psychological research by Allport (1961) who held altruism as the internal ability to value other's welfare. Chickering and Reisser (1993) stressed that empathy develops out of altruism and is a quality needed in today's world. Students acquire empathy as they care and help others to improve their lives (Chickering & Reisser, 1993). In addition to tolerance, the second component of the fourth vector is the ability for intimacy in relationships.

Vector #4 involves increasing the capacity for intimacy in several areas of students' lives with the hallmarks being "responsibility, respect, and honesty" (Chickering & Reisser, 1993, p. 172). Students with increasing maturity deal with sexual intimacy challenges such as arousal and consequences. These young adults exercise responsibility through improved communication, precautions, and sexual knowledge attainment. As students enter intimate relationships, Chickering and Reisser (1993) explained, "relationships are reciprocal and interdependent, with high levels of trust, openness, and stability" (p. 172). Students following along the vector are motivated to facilitate new friendships, recognize relationships that are a positive influence on the self, and exercise the refusal to remain in toxic partnerships. With the increased ability to distinguish positive intimate relationships, students begin to "anticipate the

needs and preferences of those they care about” and balance time spent with partners, alone, and with friends (Chickering & Reisser, 1993, p. 172). Winthrop University (2007) described the intimate relationship portion of the fourth vector as follows:

Intimacy encompasses a shift away from too much dependence or too much dominance and toward an interdependence between equals. Development means more in-depth sharing and less clinging, more acceptance of flaws and appreciation of assets, more selectivity in choosing nurturing relationships, and more long-lasting relationships that endure through crises, distance, and separation. (para. 14)

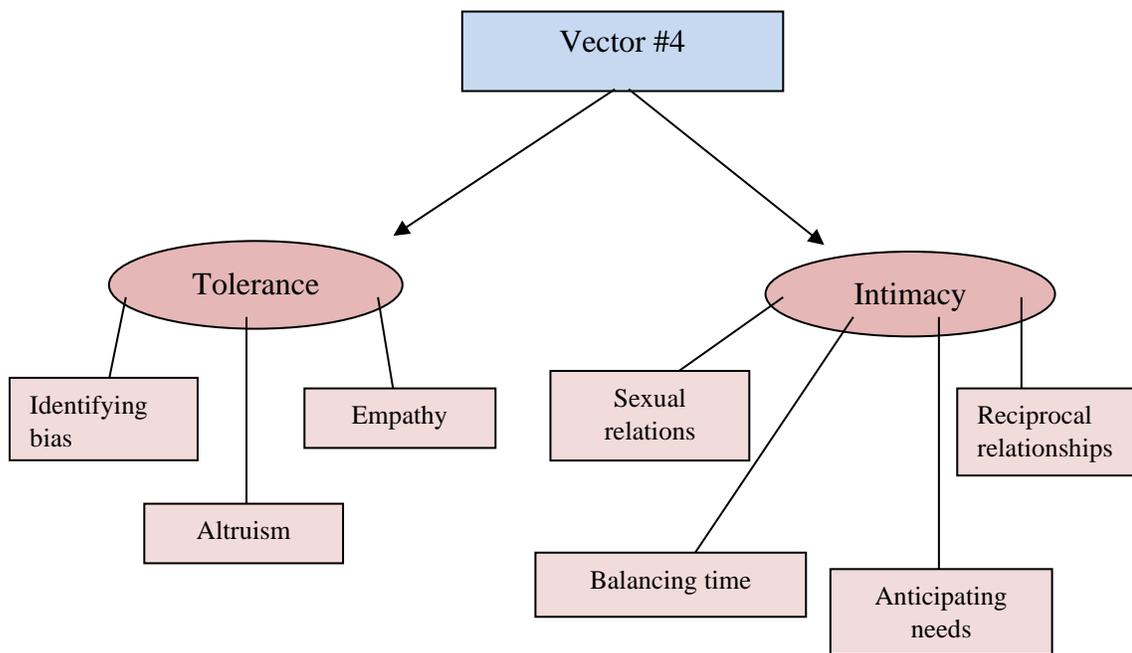
The attributes mentioned in Vector #4 relate to the research question as the vector deals with the social aspects of college students’ development while in college. The research question asked what lived social experiences are ASD students undergoing, which relates to the fourth vector. The data collected for the study on students with ASD may or may not meet the developmental criteria set by Chickering and Reisser (1993) for developing mature interpersonal relationships.

The fourth vector served as a framework to influence and guide the narrative methodology employed to obtain data from college students with ASD. The study used the vector as a guide to explore the social experiences of college students with ASD. The vector narrowed the focus to the social and mature relationships, which served as a springboard for gathering the stories on social experiences. Focusing on the fourth vector was appropriate due to the commonly known fact that social situations challenge people with Autism. Attwood (2007) postulated people with Autism experience social deficits in emotional reciprocity, codes of social conduct, and social reasoning. Also, Fleischer (2012b) noted that many young adults carry impaired social interaction skills into adulthood. Zimmerman and Kim (2017) explained

narrative inquiry participants share stories of their experiences. The stories can inform readers about the participants' unique life experiences and situations, as well as thoughts, feelings, or emotion of participants. I obtained participants through a private psychologist's office and two organizations from the Pacific Northwest region of the United States who have identified as experiencing ASD through a diagnosis. The research question for the study was as follows:

What are the life stories of the social experiences of ASD college students?

I used Chickering and Reisser's (1993) fourth vector as an inspiration for the focus on the social aspect of the college experience for students experiencing ASD.



*Figure 1.* The fourth vector from Chickering's Seven Vectors. Adapted from "Overview of Student Development Theory" by L. Reisser, 2013; "Education and Identity" by A.W Chickering and L. Reisser, 1993.

## **Review of Research Literature and Methodological Literature**

With the passage of the Education for All Handicapped Children Act (EHA) in 1975, students experiencing disabilities gained legal protection to pursue a public education (U.S. Department of Education, 2010). In 1990, amendments to EHA changed the name of the act to the Individuals with Disabilities Education Act (IDEA). Amendments in 1997 to IDEA included initiatives for transition services for high school students into adulthood (U.S. Department of Education, 2010).

Before the passage of major disability laws, many people experiencing disabilities resided in state institutions. United States Department of Education (2010) reported 200,000 people, who experienced significant disabilities, living in institutions in 1967. Individuals received basic care and lacked assistance with education or vocational rehabilitation (U.S. Department of Education, 2010). People with disabilities received a lack of basic rights to education and rehabilitation; the federal government administered training programs for professionals which are considered precursors to modern disability laws. For example, the Training of Professional Personnel Act of 1959 trained teachers and the Captioned Films Act 1958, and the Deaf Act of 1961 created films with closed captioning. In 1965, the Elementary and Secondary Education Act and State Schools Act granted assistance to states to educate students with disabilities (U.S. Department of Education, 2010).

The U.S. Department of Education (2010) explained through the passage of the IDEA that more students are accessing higher education. In 1987, 14.6% of students with disabilities attended higher education, and in 2005, the number rose to 31.9% (U.S. Department of Education, 2010). The enrollment rates increased for 2-year and 4-year institutions, while vocational and business school attendance decreased (U.S. Department of Education, 2010). The

Association on Higher Education and Disability (AHEAD) established guidance on disability documentation for higher education institutions (Klotz, 2012). Frequently, AHEAD revises guidelines to better assist colleges in evaluating disability student documentation. A recent update to guidelines was a response to amendments to the Americans with Disability Act (ADA) and a new understanding of disabilities (Klotz, 2012). When studying Autistic college students, the literature focuses on the students' social deficiencies and needs in the higher education environment. The researcher reviewed the literature for the study on the topic of Autistic students in higher education and their social experiences.

### **Neurodevelopmental Underpinning**

Some researchers utilized a neurodevelopmental foundation to analyze and understand the social deficits present in young adults with ASD. Mehling and Tasse (2016) addressed the new Diagnostic and Statistical Manual of Mental Disorders (DSM-5) and asserted that alternative ways exist to assess the severity of ASD and produce a more precise diagnosis. Mehling and Tasse (2016) suggested the instruments used to assess ASD be examined for validity and in determining an ASD diagnosis clinicians should utilize several standardized measures. For example, Mehling and Tasse (2016) recommended a combination of the following tests that measure social impairments and various adaptive behaviors: ADOS-II, SRS-2, SIS, and the Vineland II. Mehling and Tasse (2016) expressed that the system would assist in determining overall severity for communication and repetitious behaviors by exercising practices of validity which is a debated element of the new DSM-5.

Alpern and Zager (2007) examined the literature on the topic of ASD students in a college-based inclusion program and cited several studies. Seltzer, Krauss, Shattuck, Orsmond, Swe, and Lord (2003) reported adults with ASD continued to experience issues with

“stereotyped utterances and inappropriate questions” and struggled with nonverbal communication (as cited in Alpern & Zager, 2007, p. 428). Shrilberg, Paul, McSweeny, Klin, Cohen, and Volkmar (2001) determined articulation errors were higher among participants who experienced ASD or Asperger’s Syndrome (AS) (as cited in Alpern & Zager, 2007). Also, researchers reported that disfluencies (sound/syllable/word repetitions, word revisions) were frequent occurrences for people experiencing AS. Also, researchers noted loud and high-pitched voices. Researchers explained, “conversational competence was [*sic*] limited by reduced awareness of the meaning expressed by stress patterns in their voices and the voices of conversational partners” (Alpern & Zager, 2007, p. 429). Howlin, Mawhood, and Rutter (2000) and Selzer et al. (2003) asserted that language formation affects friendships (as cited in Alpern & Zager, 2007). Orsmund, Krauss, and Seltzer (2004) explained through a study that only a small percentage of ASD people meet the criteria for friendship (as cited in Alpern & Zager, 2007). Researchers defined friendship as mutual responsiveness between two people who participate in reciprocal activities outside of groups.

Fletcher-Watson et al. (2013) conducted a quantitative study to measure social interest in social information in young adults with ASD. Fletcher-Watson et al. (2013) explained social interest as follows: “making a distinction between basic-level person-centered social such as physical attributes of people (‘human’ information) and high-level social information such as hypotheses about mental states, emotion, and relationships (‘social’ information)” (p. 221). Researchers gave participants photos of people in various social situations. Researchers instructed participants to describe the image as if they were describing it to another person. Researchers reported that participants’ human and social information decreased in the second half of their descriptions but was not significant enough to indicate the absence of the

information. The instrument measured only social interest, not whether the descriptions were correct or accurate regarding interpretation. Fletcher-Watson et al. (2013) concluded, “Interest in social information may be largely intact- [*sic*], and indeed, such individuals may be highly motivated to interact with others and to create and maintain friendships” (p. 228). Other researchers, Hanley et al. (2015), also explored the social aspects of Autism.

Hanley et al. (2015) conducted a quantitative study to “compare social attention profiles between university students with and without ASD during real social interaction” (p. 869). The researchers acknowledged ASD adults bring into adulthood some of the social difficulties experienced at younger ages. Hanley et al. (2015) tracked and measured the movement of the eyes (e.g., “eye-tracking”) to understand social attention. Hanley et al. (2015) concluded through a structured social interaction gauging “eye-tracking” that ASD students do not outgrow difficulties related to Autism. Also, research by White, Kreiser, Pugliese, and Scarpa (2012) confirmed the presence of social challenges in the form of “social anxiety” in young adults experiencing ASD. White et al. (2012) explained through a quantitative study, “ASD features are related to increased aggressive experiences, broadly defined, and that hostility, in particular, is partially explained by social anxiety” (p. 460). A year earlier White, Ollendick, and Bray (2011) asserted psychiatric risks of social anxiety; depression, aggression, and hostility were “positively correlated” with ASD screening measures, and the extent of the conditions need exploration (p. 695).

Furthermore, Freeth’s (2012) quantitative study added to the previously mentioned research by studying traits related to ASD and the effect on social anxiety. Freeth (2012) found high levels of autistic traits (i.e., social skills, attention switching, and communication) in individuals create an increase in social anxiety. Freeth (2012) explained that social skills

predicted social anxiety in males more often than in females. In females, attention switching better predicted social anxiety. Overall, a high level of autistic traits in students meant they exhibited higher anxiety in activities and situations.

Similarly, Liew, Thevaraja, Hong, and Magiati (2015) added to existing research on ASD and anxiety by conducting a study to discover the relationship between Autistic traits and anxiety in the areas of social problem-solving and social competence. Through the research, researchers learned that positive relationships existed between ASD traits, anxiety, and depression. For social mediators (social problem solving, social competence, teasing experiences), Liew et al. (2015), “mediated the relationship of autistic traits with social anxiety” (p. 865). Liew et al. (2015) learned sensory experiences mediated between autistic traits and social anxiety.

These studies explored social deficits through a neurodevelopmental lens bringing awareness to the social difficulties young college students may experience who live with ASD. The studies failed to gather the experiences of students through stories. For example, Hanley et al. (2015) and White et al.’s (2012) research confirmed neurological deficits affecting social interaction. Hanley et al. (2015) and White et al. (2012) failed to capture the nature of relationships ASD students are experiencing in college, such as casual or intimate. The narrative inquiry study added to the existing literature by obtaining stories from ASD students about their social, interpersonal experiences in college.

### **Student Needs**

Another lens researchers utilized to explore the social side of college attendance for students experiencing ASD was through a need-based frame. Several researchers conducted studies to explore and examine the needs of students. Trevisan and Birmingham (2016) studied students with BAP (Broad Autism Phenotype) through a research sample and determined the

students scored lower on academic and social adjustments to college, as well as lower on personal-emotional adjustment as compared to the non-BAP sample group. Another group of researchers provided more information on the social conditions of young adults with ASD experience. Orsmond, Shattuck, Cooper, Sterzing, and Anderson (2013) conducted a study on social difficulties among young adults with ASD. The study compared the social participation of young adults with ASD who received special education services in secondary school to students experiencing intellectual, emotional, or learning disability who utilized special education services. Orsmond et al. (2013) expressed that young adulthood is a critical time for students in friendship maintenance and new social relationships. Through the National Longitudinal Transition Study-2 (NLTS2), Orsmond et al. (2013) looked for rates of social participation in activities involving the two groups of young adults. Orsmond et al. (2013) concluded young adult ASD participants who had received services through special education experienced higher levels of social isolation than participants with diagnoses of intellectual disability, emotional disturbances, or learning disability who received services through special education. For example, almost 40% of young adults with ASD never socialized with friends in person, and 50% of the participants did not receive phone calls or invitations from friends. Other studies, Chiang, Cheung, Hickson, Xiang, and Tsai (2012) and Cai and Richdale (2016), provided more knowledge on the social needs of students.

Chiang et al. (2012) examined factors of participation for higher education ASD students through a quantitative method. Researchers discovered that factors contributing to postsecondary attendance were “family characteristics, student characteristics, and transition planning” (Chiang et al., 2012, p. 693). Also, researchers found that 43% of college students experiencing ASD entered college straight from high school. Chiang et al. (2012) concluded that

ASD students need supports in place at the college level. Cai and Richdale (2016) were more specific in their quantitative study on college students. ASD students reported that higher education institutions supported them academically but not socially. Students noted receiving support through assignment extensions but experienced difficulty in reading communication innuendo within school email exchanges with faculty. Families agreed that students were not supported academically. Through focus groups, parents shared colleges provided limited academic support due to privacy laws, and college environments were not supportive of student sensory difficulties. Cai and Richdale (2016) learned that students transitioned from high school without any planning, and at the postsecondary level, disclosure of disability happened after enrollment or when a problem occurred. The insights from Cai and Richdale (2016) confirm findings by Roberts' (2010) study. Roberts (2010) indicated that schools with transition plans, including action steps, could guide the appropriate person or agency to carry out transition plan actions on behalf of students. Cai and Richdale (2016) accessed students and families to understand the needs and experiences of students. Other researchers such as Howlin and Moss (2012) studied the transition to higher education for students with ASD.

Howlin and Moss (2012) reviewed studies on Autism of individuals who transitioned into adulthood. ASD adults experience disadvantages upon entrance into adulthood in "employment, social relationships, physical and mental health, and quality of life" (Howlin & Moss, 2012, p. 275). The researchers reported a lack of support for ASD individuals entering adulthood to assist with integration into society. Hart, Grigal, and Weir (2010) examined students' options for higher education attendance. Options for students included dual or concurrent enrollment through the public school system as part of special education transition services positions students for adult transition services, college credit courses, noncredit courses, or remedial

offerings. College-initiated programs team with service agencies to offer a route to college for students with ASD. The programs are tuition-based and students apply through nontraditional methods. The individual or family can initiate supports include working with disability services, following traditional admission processes, or connecting with a campus advocate (Hart et al., 2010).

Szidon, Ruppard, and Smith (2015) postulated ASD students have unique transition challenges due to social interaction deficits and repetitive behaviors more so than peers. The researchers outlined five steps to successful transition plans as follows: Identify goals, link postsecondary goals to IEP goals, troubleshoot measurable goals, teach skills, and evaluate progress (Szidon et al., 2015). Szidon et al. (2015) suggest the steps for IEP teams to utilize in planning transition services for students. In addition to having well laid out transition plans, Quigney (2017) claimed school counselors play a vital role in the transition success of students. Students with disabilities possess unique requirements and issues that need to be understood by counselors. Nonverbal students experience more social difficulties in “making and maintaining friendships” (Quigney, 2017, p. 4). These students need the following skills in order to have a successful transition: “Self-determination, self-advocacy,” “perseverance,” goal-setting skills, and the ability to work with a support network (Quigney, 2017, p. 4). When counselors are cognizant of the skills needed by students, they will be better able to support students transitioning into adulthood. Students may transition from their family home into a residential community environment and receive occupational support. Quigney (2017) noted that students with ASD are employable, but the lack of social skills and issues with sameness could pose problems in the workplace. Zager and Alpern (2010) advocated for a Campus-Based Inclusion Model (CBIM) which forms a partnership between public school students with disabilities and a

local institution of higher education. A transition program of this scope allows high school students to attend their courses on a college campus with the support of a paraprofessional. The goal of the program is to educate students with ASD alongside their peers, readying them for an adult living (Zager & Alpern, 2010).

Through Papay and Bambara's (2011) study, researchers learned previous school district funding affected who could participate in Postsecondary Education Programs (PSE) programs making the opportunity unavailable to some students. Researchers believed an examination of characteristics of PSE programs and the extent to which Intellectual and Developmental Disabilities (IDD) students participate in college classes was necessary. Academic abilities and the type of higher education institution affect students' participation in class. Papay and Bambara (2011) stressed that the study is important due to students' rights for inclusion. When funding was not a deterrent in accessing higher education programs, researchers studied how transition programs can increase enrollment at colleges. Another study on transition programs by Wei, Wagner, Hudson, Yu, and Javitz (2016) studied the relationship between enrollment in higher education and transition programs. Researchers learned that 40.29% of subjects actively participated in transition planning meetings, and 24.20% of students had the goal of attending higher education documented in the transition plan. Active participation and goals increased the likelihood that a student enrolled in higher education (Wei et al., 2016).

Once students entered higher education, Dipeolu, Storlie, and Johnson (2015) focused on transitions into the career world for college students. The researchers found ASD students experienced challenges in the following areas: Social deficits ("self-concept, self-awareness, social perception, soft skills, negotiation, and social interaction"), grooming habits, executive functioning, problem-solving, decision-making skills (Dipeolu et al., 2015, p. 179). Dipeolu et

al. (2015) suggested that colleges create supports to assist students with social deficits and prepare students to explore strength-based careers. The researchers recognized the existence of challenges facing Level I ASD students in their transition to employment. Even though services have improved for people with ASD, coping with the disability can affect personal, social, and career aspirations. In the study, Dipeolu et al. (2015) admitted the challenges facing students in college and the workplace and recommended ways to ensure a smooth transition into the career world for Level I ASD individuals. Project SEARCH, a transition program for ASD youth, is similar to college-focused programs with the goal of employment after high school. In a study related to the program, Wehman et al. (2013) reported on two students and their internship experiences. The program was similar to college transition efforts. Supports offered to ASD students were comparable to those offered by transitioning to higher education programs. Project SEARCH participants were offered supports for social skills, communication, and visual supports. Goal-setting was paramount in the program and seen as useful in other literature on transitioning to higher education (Wehman et al., 2013).

Shattuck et al. (2012) found ASD young adults were at high risk for no postsecondary or vocational education, as well as employment especially in the first two years after high school. Shattuck et al. (2012) analyzed data taken from the National Longitudinal Transition Study 2 (NLTS2) of parents and students which collected data on participation in these three areas and compared them to youth with speech/language impairment, mental retardation, and learning disability. Researchers determined six years after high school, 34.7% of youth with ASD participated in college, and 55.1% held a paid position of employment. ASD youth had the lowest rates of employment compared to other disability categories. Other researchers in the literature studied students once they entered higher education.

Ellison (2013) conducted a quantitative study to gauge the readiness of colleges in instructing and supporting students with Autism. Researchers found that colleges accommodate students but only through the offices of disability services. According to Ellison (2013), disability services assisted students with accommodations, advocacy, and disclosure processes. Ellison (2013) learned that 15% of respondents reported that their college did not offer any specialized services in the areas of social and communication skills for students with ASD. In another study, Fleischer (2012a) declared the support provided by universities fails to assist students in day to day living. The researcher talked to three Swedish students to determine if university support is a barrier or facilitator in the higher education environment. Fleischer (2012a) utilized a case study methodology with interviews and analyzed data into themes. Students reported themselves as outsiders, and the researchers determined a theme of “alienation” and characterized belonging and obtaining confidence as a “struggle” for students (Fleischer, 2012a, p. 182). Alienation refers to identity, diagnosis, bullying, and loneliness. Fleischer (2012a) explained that struggles were in the areas of daily routines, support, interests, and plans.

In another study on university support for students with hidden disabilities on campus, Couzens et al. (2015) used a case study method to evaluate students’ use and perceptions of university supports. Couzens et al. (2015) obtained data from seven undergraduate students who identified as having a hidden disability. Students reported they did not want to access supports but rather preferred to rely on family and friends for support. Couzens et al. (2015) noted a degree of difficulty for students not living in close physical proximity to their family. University programs for students with disabilities reach many students, but some students continued to

struggle in program group environments. Even with program evaluations to drive improvement, institutions find challenge in meeting the needs of a diverse group of students.

Van Hees, Moyson, and Roeyers (2014) expressed a similar concern that students experience challenges in several areas upon entrance into higher education, making adjustment difficult. Van Hees et al. (2014) conducted a qualitative study using grounded theory and interviews to understand the experiences of students. ASD students experienced difficulty in new situations and with unexpected changes. Also, students exhibited trouble navigating social relationships, information processing, time management, and disability of disclosure (Van Hees et al., 2014). Also, Anderson, Shattuck, Cooper, Roux, and Wagner (2014) conducted a quantitative study to gauge the postsecondary housing selection of young adults. Anderson et al. (2014) found that ASD college students have a different living experience than other peers with disabilities. Higher rates of ASD students lived with a parent after high school and for more extended periods. Also, ASD individuals had the highest rate of supervised living arrangements and the lowest rate of independent living (Anderson et al., 2014). For those students opting to live with a roommate, Faso, Corretti, Ackerman, and Sasson (2016) discovered through the utilization of Actor-Partner Interdependence Models that mismatched roommates based on aloofness had less relationship satisfaction. If both roommates were aloof, the satisfaction level was higher. Faso et al. (2016) stressed that relationship development needs more attention in higher education.

Koegel, Ashbaugh, Koegel, Detar, and Register (2013) furthered the social aspect of collegiate life by studying ASD student attendance at events through direct observations, peer reports, and video. Students avoided social events, but attendance increased following participation in an intervention program. Also, students reported a higher level of collegiate

satisfaction after the intervention. Koegel et al. (2013) noted additional improvements in the areas of nonstructured social situations, grade points, and employment. Koegel et al. (2013) explained that ASD students want social interaction but experience social deficits leading to isolation and loneliness. In a more recent study, Colclough (2016) conducted phenomenological research on how social experiences impact college retention and persistence. The researcher found the following themes: “diverse experiences in campus engagement, the impact of noise on participation and campus engagement, living accommodations, faculty engagement and socialization, intentionality with peer and classmate interactions, romantic experiences and peers as mentors” (Colclough, 2016, p. 83). The researcher noted that nonengagement in social events was intentional or done cautiously by half of the students studied. Students noted reasons for their avoidance of social events as crowd size, anxiety, and disinterest. Other researchers delved into the impact of postsecondary institutional interventions on students with ASD.

Carter et al. (2017) explored an area of need not previously mentioned. The researchers studied the "impact and social validity of peer support arrangements" in the classroom for high school ASD students (Carter et al., 2017, p. 207). Carter et al. (2017) reported that peer interactions happened 100% of the time during the intervention. The interactions mostly took place with the trained peer partners rather than with untrained peers. The researchers stated, “83.2% of interactions from the focus student were to peer partners, and 84.2% of all interactions to the focus student came from peer partners” (Carter et al., 2017, p. 215). Carter et al. (2017) noted no negative impact on academic performance in three of the four students followed in the study. Academic performance was maintained or increased (Carter et al., 2017). Also, Lounds et al. (2012) confirmed the need for more research on the topic through their study of interventions. Students’ voices came to the forefront in the concluded study as they shared their

stories. The study used a qualitative narrative method allowing the audience to hear students' voices through the sharing of stories. As researchers concentrated research efforts on the needs of students, others began to look to nontraditional participants as data sources.

### **Study Participant Trends**

Over time researchers gathered data from participant perspectives other than individuals with ASD enriching the body of literature. Fleischer (2012b) consulted relatives and support personnel from campus to understand the college experience of students with Autism. The researcher learned relatives might be deficient in situational information the Asperger Syndrome (AS) student experiences and be unable to collaborate. For example, one parent explained she was unaware of the exact support her son received from the university. Fleisher (2012b) explained that parents and families could aid colleges by being a support system to students and by contributing their understanding of any impairment. However, Fleisher (2012b) concluded that higher education institutions must adjust current support systems to assist ASD students with cognitive impairment issues.

Similarly, Barnhill (2014) conducted a study gathering data from campus support personnel. The employees provided information on current campus supports for students with ASD. Through an examination of the data, Barnhill (2014) learned institutions need more passionate personnel in the implementation of support programs, determination of the individual needs of students, and collaboration from the parents and campus departments. Researchers noted that programs lacked ASD trained administrators and programs suffered a lack of funding (Barnhill, 2014). Another researcher, Longtin (2014), stressed the importance of collaboration and coordination across campus to support students with ASD. Longtin (2014) suggested using

existing infrastructure to support ASD students until specialized programs are developed, such as student counseling services and learning centers.

In another study, Knott and Taylor (2014) utilized focus groups comprised of students and staff to better understand the needs and current supports for students with Autism in the United Kingdom (UK). Through thematic analysis, Knott and Taylor (2014) discovered differing views from students and staff concerning sensory issues and daily life challenges, which impacted academic performance. Knott and Taylor's (2014) study is important due to the different perspectives provided by participants as it is relevant to participant selection and data analysis.

Hammond (2015) postulated that the success of students with ASD in higher education involves not only student affairs professionals but also faculty members. Hammond (2015) cited Mercyhurst University for their efforts in assisting ASD students by creating advisory boards composed of students, faculty, and staff who work to identify strategies to assist students in being successful at the postsecondary level. Gobbo and Shmulsky (2013) conducted a qualitative study with focus groups of college faculty members and utilized group transcripts for data analysis. Data centered on "theory of mind and understanding audience, weak central coherence in cognitive processing, and struggles with [*sic*] executive function" (Gobbo & Shmulsky, 2013, p. 13). Faculty viewpoints focused on the strengths and weaknesses of students with ASD in the classroom, critical thinking abilities, and teaching strategies. Faculty members reported that students did not recognize nonverbal cues when a discussion subject changed or abide by conventional physical boundaries.

Regarding data collected on critical thinking, an instructor reported that one student declined to work with classmates explaining he was smarter than classmates. Classroom

techniques suggested by faculty included more structure and recognition of emotions. Faculty reported change and ambiguity were difficult for students, and they preferred classrooms to cafeterias. Instructors suggested establishing classroom routines and provide the format of the course upfront.

Two other groups of researchers Zager, Alpern, McKeon, Maxman, and Mulvey (2013) and Kelley and Joseph (2012) reported similar findings in their case studies of students. Zager et al. (2013) noted that ASD students struggled within the classroom with eye contact and lack of expected facial expression. Kelley and Joseph (2012) reported from the instructor's point of view that the lack of reciprocal eye contact was confusing. The study aimed to allow ASD students the opportunity to share their social experiences through stories. These stories could serve to bring awareness and understanding to faculty as to the commonly discussed lack of eye contact given by individuals with ASD.

Wadlington, DeOrnellas, and Scott (2017) obtained data from disability services personnel. The researchers believed the personnel had perceptions that researchers needed to explore to improve the transition to higher education process for students with disabilities. The majority of colleges and universities lacked transition plan coordination with secondary schools. Also, researchers found a "slight majority" of higher education personnel approved of receiving reports (IEP's and Section 504 plans) from high schools (Wadlington et al., 2017, p. 213). Respondents reported they rarely accepted reports from high schools to determine eligibility. Wadlington et al. (2017) noted, "Postsecondary [*sic*] DSS personnel reported a halfhearted view" of the usefulness of transition reports (p. 213). In general, accommodations are reasonable adjustments or modifications to the environment or assignments. For example, accommodation for a hearing-impaired student in a lecture hall could be a note-taker or interpreter based on the

type of interaction within the class. Disability accommodations for students do not weaken or change a course but rather reduce barriers created by the disability. Hagner et al. (2012) studied the effectiveness of a transition to higher education intervention. The first group of participants received group training for families on the transition process, person-centered planning, and career assistance. Researchers collected data pre and post-intervention. Participants in the second group received current transition services, which proved to not be useful in meeting transition goals. Hagner et al. (2012) concluded that the first group had significant increases in the ability to make future career decisions, self-determination, and higher future expectations by students and families.

In another trend, researchers consulted students with ASD for data on the college experience but not in-depth. Altman (2013) explored the topic by consulting students with ASD through a qualitative methodology, phenomenological study with semistructured interviews. Altman (2013) asserted by including ASD students' voices, researchers might gain more insights on student social experiences and students' perceptions of their social experiences. Even though Altman (2013) attempted to hear the voices of students, the depth of the data could have been deeper through a narrative method. For example, Altman (2013) reported that ASD students felt that peers were more mature at the postsecondary level. One respondent felt that the transition from acquaintance to friendship was difficult (Altman, 2013). On a similar topic, Trammell (2013) conducted research that asked students to consider desirable and undesirable social behaviors. Trammell (2013) sought, through a qualitative study utilizing structured interviews, to record students' responses to a request that students create lists of wanted and unwanted behaviors from social interactions related to classroom or school interviews for graduate school or employment. For example, one student listed processing feedback as an unwanted behavior

mentioned. Trammell (2013) turned the lists into resources to locate television shows that exaggerated similar behaviors. Students observed the shows and documented behaviors relating them to their situation. Students reported their experience with the exercise with one stating he gained more confidence in looking at other people and his surroundings through the exercise. Another student reported she was able to use smiles at appropriate times to connect with interviewers. The study used a qualitative narrative method to explore unique stories of social experiences from ASD students themselves. The collected stories provided specific situations and details on conversations and social interactions by ASD college students where there is a lack of appropriate use of social cues by the student.

A final example of participant trends involved a quantitative study on peers of ASD students as the source of data. Nevill and White (2011) claimed that more students with ASD without co-occurring intellectual disabilities are attending college and research is needed in understanding peer openness to ASD student characteristics. The “results showed a significant difference in openness between students who had a first-degree relative with an ASD ( $n = 18$ ) and a gender-matched comparison group of students without such experience” (Nevill & White, 2011, p. 1619). In another study, Gardiner and Iarocci (2014) found that quality and quantity were precursors to openness to peers with ASD in a study on peer openness to volunteering with ASD students. In another study, Altman (2013) found the theme of feeling socially accepted by peers as important to ASD students. The research by Altman (2013) and Nevill and White (2011) provided colleges with an awareness of the ways non-ASD students view ASD students, and ASD students want social acceptance.

In summary, the state of the literature shows a gap in the method employed in qualitative methodology. Students’ voices are just beginning to be heard but only through brief interview

questions and answers. I believe a narrative research method was needed to provide a view into the lives of college students with ASD and their social experiences. The current literature lacks detailed accounts of the student experience. The phenomenological method focuses on finding a concept or phenomenon through life experiences, so the researcher chose narrative inquiry. Through the narrative method, the research included a small number of students to share their stories of experience (Creswell, 2013). Furthermore, the narrative method served to enhance previous studies that did not delve deeply into students' actual experiences.

### **Review of Methodological Issues**

Researchers studying the topic of social aspects of college students experiencing ASD utilized either quantitative or qualitative methodologies. Through the methodologies, researchers learned about the social issues facing college students with ASD. By utilizing a quantitative methodology, researchers delivered studies that reported generalizations and used statistical analysis to understand data. Hanley et al. (2015) recruited 15 college students through Disability Services at a UK University. The final sample contained 11 students who had a DSM diagnosis of ASD. Researchers matched ASD students with peers who did not experience a disability. Researchers employed a 65-item SRS (Social Responsiveness Scale) which gave an overall social reciprocity score. Researchers converted the scores to T-scores and they decided on whether the behavior was in a normal, mild-moderate impairment, or severe impairment range.

Hanley et al. (2015) utilized ANOVA's in data analysis. The TD (Typically Developing) group viewed eyes longer than the ASD (Autism Spectrum Disorder) group (Hanley et al., 2015). The researchers confirmed that students with ASD were challenged in sustaining eye contact but was limited in being able to report on actual experiences of students. Other researchers used the quantitative method to measure hostility in students with ASD and social

anxiety (White et al., 2012). White et al. (2012) employed surveys in the form of the Autism Spectrum Quotient (AQ), Buss and Perry Aggression Questionnaire, and the Social Phobia and Anxiety Inventory-23 (SPAI-23). Characteristics of ASD and social anxiety were found to be “significantly associated with hostility” (White et al., 2012, p. 459). The studies established through statistical means that social challenges occur in college students with ASD without direct conversations with participants.

In qualitative studies, researchers utilized the opportunity to explore views held by participants through direct contact with human subjects. With the methodology, human subjects have the opportunity to share their thoughts or feelings, as well as to be observed in their actual environments (Atieno, 2009). Van Hees et al. (2014) utilized the qualitative method of grounded theory and semistructured interviews to explore the ASD student experience upon entry into college. ASD students had difficulty in new situations and with unexpected changes. Also, participants reported difficulty in navigating social relationships, information processing, time management, and disability of disclosure (Van Hees et al., 2014). The study collected descriptions of students’ social experiences at college, offering their perspective on situations and relationships.

Similarly, Cai and Richdale (2016) collected data on the experience and needs of ASD college students through semistructured focus groups with thematic analysis. Students reported that higher education supported them on an academic level but not socially. Families believed students were not supported academically or socially at institutions. Researchers learned that secondary schools did not plan participants’ transitions to higher education institutions. Participants reported disclosure of disability frequently happened after enrollment or when a problem occurred (Cai & Richdale, 2016). Cai and Richdale’s (2016) study added to the

previous literature by obtaining data in the form of words straight from participants through focus groups.

Quantitative methodologies employed in the literature used numbers rather words to explain the college experience of ASD students on a social level but could not understand how or why. Since many quantitative studies are unable to reveal how something occurs, a narrative method could be beneficial and contribute to the literature. Also, important to note is the previous qualitative research utilized semistructured interviews and focus groups. For example, some researchers utilized interviews for the collection of data which provided word-based data. The one method overlooked by researchers in the literature is the narrative inquiry method. The research utilized the narrative method to document stories of individual ASD students' social experiences in college. The narrative method added to existing qualitative research by providing more details on the students' experiences and provided a storied account of their social experiences, which is lacking in the current body of literature. Furthermore, the narrative method added to the current literature.

### **Synthesis of Research Findings**

To explore a research question or topic, researchers employ a quantitative, qualitative, or mixed-method in studying the social sciences (Creswell, 2014). Researchers utilize a quantitative approach to explore a theory through the examination of variables. Many quantitative methodologies employ instruments to measure variables. Researchers use statistics to analyze data obtained through the instruments (Creswell, 2014). In qualitative methodology, the researcher looks for meaning the participants make about their issues or problems (Creswell, 2014). Researchers collect data in the human subjects' natural environment, utilize inductive analysis, and interpret data. Mixed methods are the final methodology involving using both

methods, quantitative and qualitative. Creswell (2014) explained by combining the two approaches, some studies are stronger than if researchers employed one single methodology.

Furthermore, Creswell (2014) explained the philosophical worldview plays a role in the type of research methodology employed by a researcher. By philosophical worldview, Guba (1990) explained the concept as follows: ““a basic set of beliefs that guide action”” (as cited in Creswell, 2014, p. 6). In the end, the researcher’s worldview contributes to the choice of the research methodology employed. In examining the literature on the social experiences of college students with ASD, most researchers utilized a single methodological approach to the topic.

When researchers employed the quantitative method on the social implications of Autism on young adults, strengths, and weaknesses were present in the studies. Many researchers focused on the neurodevelopmental and physiological issues affecting social relations (Hanley et al., 2015). In Hanley et al. (2015), researchers assisted in quelling misconceptions of mediocre parenting and confirmed Autism’s physiological presence within the body. Furthermore, Hanley et al. (2015) showed through an eye-tracking study ASD students do not outgrow difficulties related to Autism. The claim was validated through the research using a semistructured social interaction to gauge eye-tracking (Hanley et al., 2015). One negative aspect to the study involved the inflexibility of the method to record actual words or stories from the participants related to their experiences with making eye contact with peers. Through the data, researchers learned that eye contact issues exist but not how students are experiencing the issue in the actual social environment. In quantitative methodology regarding the social developmental weaknesses of Autism, researchers proved social problems are neurodevelopmental.

In another quantitative study, White et al. (2012) presented data illustrating social anxiety was associated with hostility. Statistical analysis was utilized to discuss the data collected,

which may reduce human error or bias. The study complemented Alpern and Zager's (2007) work on specific communication deficiencies in the ASD population. A negative aspect of utilizing quantitative methodology is in the explanation of the data, which the lay reader or audience could conceive as confusing. Surveys utilized by researchers included the Autism Spectrum Quotient (AQ), Buss and Perry Aggression Questionnaire, and the Social Phobia and Anxiety Inventory-23 (SPAI-23), which may be unfamiliar to university personnel attempting to utilize the findings. In the end, White et al. (2012) proved the link between social anxiety and hostility, which was the aim of the study.

A final weakness that surfaced in quantitative research was related to the pool of participants in a study by Trevisan and Birmingham (2016). The researchers created a major flaw in their execution of the study by not setting selection criteria that were purposeful and would inform the research topic. Trevisan and Birmingham (2016) failed to require an official ASD diagnosis from participants compromising the integrity of the data. Within a population of ASD individuals, researchers can practice randomization and stratification. For example, a study concerning ASD students can utilize stratification by having a representation of both genders (Creswell, 2014).

In qualitative research methods, researchers utilized alternative methods to study the social aspects of Autism in young adults rather than a reliance on surveys and statistical analysis. Koegel et al. (2013) utilized direct observations and peer reports over 33 weeks to obtain data about student participation in a social support program for college students. Results included students want to be social but lack the skills necessary to attend social events successfully. Following participation in the program, students' attendance increased at social events. Also, students reported a higher level of collegiate satisfaction after the intervention. Additional

improvements were noted in the areas of nonstructured social situations, grade points, and employment (Koegel et al., 2013). The disadvantage of the method was that researchers did not document comments from participants but rather, they utilized observation. The narrative method of the study provided detailed stories of the social experience as told by students.

In another study, Van Hees et al. (2014) employed a grounded theory method and used semistructured interviews to explore the difficulty ASD students had in new situations and with unexpected changes. Van Hees et al. (2014) learned that students experienced trouble navigating social relationships, information processing, time management, and disability of disclosure. The interview format allowed researchers to hear some of the concerns and experiences of students. One student expressed academic and social concerns in transitioning to higher education, but the information was brief and anecdotal. The study by Van Hees et al. (2014) lacked individual stories of social experiences, which the study provided. The completed study collected stories on social experiences in regards to relationships bringing to the current literature first-hand accounts from students and their insights on the interactions.

To address the weaknesses of both methods, the study recognized the importance of the voices of college students with ASD. The researcher employed a narrative research method to discover the actual social experiences of college students with ASD. Clandinin and Raymond (2006) explained that the narrative method relies on human beings' affinity to storytelling and their lived stories. Clandinin and Raymond (2006) contended the stories of individuals and populations who experience disability have traditionally been unattended to or discounted. In the completed research, I studied a small number of students with ASD diagnosis by compiling stories of their social experiences in college.

The previously mentioned studies had weaknesses in data interpretation, participant sampling practices, and limited input from students. I proposed the narrative method, which allowed easier understanding of conclusions from the study. By reporting conclusions and data based on a narrative method through stories, higher education institutions will be able to easily read the findings and adjust their programs to serve ASD students. To address the second weakness, I recruited participants with an ASD diagnosis as a requirement for participation in the study. The study did not discriminate based on gender, race, ethnicity, or sexual orientation. Finally, the researcher used the narrative method giving a voice to students with ASD through detailed, descriptive, lived stories.

Creswell (2014) explained the “transformative approach” to research takes influence from the writings of Paulo Freire and others who focused on marginalized individuals and addressed social oppression (p. 9). When a researcher holds the “transformative approach” to research, Creswell (2014) explained, “the inquirer will proceed collaboratively so as to [*sic*] not further marginalize the participants as a result of the inquiry” (p. 9). The researcher possessed the worldview described by Creswell (2014), which aided in the selection of the qualitative methodology of the narrative inquiry for the completed study. The study filled a gap and added to existing literature, while at the same time recognized the current body of literature lacked ASD voices in story or narrative form. Creswell (2014) stressed that transformative research allows the researcher to hear participants’ voices. The possibility of change and eventual improvement to lives exists with the research method (Creswell, 2014).

### **Critique of Previous Research**

As mentioned in the previous section, the literature on the topic of Autistic college students’ social experiences has centered on quantitative and qualitative methodologies

recognizing students with disabilities desire to attend higher education institutions. Researchers highlighted the social needs of students with ASD but also examined the physiological aspect of the disability and collected data from family, college staff, and ASD students on the college experience. Researchers discussed recommendations for colleges to serve better the population of students with ASD based on the research findings.

The researchers explored and recognized the social deficits present in ASD through quantitative and qualitative studies. Researchers identified attributes affecting social interactions and relations. Alpern and Zager (2007) reported that adults with ASD continue to experience communication deficits of inappropriate questions, articulation, and disfluencies in social situations. Hanley et al. (2015) added to the literature by conducting a study to determine association "between gaze behavior and social deficits in cognitively able adults with ASD" (p. 871). In social interactions, ASD students focused less on the eyes and more on mouth movements creating less communicative signals (Hanley et al., 2015). Freeth (2012) tested for social anxiety and determined participants with high levels of Autistic traits increased social anxiety. In another study, White et al. (2012) reported that social anxiety had a significant relation to hostility. Social anxiety worsened the experience of hostility and aggression, as shown in participants (White et al., 2012, p. 453). Researchers produced work examining different facets of social and communicative deficits.

Other researchers went beyond establishing the existence of social and communicative deficits by collecting data on behaviors exhibited by ASD college students. Faso et al. (2016) utilized Actor-Partner Interdependence Models, which illustrated roommates who experienced a mismatch on aloofness had less relationship satisfaction. If both roommates were aloof, the satisfaction level was higher. Koegel et al. (2013) shared results regarding college student

attendance at social events. Three ASD college students reported no attendance at social events, but after a pilot program involvement attendance increased. The pilot program was an intervention providing instructions in a step-by-step format for social planning. Research staff performed checks on participants, and participants completed a log of their activities. Participants reported a higher level of collegiate satisfaction after the intervention. One participant experienced a higher GPA after the intervention, hosted a party, and enrolled in a dance class. Additional improvements were noted in the areas of nonstructured social situations, grade points, and employment (Koegel et al., 2013). Besides research on ASD deficits and behaviors, researchers have accessed a wide array of participants in data collection efforts.

To understand the needs of college students with ASD, researchers turned to parents, college personnel, and students for data. Altman (2013) conducted a qualitative phenomenological study on the social experiences of students with Autism. The researcher used semistructured interviews to gather data from 13 college students. After data analyzation, Altman (2013) concluded that participants had voices, needs, and experiences to share. Cullen (2015) employed qualitative methodology characterized as naturalistic inquiry, which utilized questionnaires, focus groups, and interviews. Researchers collected data from 24 students from five universities about their social needs and whether the needs were met (Cullen, 2015). Cox (2017) continued the interest in gathering data from ASD students through the qualitative methodology. Cox (2017) employed semistructured personal interviews to explore student voices, identities, self-advocacy, and communication challenges. Researchers have conducted various types of interviews but not a narrative approach, which the study accomplished.

Clandinin and Connelly (2000) stated, “Narrative inquiry is aimed [*sic*] at understanding and making meaning of experience,” and according to the authors, the method provides a way

“to think about [*sic*] experience” (p. 80). I utilized interviews that allowed participants to tell their stories of their social experiences from college. In conclusion, researchers established the social deficiencies related to an ASD diagnosis. Researchers reported that adults continue to experience communication issues which were explained through studies on gaze behaviors and anxiety (Alpern and Zager, 2007; Freeth, 2012; Hanley et al., 2015). Other researchers gathered data on the needs and experiences of the population from parents, college personnel, peers, and ASD students. Participants in studies reported that colleges should do more to assist students in the transition to college, social relations, and academics (Altman, 2013; Cullen, 2015). In the end, the sharing of research findings with university and college communities will serve to raise consciousness and give students a voice. Eventually, higher education may hear their voices and improve current programs and implement new ones. The study filled the literature gap by conducting a narrative inquiry which chronicles stories from ASD students about their social experiences and gives them a voice. Furthermore, the study added to the existing body of knowledge by providing detailed stories of the social experiences of ASD college students. Clandinin and Connelly (2000) explained that narrative inquiry is a way of “representing and understanding experience” and allows for storytelling of an “individual’s life experience” (pp. 17–18). Through the telling of stories, individuals share who they are and recount their past experiences. Ultimately, they share the impact of these experiences on their current self (Clandinin & Raymond, 2006)

## **Chapter 2 Summary**

The Education for All Handicapped Children Act (EHA) and the Individuals with Disabilities Education Act (IDEA) opened the possibility of higher education attainment for students with disabilities. The increase of attendance at college of students with disabilities has spurred research interest in the topic of Autistic students in higher education. Researchers studying the topic employed quantitative or qualitative methodologies. By utilizing a quantitative methodology, researchers delivered studies that reported generalizations and used statistical analysis to analyze data. Through the quantitative method, researchers confirmed the social deficits students experience and shed light on the neurodevelopmental challenges faced by students. Qualitative researchers focused on semistructured interviews containing brief interview questions and answers from participants, leaving a gap in the literature. Researchers pulled data on the social experience and collegiate needs of students by gathering data from students, parents, and college personnel.

Zimmerman and Kim (2017) positioned narrative inquiry aside from traditional qualitative methods calling the method *post-qualitative* as the method departs from *epistemological concerns*. According to Zimmerman and Kim (2017), narrative inquiry deals with *ontological concerns* such as being, existing, and concerning. Narrative inquiry is a “perpetual process of co-creating meaning” (Zimmerman & Kim, 2017, p. 18). I used the narrative method to provide a view of the social experiences of college students with ASD in higher education. By utilizing the narrative method, I collected stories of the social experiences of college students with ASD. The narrative method enhanced previous studies that lacked detailed, rich descriptions of students’ experiences. By employing a post-qualitative method, the stories provided brought awareness of the state of being experienced by students with ASD and a view into the individuals’ existence in higher education.

## **Chapter 3: Methodology**

### **Introduction to Chapter 3**

Denzin and Lincoln (2011) explained that the qualitative method contains an interpretive approach to research topics which attempts to understand phenomena. The study utilized the qualitative narrative research method rather than a quantitative methodology. Clandinin (2007) stressed that qualitative researchers focus on understanding rather than prediction. Through the qualitative methodology, participants' lived experiences served as data rather than predicting an outcome of the research. Clandinin (2007) explained that the narrative method emerged over time through changes in researchers' thoughts and actions. Clandinin (2007) wrote about four ways in which researchers' thoughts changed over the years to narrative inquiry. Clandinin (2007) reported four themes in the turn towards narrative research explained as follows:

1. There is a change in the relationship between the researcher and the participant.
2. The researcher uses words as data rather than numbers.
3. The researcher focuses on "the local and specific" not the universal (p. 7).
4. Researchers accept new ways of knowing.

Clandinin (2007) stressed the change to narrative inquiry for researchers did not follow a particular order but rather evolved. For researchers employing the method, "the stories and the humans are continuously visible in the study" (Clandinin, 2007, p. 7). Clandinin (2007) believed when researchers employ narrative research participants' stories come to life about their human experience. The study allowed college students with ASD to recount their social, interpersonal experiences through stories.

The chapter includes an explanation and rationalization for the employment of the narrative method to study the interpersonal experiences of college students with Autism. Also,

the researcher described participants, instruments, data collection, and analysis. The researcher introduced validity and reliability strategies and explained along with safeguards for the ethical protections for participants.

### **Research Question**

The narrative study allowed students with ASD to retell stories of social experiences from college. The researcher viewed students' social experiences through a student development lens. Chickering and Reisser's (1993) revised the psychosocial theory of college student development, *The Seven Vectors of Identity*, guided the research question.

The research question was as follows:

What are the life stories of the social experiences of ASD college students?

Chickering and Reisser's (1993) seven vectors included the following (see Table 1):

*Develop competence, manage emotions, move through autonomy towards interdependence, develop mature interpersonal relationships, establish identity, develop purpose, and develop integrity.*

Chickering and Reisser (1993) believed that all students eventually pass through each vector. The study utilized Vector #4, which centers on "developing mature interpersonal relationships" (see Figure 1; Reisser, 2013, n.p.). Students develop "tolerance and appreciation of differences" and the "capacity for intimacy," when they are in the fourth vector (Chickering & Reisser, 1993, p. 146). Being tolerant of differences means the student recognizes intercultural and interpersonal differences and learns to communicate without stereotypes or unconscious bias. Within current friendships, students exercise an understanding of differences that can transfer as tolerance into new acquaintances. The ultimate goal remains to "refine first impressions, reduce bias or ethnocentrism, increase empathy and altruism, and enjoy diversity"

(Winthrop University, 2007, para. 13). Chickering and Reisser (1993) cited the importance of multicultural competence in the increasingly diverse college and university settings across the United States today. The fourth vector served as a framework to influence and guide the narrative methodology employed to obtain data from college students with ASD about their social experiences.

## **Purpose and Design of the Study**

### **Purpose of the Study**

ASD is a neurodevelopmental disorder, which produces social interaction and communication deficits along with repetitive and restrictive behaviors in adults and children. The Centers for Disease Control estimates that one in 59 American children experience ASD (Centers, 2018). Young adults with ASD pursue higher education due to the passage of disability legislation, early diagnosis, and improved treatment programs (Van Hees et al., 2014). With more students on campus experiencing ASD, academic literature focused on the social challenges of students, needed support programs, and the neurodevelopmental background behind ASD symptoms. The study was needed as there is a scarcity of research that shares the unique life stories of college students with ASD.

The body of research available for review on Autistic college students focused on the students' social deficiencies and needs in the higher education environment. Hanley et al. (2015) utilized a neurodevelopmental foundation to study the social deficits present in young adults with ASD. For example, Hanley et al. (2015) conducted a quantitative study that tracked and measured the movement of the eyes (e.g., *eye-tracking*) to understand social attention. Hanley et al. (2015) and Fleischer (2012b) acknowledged that ASD adults bring into adulthood some of the social difficulties experienced at younger ages. Hanley et al. (2015) concluded that ASD

students do not outgrow difficulties related to Autism through a structured social interaction gauging *eye-tracking*. White et al. (2011) asserted psychiatric risks of social anxiety; depression, aggression, and hostility were “positively correlated” with ASD screening measures, and the extent of the conditions need exploration (p. 695).

Furthermore, Freeth (2012) believed certain traits are related to ASD and social anxiety, such as social skill and attention switching abilities. Hanley et al. (2015), White et al. (2011), and Freeth (2012) explored social deficits through a neurodevelopmental lens bringing awareness to the social difficulties ASD college students experience. Studies failed to gather the experiences of students through stories. For example, Hanley et al. (2015) and White et al. (2012) confirmed neurological deficits affecting social interaction but fell short in capturing the nature of relationships ASD students are experiencing in college, such as casual or intimate. The completed narrative inquiry study added to the existing literature by obtaining stories from ASD students about their social experiences in college.

Other literature focused on determining the social and academic needs of students experiencing ASD. Through a quantitative method, Chiang et al. (2012) examined factors of participation for higher education ASD students. The researchers learned “family characteristics, student characteristics, and transition planning” contributed to postsecondary attendance, and Chiang et al. (2012) concluded ASD students need supports in place at the college level (p. 693). Cai and Richdale (2016) learned through their study, ASD students received assignment extensions but experienced difficulty in written communication exchanges with instructors. Some researcher such as Fleischer (2012b) gathered data from the family members who explained their deficiency in situational information the Asperger Syndrome (AS) student experienced, so they were unable to collaborate. Fleisher (2012b) concluded that parents and

families could provide a support system to students and contribute their understanding of student diagnosed impairments. These brief examples from the literature review prove that more researchers need to delve into the social experiences of college students with ASD. In-depth discussions with students on their lived experiences can supplement the body of research. By utilization of the narrative method, the concluded study heard student voices and brought student experiences to the attention of the higher education establishment.

Clandinin and Connelly (2000) explained narrative inquiry in the following manner: “For us, life-as [*sic*] we come to it and as it comes to others-is filled with narrative fragments, enacted in storied moments of time and space, and reflected upon and understood in terms of narrative unities and discontinuities” (p. 17). The completed research used a narrative approach utilizing the biographical and autobiographical recording, which captured participants’ stories. Creswell (2015) explained that biographical recording by the researcher is a means of writing and recording the participants’ life stories. In the study, I recorded life experiences through interviews and collecting participant journaling. I followed the narrative inquiry process of collecting stories through interviews and journaling, analyze data, and retell the participants’ stories through the *problem-solution narrative structure* (Creswell, 2015).

### **Design of the Study**

Three research methods exist for educational researchers, which include the following: Quantitative, qualitative, and mixed methods approach. Researchers utilizing quantitative method take a deductive approach by developing and testing the theory through hypotheses or research questions (Creswell, 2013). Researchers develop variables, instruments to collect data, and collect scores through instruments. Alternatively, researchers using qualitative method are interested in incorporating a theoretical lens which assists in forming research questions,

instruments, and analyzation techniques (Creswell, 2013). Researchers use qualitative approach when there is a need to focus on participants' words rather than numbers. Within the qualitative approach, researchers select from various inquiry methods, including ethnography, case study, grounded theory, phenomenology, and narrative study. Researchers in ethnography study a cultural group in a natural setting, and the design stems from a tradition in anthropology and sociology. When researchers utilize a case study, a program, process, or several individuals receive analyzation in an in-depth manner. The sociology field provides the method of grounded theory, which the researcher generates out of data.

On the other hand, philosophy and psychology are the underpinnings for the phenomenology method, which inquiries into the shared experiences of participants about a phenomenon (Creswell, 2013). Researchers selecting narrative inquiry delve into the lived experiences of one or more participants. Researchers re-story the lives of participants in close collaboration and usually through a chronology. The study utilized narrative inquiry to capture the social life experiences of college students with ASD. The researcher in the completed study used a narrative method only choosing to not utilize a mixed-method approach of quantitative and qualitative methods with different types of data.

The study captured stories of the lived social experiences of college students with ASD making narrative inquiry the most sensible method. Clandinin and Connelly (2000) described narrative inquiry in the following: "Experience happens narratively. Narrative inquiry is a form of narrative experience. Therefore, [*sic*] educational experience should be studied narratively" (p. 19). Creswell (2013) cited that Dewey held experience as a way to gain an understanding of an individual, and one experience leads to more experiences for the individual.

Furthermore, Creswell (2013) explained, “the narrative researcher provides a voice for seldom-heard individuals in educational research” (p. 507). Through the literature review for the study, researchers failed to obtain and retell the stories of college students with ASD. By allowing ASD students the opportunity to share their social experiences through stories, the researcher allowed the voices of the marginalized population to come forth.

### **Role of the Researcher**

I believe my previous educational work experiences and volunteerism in the Autism community spurred an interest in the population of ASD students who attend higher education after high school. I took the role of instrument creator and sole data collector. I reached out to participants with a welcome letter either electronically or through paper delivery and followed up with a separate correspondence expressing gratitude for participation. I conveyed to participants verbally and in writing the researcher’s responsibilities in the study. The researcher made participants aware of the process for gathering data and the nature of interview questions and journaling prompts. Finally, I entered into the study understanding that biases may exist and strove to conduct the study with an open, objective mind in data collection and the retelling of stories provided by the participants and not allow any preconceived opinions on the social lives of students with ASD affect data collection or analysis. I kept a journal to record the research process to guard against known and unknown biases.

### **Research Population and Sampling Method**

The setting for the study resided in higher education. The data collection occurred off campus. The participant sample included college students or previous students who attended college within the last year from either a public 4-year or 2-year college in the Northwest region of the United States. The Northwest region boasts active support communities for families with

children and adult children who experience ASD. Multnomah County, which includes the city of Portland, Oregon, contains at least 11 in-person support groups for individuals and their families on the Autism spectrum and many local businesses offer sensory-friendly opportunities for individuals on the Autism spectrum (ASO, n.d.).

The researcher solicited for study participants through two Autism nonprofit organizations and an Autism psychologist's private practice office. The nonprofit organizations contained support groups of young adult Autistics or parents of young adults who experience Autism and the organizations boast a strong online presence. Organizations and the psychologist granted permission to solicit through social media, print materials, and on-site. Whether participants came from an organization or a psychologist office, I followed protocols or processes created and required by the entity for the act of solicitation of participants.

Maxwell (2013) explained that the *purposeful selection* of participants in qualitative research is the accepted method to obtain participants who are relevant to the research questions. The current or former college students of the study experienced ASD at Level 1 of the Severity Levels for ASD. Individuals who experience Level 1 exhibit deficits in initiating conversation and trouble responding in social exchanges. Individuals may possess little interest in social interaction. Furthermore, Level 1 includes individuals who experience difficulty in transitions between activities and operating within multiple contexts (Autism Speaks, n.d.). The participants needed at least one semester of study in person at a postsecondary institution to qualify for the study.

The study solicited participants through a psychologist's ASD private practice and two nonprofit organizations through paper signs and electronic social media. Creswell (2013) explained in narrative participants "need to have stories to tell about their lived experiences," so

these participants need to have experienced a college or university brick and mortar environment in order to qualify (p. 154). By soliciting participants from Autism focused environments, I ensured the study addressed the research question. The solicitation occurred through social media or within the meeting space or offices of the organization or group. Creswell (2013) stressed that the selection of participants should be individuals who can speak to the phenomenon studied. Due to the nature of the small number of participants needed for narrative research, the researcher chose not to employ random sampling. In the solicitation material for participants, I gave an email and cellular phone number for interested students to contact for more information on the study. When a potential participant contacted me, I introduced myself and explained the study. I assessed any interested perspective participants based on the following criteria:

1. Be in attendance for at least one semester at a public college or university on campus.
2. Have a diagnosis of Autism Spectrum Disorder.
3. Not be withdrawn from college or university for more than two semesters.

During the recruitment of participants, I exercised a nondiscrimination policy and avoided discrimination based on sex, ethnic/racial group, socioeconomic level, immigrant status, sexual orientation, disability status, or gender identity. Besides assessing perspective participants on the criteria, I explained the participant's role and gained participant consent. Each participant read and signed a consent form. I accepted three participants for the study. Creswell (2013) recommended at least two participants for narrative research allowing for the collection of rich, detailed life stories. Furthermore, participants understood the benefits of participation and risks. I explained that participants were free to quit the study at any time and ask questions. Each participant agreed to a pseudonym name to provide confidentiality.

## **Instrumentation**

### **Interviews**

According to Maxwell (2013), researchers utilize interviews for information on past events as observations will only give you current data. Since narrative inquiry involves constructing a chronology of life stories, interviews captured stories from the participants' past. Structured, unstructured, and semistructured are common interview formats, and researchers perform an initial interview then conduct follow-up interviews (Fontana & Frey, 2000). Researchers using structured interviews administer the same questions to each participant. The unstructured format allows the researcher to adjust questions based on answers given by the participant. Semistructured interviews contain qualities of both structured and unstructured and served the completed study well (Fontana & Frey, 2000). Weiss (1994) explained the questions posed ask about specific actions or events, rather than abstract opinions. Information stored in the brain-based more on sequencing in time rather than on abstraction.

Rubin and Rubin (2012) claimed that semistructured interviews allow the researcher to focus on the topic and ensures a higher chance of obtaining data that will answer the research questions. The completed study participant instruments received vetting by a two-person expert panel. One panelist is a psychologist with a private practice specializing in Autism disorders. The second panelist serves as a professor at a public university in the Pacific Northwest, specializing in higher education. The process of consulting outside experts in the field ensured validity and allowed the researcher to improve the instrument before the actual participant interviews and journaling (Creswell, 2014). The conceptual framework, research question, and literature review guided the process to create participant interview questions. The researcher based the conceptual framework on a portion of a student development theory by Chickering and

Reisser (1993) on forming mature interpersonal relationships. The questions elicited responses related to the two main proponents of the mature interpersonal relationship theory involving tolerance and intimacy. By doing so, the questions answered the research question concerning the life stories of the social experiences of college students with ASD. The researcher phrased questions to obtain experiences and stories to supplement current literature that exhibits a void of descriptive participant stories of interpersonal relationships. Rubin and Rubin (2012) suggested that interview questions should be created to elicit in-depth responses. The researcher worded the questions to extract thick, rich, detailed information to accommodate the research method of narrative inquiry, which records participants' stories. I constructed open-ended questions motivating participants to elaborate on answers and respond in a naturally (see Appendices C and D).

Maxwell (2013) explained that interviewers might immediately begin questioning participants or they may start with casual conversation. Attwood (2007) explained that individuals experiencing ASD might not follow expected social expectations regarding “conventional conversational rules” (p. 219). Out of respect for the participants, I chose to begin immediately with the questions about the study rather than engage in conversational pleasantries. The questions followed the conceptual framework, research question, and added to the existing literature. In following the conceptual framework Chickering and Reisser’s (1993) Vector #4, I created questions to elicit experiences about *intimate relationships*. *Intimate relationships* can pertain to the students’ experiences in reciprocity, balancing time, anticipating needs (Chickering & Reisser, 1993). Questions dealt with *tolerance* the second portion of Vector #4. I asked questions to elicit experiences that might contain biases, altruism, and empathy in relationships formation. Also, the questions assisted the researcher in answering the research question about

the life stories of the social experiences of ASD college students. By wording the questions carefully to center on actual experiences, the researcher gained a better understanding of how and to what degree the population participated in social interactions.

Finally, the data added to the existing literature by providing a narrative study focused on obtaining stories from participants. The questions asked students to retell lived experiences of social experiences. I used follow-up interviews to ask questions on responses received to obtain additional information or clarification and to check initial interview data for accuracy.

### **Participant Journaling**

The studies contained in the literature review did not contain participant journaling as instruments, but the completed study utilized the instrument. Hayman, Wilkes, and Jackson (2012) defined journaling as “a diary and a log in [*sic*] that it blends personal reflections, accounts of events and descriptions of experiences” (p. 28). The journaling assisted in answering the study research question by recording participants’ reflections on social experiences. For example, questions prompted participants to substantially reflect on one or more interactions they experienced while a student at college or university (see Appendices C and D). The participants responded by retelling about an experience or relayed story about interactions and served to answer the research question about the life stories of the social experiences of college students with ASD, who attended an institution of higher education.

Also, the decision to use an additional instrument aided to enrich and increase validity through triangulation. Hayman et al. (2012) highlighted challenges with journaling include low participation and failing to stay on track. Hayman et al. (2012) suggested that researchers keep the journal content clear to participants, so data fits the study, and participants utilize their time. I enacted suggestions from Hayman et al. (2012) to provide participants with timely prompts,

electronic or verbal reminders, acknowledgments of any data submitted, and limiting the journaling days to three days.

## **Data Collection**

### **Interviews**

I utilized alternative means to orchestrate the semistructured interviews due to the distance present between the researcher and participants. Creswell (2013) explained that video conferencing is common practice today in data collection and endorsed the technology, as well as data collection through email and instant messaging. Electronic and technological advances allow data collection with the advantages of lower costs and time efficiency due to eliminating the need to travel and use data transcription services. The study dealt with traditionally marginalized participants, semistructured interviews occurred in the manner in which participants preferred, and that allowed for communication over a long distance. The sensory issues experienced by ASD individuals received documentation and discussion through the work of Attwood (2007) and Grandin and Barron (2016). Individuals experiencing ASD experience a keen sensitivity to tactile experience, sound, light, and aromas, which the researcher acknowledged and took into consideration for each participant. I offered video conferencing due to distance factors but accommodated participants through a telephone conference or email, if those methods made the participant more comfortable.

I conducted one initial and one follow-up interview per participant and collected three days of participant journaling to prompts created by the researcher. The initial interview lasted up to an hour with the follow-up interview lasting a maximum of 30 minutes. I conducted the initial interviews, then conducted the follow-up interviews a week later. The questions asked during the semistructured interviews depended on the conceptual framework, research question,

and current literature (see Appendix B). The initial interview consisted of the researcher asking the predetermined questions, recording the interview through two digital recorders, and taking notes by hand. The researcher offered video conferencing, phone calls, or email due to the distance between the researcher and participants. The researcher transcribed collected audio from the interviews and re-transcribed in following the tradition of narrative research. The data were delivered to participants through email for member checking. At the follow-up interview, participants discussed if anything should be corrected, added, or deleted in the re-transcription provided by the researcher. Participants possessed the opportunity to expand on the re-transcription data and the researcher asked questions for clarification. After the follow-up interview, I made the necessary corrections and sent them to the participants.

### **Journals**

Creswell (2013) and Hayman et al. (2012) suggested that researchers use online networks or email platforms to collect journal data, which are common methods for gathering participant journaling. Creswell (2013) explained that electronic communication allows participants the opportunity for flexibility to respond to their own time and allows for more time to consider questions. Offering flexibility to participants allowed selection of the method they were most comfortable utilizing for sharing journals. The researcher sent the journal questions to participants at the conclusion of the initial interview. Due to distance, I allowed participants to electronically submit journals unless the participant is more comfortable mailing paper versions through a secure U.S. Mail, United Parcel Service, or Federal Express secure mailing service. Participants engaged in journaling for a maximum of three days with a two-hour maximum time commitment, but completion time could vary based on the participants' desire to provide more detailed accounts.

For any participant leaving the study, the researcher agreed to destroy notes, audio recordings, transcriptions, and journaling. After three years, the researcher agreed to destroy all research data through electronic deletion or physical paper shredding. During and after the study, the researcher stored collected data electronically with password protection or in paper format locked in a secure location. Any audio electronically or on a physical recorder the researcher kept under password protection or locked in a secure location.

### **Identification of Attributes**

The terms Autism and Autism Spectrum Disorder are referenced multiple times in the completed study. The researcher adheres to the professional definition of Autism Spectrum Disorder set by the Centers for Disease Control (CDC): “A developmental disability that can cause significant social, communication and behavioral challenges” (para. 1). The study was conducted using the qualitative method of narrative inquiry. Clandinin and Connelly (2000) explained narrative inquiry as a means of collecting stories in a narrative format. Adding to the definition Creswell (2015) expounded that the narrative method allows the researcher to record participants’ life stories.

### **Data Analysis Procedures**

The data analysis began with the data from interviews and participant journaling (see Table 2). Ollerenshaw and Creswell (2002) described the narrative analysis process as follows: The restorying [*sic*] process, described by Clandinin and Connelly (2000) as [*sic*] retelling, first involves collaborating and renegotiating information with participants and returning again and again to the field text. Finally, the researcher writes interim texts to find a narrative text that promotes an account of participants’ lived experiences. (p. 342)

Ollerenshaw and Creswell (2002) referred to the analyzation of narrative data as re-storying. Ollerenshaw and Creswell (2002) explained two approaches to analyzing narrative data. The first approach solves a problem by putting the stories into a *problem-solution narrative structure* (Ollerenshaw & Creswell, 2002). The method involves the researcher entering data into a graphic organizer according to the described experience given by the participant into the following structure: “Setting, characters, actions, problem, and resolution” (Creswell, 2015, p. 513).

In the second method, referred to as *three-dimensional-space narrative*, the researcher looks for interactions and experiences of individuals. Ollerenshaw and Creswell (2002) explained that the narrative analysis method is rooted in Dewey’s philosophical belief of experience. The approach involves recognizing personal experiences and interactions with others to understand a person. The method encompasses personal and situational elements making it “holistic” but lacks the structure present in the *problem-solution narrative* (Ollerenshaw & Creswell, 2002, p. 343). In the method, the researcher organizes data around an experience then re-stories to include the participant and other people’s interactions and continuity through past, present, and future actions and place. Ollerenshaw and Creswell (2002) shared on occasion narrative researchers begin the analysis with *problem-solution narrative* and move to a *three-dimensional-space narrative*.

I utilized the *problem-solution narrative* method as the interview and journaling prompt elicited lived stories from participants. Stories fit into the *problem-solution narrative* model because stories contain the following literary elements: “Setting, characters, actions, problem, and resolution” (Creswell, 2015, p. 513). In general, the participant population does not think in terms of abstract concepts; the *three-dimensional-space narrative* could prove to be troublesome

in the analysis of more accurate data. Attwood (2007) explained the problematic nature of abstractions for individuals on the Autism spectrum. For example, speaking in abstractions to individuals on the Autism spectrum with certain words (e.g., maybe, later) can be perceived as vague. Attwood (2007) explained abstraction lacks precision and concreteness which individuals with ASD might perceive as vague. The *three-dimensional-space narrative* method deals with reporting on emotion and morals along with determining other people's intentions and points of view which are all abstract concepts and could be difficult to elicit from participants with Autism (Creswell, 2015).

Creswell (2015) explained that both methods involve ordering the stories for the reader and utilizing literary elements. Creswell (2013) advocated narrative researchers exercise the freedom to begin analyzation with the *problem-solution narrative* and turn to the *three-dimensional-space* model. I used the *problem-solution narrative* as I elicited stories from participants who traditionally lack communication skills in abstractions.

With the analyzation method chosen, I transcribed the raw data by hand without the use of computer software. I transcribed data from interviews and performed member checking with the participants providing the data at the follow-up interview. I sent the transcriptions to the participants for a review then any requests for clarification or changes that occurred during the follow-up interview. Lincoln and Guba (1985) explained that participants might correct facts or point out incorrect interpretations. Participants offered additional facts or information during member checks. Following Creswell (2015), I corrected the transcription (raw data), coded the interviews and journal data, and re-storied the data.

Saldaña (2009) stressed that narrative coding can be used as a “preliminary approach to the data to understand it storied, structured forms” (p. 112). When researchers gather data on

“Interpersonal participant experiences and actions to understand the human condition through [sic] story” coding strategies provide a useful means to analyzation (Saldaña, 2009, p. 112). In the study, participants shared stories. In narrative inquiry, researchers organize data into chronological order as a common practice (Creswell, 2013; Saldaña, 2009). I followed the recommendation by Creswell (2013) to use chronology. Saldaña (2009) also suggested but named the method narrative coding to put information in chronological order. Most people tell stories out of order, so chronology assists in narrative research to put the components of a story in proper order. By utilizing *problem-solution narrative structure* and narrative coding, the researcher preserves and keeps participants’ stories intact.

### **Limitations of the Research Design**

A limitation of the study was instrumentation. First, participants may not be comfortable to share information through interviews. I offered participants the option of phone interview or completion of responses through email to ensure I received thick, rich descriptions from participants while respecting their comfort level. Attwood (2007) explained that individuals with Autism might not be comfortable making eye contact so that, I offered the mentioned alternatives. To guard against low journal participation, I sent prompts to the participants to ensure participants met deadlines. To ensure I transcribed the data correctly, I conducted member checking for the interview data. Also, I offered researcher contact information in the form of email and phone for participant questions or concerns.

Delimitations deal with boundary choices made by the researchers. Due to the nature of the study, the researcher limited sampling and setting. The researcher accepted college students with a diagnosis of ASD to adequately answer the research question regarding the social experiences of students with ASD. The researcher accepted only students who experience ASD

as the research and higher education community need to hear their voices through stories according to the literature review conducted for the study. I did not consult parents or school staff for data as they have traditionally been used to assess the needs of students with ASD in previous studies. Member checking was conducted on the interview and journaling data to ensure accuracy. Triangulation of data sources was used to strengthen the credibility of the data by the utilization of interviews and journaling. The setting for the study was limited to gathering stories from higher education settings. I focused on a higher education setting in order to add detailed stories to the current literature. Finally, the data analysis methods of narrative coding and *problem-solution narrative structure* are transferrable to other types of studies that focus on marginalized populations of participants.

### **Validation**

In research, validity is referred to as the “credibility or believability of the research” (University of California-Davis, n.d., para. 3). Maxwell (2013) stressed within the research realm validity is a difficult concept to explain and define. Maxwell (2013) discussed validity for qualitative studies “requires you to identify the specific threat in question and to develop ways to attempt to rule out that particular threat” (para. 6). Maxwell (2013) postulated two common validity threats to qualitative research: “Researcher bias” and “Reactivity” (para. 9). Researcher bias involves the subjectivity of the researcher and researchers must avoid the practice. I guarded against biases by keeping a reflective researcher journal to record any personal or political bias experienced during the study, as biases can influence the re-storying account of participants’ stories (Creswell, 2013).

The second concept, reactivity, involves the influence of the researcher on the participants or setting (Maxwell, 2013). Maxwell (2013) cautioned in qualitative research the

aim is not to get rid of reactivity but rather to “understand it and to use it productively” (para. 11). Maxwell (2013) explained that reactivity is present in interviews, and little can be done to reduce the influence of the researcher except being cognizant of how the researcher could influence the interviewee. I carefully constructed interview questions and spent adequate time with each participant to ensure I received thick, rich, detailed data from participants ensure validity.

Member checking is another technique researchers use to guard against reactivity, which was part of the study. The technique curbed misinterpretation of participant stories by having participants read transcripts of the information given in interviews. Triangulation is another technique mentioned by Maxwell (2013). In the study, I utilized data triangulation to ensure internal validity through interviews and participant journaling.

### **Credibility**

In qualitative research, external validity involves whether the study produces results that can be generalized to other populations of college students with ASD outside of the study (the University of California-Davis, n.d.). However, in qualitative research, external validity is seen more in terms of transferability or the idea that certain results of the study can be transferred to other studies based on similar context of the study. However, Lincoln and Guba (1985) hold qualitative researchers experience challenges in transferability of research results, and the possibility of proving transferability is not possible. In order to counter some of the issues that limit transferability, Lincoln and Guba (1985) suggested that qualitative researchers can supply thick, rich descriptions in the research study and use purposeful selection, which allows the reader to make conclusions on the transferability of results. Also, Merriam (2009) advocated for

strengthening transferability to other settings through thick, rich descriptions and practice a maximum variation of participants and site.

I utilized thick, rich description in setting and participants, as well as, in the deliverance of findings. I included within the findings direct participant quotes. I used the maximum variation of participants and institutions (Merriam, 2009). I exercised a variation of participants except for the requirement that each participant experience ASD. Participation in the study was open to ASD college students of a different race, ethnicity, and age to open generalization to more populations. By seeking diverse ASD participants through various support groups, I recruited students who attended various higher education institutions, which increased the range of application for transferability (Merriam, 2009). Lincoln and Guba (1985) stated, “It is, in summary, *not* [*sic*] the naturalist’s task to provide an *index* of transferability; it *is* [*sic*] his or her responsibility to provide the *data base* [*sic*] that makes transferability judgments possible on the part of potential appliers” (p. 316). Lincoln and Guba (1985) used the term naturalist to refer to the various types of qualitative research methods.

### **Dependability**

In qualitative research much weight is put on the reliability in research which involves the ability for a study to be replicated with the same or similar results occurring (Lincoln & Guba, 1985; University of California-Davis, n.d.). While qualitative study is not often discussed in terms of its reliability, there is some debate by scholars such as Golafshani (2003) who pointed out that there are different definitions of reliability within the qualitative research community that stem from various schools of thought from realism to constructivism making measuring reliability difficult for qualitative studies. Lincoln and Guba (1985) suggested qualitative researchers guard against “any careless act in the measurement or assessment process,

by instrumental decay, by assessments that are insufficiently long (or intense), by ambiguities of various sorts, and a host of other factors” to ensure a study will be reliable (p. 292). As a result, qualitative researchers often use the term *dependability* to refer to reliability in qualitative studies. Inquiry audit serves to ensure dependability, but Lincoln and Guba (1985) stress the process is cumbersome. I utilized the tool of inquiry audit to strengthen the study. Merriam (2009) explained that audits work similarly to those found in the business world. In research, readers benefit from audits by following the trail by the researcher. Researchers can provide readers a trail to follow the processes and journey followed for the study. An audit trail includes the process of data collection, rationale for coding categories, and the decision processes of the researcher (Merriam, 2009). During the study, I kept an audit trail through the creation of a researcher journal. I followed the process set forth by Merriam (2009) to capture my questions, reflections, and decisions on data collection. For example, I logged and described my analysis and interpretation of data. The strategy increases reliability by the researcher, providing a transparent path to the study’s findings.

In addition, I verified accuracy through comparison of the interview transcripts and participant journals to ensure dependability through triangulation of data sources (Silverman, 2013). Furthermore, I employed a final technique suggested by CIRT (n.d.) during the collection of data to record any unexpected changes in the research setting or context creating awareness for any researcher wanting to replicate the study.

### **Expected Findings**

As the researcher, I strove to keep my biases to a minimum by maintaining a researcher journal. Through the study, I expected to find some social, interpersonal challenges for students in interpersonal relationships. I was unable to predict the detailed nature of the social,

interpersonal interactions of participants. The researchers presented in the literature review have shown that adult ASD students experience social issues. I assumed that participants in the study would report issues. Also, the participants in the study provided new insights into the social, interpersonal challenges facing adults with ASD in higher education.

## **Ethical Issues**

### **Conflict of Interest Assessment**

The Institutional Review Board (IRB) at Concordia University–Portland guided the study and the American Psychological Association (APA) standards for researching the social sciences to protect the rights of participants. APA codes protect against relationships that harm or exploitation of others (APA, 2019; Smith, 2003). I refrained from entering into multiple professional relationships in order to adhere to the code. In recognizing researchers' multiple roles, I kept no employment with any of the nonprofit organizations or psychologist office that advertised for participants and have no plans of employment. I received no financial compensation for the study from any organization or entity.

### **Researcher's Position**

Through my previous volunteer efforts, I am familiar with the Autism community in the Northwest. I no longer volunteer or attend any events in the community. I was unknown to the participants as I did not directly work or associate with the population. I was the principal researcher in the study. I conducted participant interviews and administering the journal prompts. No additional researchers saw the data which serves as an advantage and an extra level of confidentiality. The researcher planned to only share data with the dissertation committee on a need to know basis and a need did not exist. The dissertation committee learned of the data through the final dissertation write-up procedures. I kept all data and pseudonyms electronically

password-protected as no paper versions existed. The researcher noted researcher biases as a disadvantage to studies. As the principal investigator, I kept a researcher journal to guard against biases (Creswell, 2013).

### **Ethical Issues in the Study**

The researcher followed informed consent requirements according to IRB and APA standards. I ensured participants received adequate information needed to decide to participate in the study in a format appropriate to the individual with full knowledge of any risks and benefits (APA, 2019; Smith, 2003). The consent form included the following:

- The purpose, duration, and procedures of the study.
- The right for participants to withdraw from the study, which includes no negative consequences for doing so.
- The risks and benefits of the study include minor discomfort from talking about personal information with a stranger, and the positive aspect of the study contains raising awareness within higher education of the social needs of students with ASD.
- Confidentiality precautions will include the password-protected the storage of data and physical storage of printed data, the timely destruction of all data after the study and using pseudonyms for each of the participants and higher education institutions.
- Contact information of the researcher for questions.
- If for any reason a participant is unable to permit for cognitive reasons then participation in the study will be left up to the appropriate, legal guardian (APA, 2019; Smith, 2003).

Furthermore, the researcher understood the possibility of consent requiring guardianship approval in some instances due to the adult population experiencing a disability (Silverman,

2013). Also, to ensure participants truly understood their participation and nature of the study, participants received study information printed onto the interview question sheet and included again with the journaling prompts. The information explaining the study received vetting along with the actual instruments to ensure participants comprehended the study and nature of the questions. The researcher gave participants the information and offered them the opportunity to receive the information read orally to them (Silverman, 2013). The measures ensured consent was granted as ethically and transparently as possible for participants experiencing ASD.

### **Chapter 3 Summary**

With more students attending higher education with disabilities, the study provided data needed as there is a scarcity of research that shares the life stories of college students who experience ASD. The study utilized narrative inquiry to retell the social experiences of college students with ASD through stories. Interviews and participant journaling provided data in the form of stories and the researcher re-storied the data through *problem-solution narrative structure*. The researcher carefully followed the validity and reliability plan through the utilization of techniques by Maxwell (2013) and Creswell (2013), which included using *member checking*, triangulation, and full descriptive texts. The researcher exercised careful consideration to protect participants. Throughout the study, I followed the ethical protection of participants set forth by Concordia University IRB and APA standards for researching in the social sciences to protect the rights of participants.

## **Chapter 4: Data Analysis and Results**

### **Introduction**

The study allowed college students with ASD to share their life stories, which was the original purpose. The study filled a gap in the literature on the social experience of college students with ASD by utilizing a narrative study. The problem statement reflected the state of the literature reviewed by the researcher. The literature review revealed a lack of narrative studies focused on a small number of ASD college students recounting their social experiences in higher education. The study had the following problem statement: The study needed to be conducted as there was a scarcity of research giving ASD college students, a traditionally marginalized population in society and education, a voice through unique life stories of their social experiences within the higher education environment.

I posed the following research question presented for the study as follows: What are the life stories of the social experiences of ASD college students?

My role as researcher encompassed pursuing a professional and personal interest in the Autism community within anonymous educational environments which through the narrative method allowed collecting stories from students. For many years, I was active in the Autism community through various nonprofit organizations, as I supported a family member who experiences ASD. My professional experience included many years of supporting college students on campuses who experienced disabilities. I wanted to hear the stories of college from students who experienced a disability. Currently, in my profession as an Exceptional Student Education Autism educator, I facilitate learning with students experiencing Autism and intellectual disabilities in a self-contained, Title I elementary classroom.

For the study, I defined *social experience* as interaction with college peers, faculty, and staff members. After a potential participant met the study requirements, the participant engaged in an interview with the researcher. The questions and prompts elicited responses from participants related to social interactions experienced while enrolled in a brick and mortar college environment. For the interviews, participants retold short stories of social interactions with instructors, peers, roommates, and campus co-workers. Within a week, the follow-up interview occurred to confirm the accuracy of the transcription and to add any information volunteered by the participant. After the interviews, participants utilized the journal method to tell longer stories of social interactions at college. Participants' stories included interactions with college staff, classmates, and instructors. Narrative coding (i.e., chronology) and *problem-solution narrative* encompassed the data analysis phase of the study. The researcher guarded against biases by keeping a reflective journal to ensure validity and increase credibility. With the study concluded, the following sections of the chapter discuss the sample, research methodology and analysis, summary of findings, and presentation of data and results.

### **Description of the Sample**

Plummer, Huber, and Whelan advocated for a low number of participants for narrative research studies, which remains an acceptable practice allowing for the collection of detailed life stories (as cited in Creswell, 2013). The study obtained consent forms from three participants (i.e., two Caucasian females and one Caucasian male) and data collection began immediately upon completion of the forms. To protect the identity of subjects, the researcher assigned a pseudonym to each participant. Participant 1, a female Caucasian, who dropped out of a community college and considered herself a first-generation student. Participant 2, a Caucasian female, who attended a 4-year public university at the time of the study. Participant 3, a male

Caucasian, attended a 2-year community college at the time of the study. From the inception of the study, I refrained from creating a tool for the collection of detailed demographics to ensure the anonymous nature of the study. In the study proposal, I purposely designed the sampling strategy to avoid the collection of detailed demographic information to avoid any personal information compromising the identity of participants. Any demographic information contained in the chapter, participants divulged voluntarily. Some participants shared detailed demographic information (e.g., marital status, college name, city of residence) but to protect participant identity, the researcher excluded the information.

Creswell (2013) advocated for the selection of participants who speak to the phenomenon researchers plan to study. Solicitation occurred through an ASD psychologist's private practice and other organizations that worked with the population. By soliciting participants from Autism focused environments, participants spoke to the study topic.

Creswell (2013) explained the importance of obtaining subjects who lived the experiences needed for the narrative study. By attending a college or university brick and mortar environment, participants possessed stories to share about their experiences. The study allowed ASD college students to share their life stories giving the population a voice. The study solicited for current and former ASD college students with at least one semester of study and on-campus experience in a postsecondary environment. Through the narrative method (e.g., personal experience stories), I amassed stories documenting ASD college students' social experiences within a higher education environment.

For the narrative study, I utilized the *purposeful selection* of participants as the method obtained participants who were relevant to the research questions (Maxwell, 2013). Participants of the study met ASD criteria and attended brick and mortar institutions or held previous

attendance with not more than two semesters of absence. Participants in the study were two females and one male. All participants identified as Caucasian. The study declined to discriminate based on sex, ethnic/racial group, socioeconomic level, immigrant status, sexual orientation, disability status, or gender identity.

Creswell (2013) explained in narrative research, participants possess stories to be told of “their lived experiences,” so participants possessed collegiate experience (p. 154). Three individuals responded to participate and the researcher accepted the participants. The study aimed to recruit participants at Level 1 of the Severity Levels for ASD. Level 1 describes an individual as experiencing deficits in initiating conversation and trouble responding in social exchanges. Individuals at this level exhibit little interest in social interaction.

Furthermore, individuals at Level 1 experience difficulty in transitions between activities and operating within multiple contexts (Autism Speaks, n.d.). Furthermore, the researcher made participants aware of the benefits to participants and any related risks. Through the solicitation process, participants received information regarding being free to quit the study at any time and ask questions.

## **Research Methodology and Analysis**

### **Narrative Inquiry**

The following sections contain a description of the research method employed in the completed research and how the method supported the conceptual framework, literature, and research question. The study utilized a qualitative methodology. In general, the qualitative method encompasses a theoretical lens which assists in forming research questions, instruments, and analyzation techniques (Creswell, 2013). The researcher used the qualitative approach since a need existed to focus on the participants’ words. The nature of the study called for an approach

with a focus on words as the research question asked for the stories of participants. Within the qualitative approach of research methods, the narrative inquiry method records stories from participants, so the method suits the research question. The researcher selected narrative inquiry to delve into the lived experiences of one or more participants. The researcher re-storied the lives of participants in close collaboration with participants through a chronology. The study utilized narrative inquiry to capture the social life experiences of college students with ASD. The research question called to elicit the social experiences of ASD college students.

The study met the goal of capturing the lived social experiences of college students with ASD through stories solidifying the chosen method of narrative inquiry. Clandinin and Connelly (2000) described narrative inquiry as being appropriate for studies in the education field as follows: “Experience happens narratively. Narrative inquiry is a form of narrative experience. Therefore, [*sic*] educational experience should be studied narratively” (p. 19). Creswell (2013) explained, “The narrative researcher provides a voice for seldom-heard individuals in educational research” (p. 507). Through the literature review for the study, the stories of college students with ASD have not been obtained as data and retold. By allowing ASD students the opportunity to share their social experiences through stories, the research, Autism, and higher education community heard the voices of a marginalized population.

The literature review revealed that qualitative researchers utilized semistructured interviews containing brief interview questions for participants leaving a gap in the literature. Previous researchers presented data on the social experiences and collegiate needs of students by gathering data from students, parents, and college personnel. The gap occurred in the method employed for research as the narrative inquiry was absent from the many studies mentioned in the literature review. Narrative inquiry delves into *ontological concerns* such as being, existing,

and concerning. Zimmerman and Kim (2017) explained the narrative inquiry as the “perpetual process of co-creating meaning” (p. 18). In this study, the narrative method provided a view into the social experiences of college students with ASD in higher education through the collection of stories. The narrative method enhanced previous research studies that lacked detailed, rich descriptions of students’ experiences. By employing a post-qualitative method, the stories provide an awareness of the state of being experienced by students with ASD.

The study utilized the narrative research method collecting stories of the social college experience. The method and analysis fit with the research question as the question called for stories. The research question was as follows: What are the life stories of the social experiences of ASD college students? For researchers employing the method, “the stories and the humans are continuously visible in the study” (Clandinin, 2007, p. 7). Clandinin (2007) believed when researchers employ narrative research, participants’ stories come to life about their human experience. The study allowed college students with ASD to recount their social interpersonal experiences through stories.

### **Conceptual Framework**

Chickering and Reisser’s (1993) revised the psychosocial theory of college student development referred to as the *Seven Vectors of Identity* served as the guiding conceptual framework. Chickering and Reisser’s (1993) theory of college student development inspired the study through a human development lens. The fourth vector, *developing mature interpersonal relationships*, provided a springboard for the research and allowed the researcher to narrow the research to one specific area. Other vectors not used in the study included *develop competence*, *managing emotions*, *move through autonomy towards interdependence*, *establishing identity*,

*developing purpose, and developing integrity.* Chickering and Reisser (1993) advocated that all students eventually pass through each vector, and movement between vectors is fluid.

The study focused on Vector #4 as the conceptual framework to study the social, interpersonal relationships among Autistic college students who are known to have social impairments. Social impairment remains a high indicator of ASD. Attwood (2007) explained that social understanding and friendship problems occur when people are experiencing ASD interact with others in one-on-one or group situations. Social environments containing more people pose a greater challenge for ASD individuals. Attwood (2007) expounded that multiple interactions require more time to process information which challenges individuals experiencing ASD.

Examining the social lives of ASD students fit into the framework as Chickering and Reisser's (1993) fourth vector discussed students developing additional social skills. The method complimented the framework as the method allowed the researcher to collect stories on the lived social experiences of college students. Clandinin and Raymond (2006) advocated for narrative inquiry as the method relies on human beings' affinity to storytelling and their lived stories. Furthermore, the research community continues to discount and omit individuals who experience a disability (Clandinin & Raymond, 2006). The participants lived their social experiences and had stories to share, so the narrative method fit the framework which focused on the development of interpersonal social lives.

## **Literature Review**

Through the literature review, a substantial amount of research on the topic of Autistic students in higher education exists. Researchers studied the topic through quantitative and qualitative methodologies. Through quantitative methodology, researchers reported on studies

utilizing generalizations and statistical analysis to analyze data. The researchers uncovered the social deficits students experience and highlighted the neurodevelopmental challenges faced by students (Alpern & Zager, 2007; Fletcher-Watson et al., 2013; Hanley et al., 2015; White et al., 2012). There is some evidence of experiences through researcher's use of semistructured interviews, but the accounts do not capture the entire experience or story of the participant (Cox, 2017; Van Hees et al., 2014). Researchers reported data on the social experience and collegiate needs of students through data collection from students, parents, and college personnel (Cai and Richdale, 2016; Chiang et al., 2012; Couzens et al., 2015; Ellison, 2013).

The literature presented in the literature review lacked detailed accounts of the ASD student social experience, which served as the gap in the method employed within qualitative methodologies (Couzens et al., 2015; Fleischer, 2012a; Van Hees et al., 2014; Wehman et al., 2013). Previous researchers employed methodologies of case study and grounded theory, which focused on emerging phenomenon and themes (Fleischer, 2012a; Van Hees et al., 2014).

Another researcher, Couzens et al., 2015, utilized semistructured interview questions which failed to elicit specific experiences or stories, while others were close-ended questions. The completed study utilized the narrative inquiry method, which provided a view into the lives of college students with ASD and their social experiences. Through the narrative method, the completed research included a small number of students to share their stories of experience (Creswell, 2013). The study filled a gap in the present literature by utilizing the narrative method as a methodological approach to the topic.

### **Research Question**

The researcher posed the following research question: What are the life stories of the social experiences of ASD college students? The use of the qualitative method of narrative

inquiry allowed the researcher to collect data in the form of stories within the human subjects' natural environment, utilize inductive analysis, and interpret data. The qualitative methodology allowed the researcher to look for meaning study participants make about their issues or problems (Creswell, 2014). The research question called for life stories, and the narrative method allowed the researcher to collect stories, utilize narrative coding, and perform analyzation through the *problem-solution narrative* method.

### **Analysis**

The previous section detailed the participant sample and the selection process. After participant selection and consent form completion, the data collection occurred through semistructured interviews and journal writing. The researcher conducted an initial interview lasting no more than one hour offered by video conference, phone, or email with an additional interview to serve as member checking (see Appendix B for a list of questions). Due to the distance between the researcher and participants, the researcher offered various means of participation (i.e., video conferencing, telephone calls, email, instant messaging) to the participants. In addition, a variety of options offered the traditionally marginalized participants, who experienced social deficits, flexibility in the way in which they communicated their experiences (Attwood, 2007). All participants selected the phone method for semistructured interviews. The interviews lasted no more than one hour. The researcher asked predetermined semistructured questions, recorded the interview through two digital recorders, and took notes by hand. The researcher transcribed the data and used narrative coding. Then, one week later, the researcher followed up with each participant through a short 30-minute call to conduct member checking. If any re-transcriptions occurred, the researcher forwarded the information to the participant. Participants began the journaling after the initial interview.

The researcher utilized email platforms, a common method for gathering participant journaling, as the means to collect journals (Creswell, 2013; Hayman et al., 2012). The electronic communication method allowed participants the flexibility to write on their schedule and time to ponder the writing prompts (Creswell, 2013). The researcher instructed the participants to journal write for three days, acknowledged submissions electronically, and utilized email to remind participants of due dates. The researcher used narrative coding and *problem-solution narrative* in the analyzation of journal data and conducted member checking (see Appendix C for writing prompts).

### **Narrative Coding**

Saldaña (2009) advocated for the utilization of narrative coding in the narrative inquiry method as a first coding tool. Saldaña (2009) explained that the coding strategy offers usefulness when the data contains personal experiences and when collecting data on the human condition. In the completed study, the researcher followed the recommendation of Creswell (2013) and Saldaña (2009) to use narrative coding, which allowed the researcher to reorder the stories into chronological order. As noted earlier, participants often relay stories out of order, so chronology offered a beginning to put the components of the story in proper order. For the interviews and journals, I transcribed the raw data by hand without the use of computer software through the narrative coding method. Then, the researcher sent the transcription of data to participants before the follow-up interviews. Member checking at the follow-up interviews allowed participants to correct facts or point out incorrect interpretations (Lincoln & Guba, 1985). The researcher collected any additional facts or information that participants wanted to include. The completed study asked participants to share personal social stories, and the researcher used narrative coding as the initial coding to organize story elements into the proper chronology.

## **Problem-Solution Narrative**

After narrative coding ordered the stories in the correct chronology, the study followed the *problem-solution narrative* method of analyzation common in narrative research. The researcher strove to keep the stories intact by utilization of *problem-solution narrative* to avoid fragmentation caused by other coding methods. The researcher organized the story based on a story framework utilizing literary elements (Creswell, 2015; Ollerenshaw & Creswell, 2002). The researcher entered data into a table according to the described experience given by the participant into the following structure: “Setting, characters, actions, problem, and resolution” (Creswell, 2015, p. 513). The researcher utilized the *problem- solution narrative* method as the interview and journaling prompts elicited stories from participants. Stories fit well into the *problem-solution narrative* model because stories contain the following literary elements: “Setting, characters, actions, problem, and resolution” (Creswell, 2015, p. 513).

The participant population in general refrain from speaking in abstract concepts, so analyzation techniques such as the *three-dimensional-space narrative* do not fit the study population. Attwood (2007) advocated for the understanding that abstractions prove problematic for individuals on the Autism spectrum. According to Attwood (2007), abstraction lacks precision, and most people on the Autism spectrum struggle to understand abstract concepts. The researcher chose to use the *problem-solution narrative* model rather than the *three-dimensional-space narrative* method which deals with reporting on emotion and morals, as well as, determining other individual’s intentions and points of view (Creswell, 2015). The researcher performed an audit trail in the form of a researcher journal detailing the process and journey of the study.

As mentioned in previous sections, the narrative inquiry method allowed the researcher to collect stories of the social experiences of college students who experience ASD. The researcher summarized the findings based on the situational context of the story following the interview questions and writing prompts. The questions relating to instructor interactions yielded the most information. Participants quickly shared stories of interacting with instructors. Through the *problem-solution narrative*, participants detailed positive and negative classroom interactions and experiences. Each participant reported stories of good experiences with instructors, but each participant shared at least one story of a negative experience. The experiences ranged from interacting with caring and understanding instructors to ones who exhibited aloofness to students' needs. Another question dealt with peer interactions and yielded information on participants' interactions with peers within the classroom environment. One participant reported positive contact with peers outside of the classroom through university programs. Two participants reported on-campus staff with positive stories, while another participant experienced mixed interactions. Finally, questions related to campus events and housing yielded fewer details and stories of participants who experienced little in the form of campus events. The stories presented below, presented in tables when appropriate, exhibited in detail the findings explained in summary.

### **Presentation of the Data and Results**

The researcher organized the presentation of data and results based on the nature of the questions and writing prompts presented to the participants. Presenting the data in this manner allows for participant stories to be shared side by side on a topic allowing for easier synthesis. The researcher presented the data in the following order: Instructor/work interactions, peer interactions, other staff interactions, and event/housing attendance.

**Instructor/work interactions.** The researcher's initial intent to group instructor and campus work stories got dismissed when none of the three participants engaged in campus employment. Two students reported overall positive instructor interactions but one student shared negative experience. The interview and writing prompt asked participants for accounts of interactions with instructors on the college campus, in the classroom, or through electronic communication. The participants recounted instructor stories as they lacked employment during their time at college, but they shared more than one instance of instructor interactions. The researcher provided tables within the text to provide details and convey the data in a story format for the reader for clarity and to represent participant stories in their entirety.

Participant 1, as shown in Table 2, shared an instructor interaction in which she asked the instructor for career guidance. She took an art gallery course and posed a question to the instructor regarding the process to show art work in a gallery. The instructor told the student to not consider showing her art in a gallery. According to the instructor, only artists with bachelor's degree exhibit work in galleries. As shown in Table 2, the student refrained from confronting the instructor about the comments and kept her opinions to herself.

Table 2

*Problem-Solution Narrative for Participant 1, Instructor 1 Interaction*

Setting	Characters	Actions	Problem	Resolution
The setting was a large community college and in an art course on gallery management. The class was on campus at the largest campus of the college during a previous term.	Participant 1 was a college art student. Instructor 1 middle-aged man was described as a negative instructor. He had a negative attitude about succeeding in the visual arts.	Participant 1 was enthusiastic about taking the gallery course and loved making art. She took the class because her goal was to get her work in a gallery.	One day in class, she asked Instructor 1 the best way to show artwork in a gallery. Instructor 1 told Participant 1 you need a bachelor's degree and she should not even think about putting her art in a gallery.	The participant thanked the instructor for his answer. She tried not to let the answer bother her, but she was left wondering how someone in his position could "squash enthusiasm and confidence." She never asserted her opinion to the instructor but rather kept it to herself.

*Note.* Adapted from Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research by J. W. Creswell, 2015, p. 513.

The same participant wrote of another negative instructor interaction. The participant enrolled in a series of design courses taught by the same instructor. The instructor announced to the students he never awarded A's as a final grade or for assignments. The participant accepted the instructor's belief but had a strong reaction to the rule. The participant's comments, see Table 3, exhibited the disgust she felt for the practice, but she never confronted the instructor. Both stories illustrated the student refrained from constructively confronting each instructor over the career advice and grading strategy.

Table 3

*Problem-Solution Narrative for Participant 1, Instructor 2 Interaction*

Setting	Characters	Actions	Problem	Resolution
The design class was on the largest campus of the college during a previous term lasting for three consecutive courses.	Participant 1 was a college art student. Instructor 2 was a male who was rigid and inflexible in his grading.	Instructor 2 did not believe in giving A's, no matter how good a student performed. He never gave an A. Participant 1 tried hard to do a good job in the class so she could keep straight A's. She was required to take three art classes led by Instructor 2.	Participant 1 wanted an A in the class, but the instructor did not believe in giving an A to any student.	Participant 1 did not address the issue with the instructor. She explained the practice of Instructor 2 as follows: "It was a confidence hurter," "I got a B in the class," and "that was aggravating as hell."

*Note.* Adapted from Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research by J. W. Creswell, 2015, p. 513.

In the final story by Participant 1, she explained a less negative experience, but the story lacked a follow through on the part of the student. The student recounted she took a drawing course at the same community college with an approachable instructor. The instructor gave plenty of work to keep students busy, and Participant 1 experienced enthusiasm in attending. Her question to the instructor involved suggestions on how to begin a drawing. The instructor suggested to layout her drawing materials and use them as inspiration, see Table 4. The student regrets she never tried the procedure, but the student did return to the class to express her appreciation for the instructor, see Table 4.

Table 4

*Problem-Solution Narrative for Participant 1, Instructor 3 Interaction*

Setting	Characters	Actions	Problem	Resolution
The setting was a large community college, and Participant 1 took an art course on drawing in a previous term.	Instructor 3 was described as a “hippie” instructor with long hair that was pulled into a gray ponytail. He stood at medium height and was funny. Participant 1 took a drawing course from the instructor.	Instructor 3 taught a class that was very specific about drawing, and his assignments kept the class very busy. Participant 1 was enthusiastic about attending the class.	Participant 1 asked the instructor, “how do you even start a picture?”	Instructor 3 told her to get all the supplies out and let them inspire her. She never practiced the method, though. After the class was over, she returned to thank the teacher for being funny and approachable. Being back in the classroom made the participant happy.

*Note.* Adapted from Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research by J. W. Creswell, 2015, p. 513.

The other two participants shared stories of mixed experiences. Participant 2 provided several experiences with instructors and one within the classroom sponsored by the Wellness department at the university. Participant 2 recounted an initial experience in college of approaching her math professor with her disability accommodations, see Table 5. She expressed, “I was scared to death having never done this before.” Previously, her parents dealt with her accommodations.

Table 5

*Problem-Solution Narrative for Participant 2, Instructor 1 Interaction 1*

Setting	Characters	Actions	Problem	Resolution
A college math class at a western public 4-year university.	Participant 2 and a math professor.	Participant 2 explained she walked to the instructor’s office herself with the intent of discussing her accommodations given from the disability center.	She explained her nervousness about approaching the instructor with her accommodations. In the past, her parents handled these matters.	Participant 2 found the instructor to be “nice,” and she even asked her about her summer and her interests. Participant 2 often went to her office hours to talk.

*Note.* Adapted from Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research by J. W. Creswell, 2015, p. 513.

Participant 2 recounted another experience with her Math instructor regarding college majors, see Table 6. The participant attended office hours often and in one instance, discussed her desire to major in kinesiology and later medicine. The instructor shared information on the majors with the participant. They came to an agreement that due to her sensory issues and fine motor challenges the participant should select another major. The participant decided with the help of her instructor to possibly study Geology, which combines her interest in math and the outdoors. Through the experience, the instructor continued to prove helpful and supportive.

Table 6

*Problem-Solution Narrative for Participant 2, Instructor 1, Interaction 2*

Setting	Characters	Actions	Problem	Resolution
Math professor's office hours at a 4-year university.	Participant 2 and a math professor.	Participant 2 explained, "We would often talk sometimes about life and my personal life." One day they discussed Participant 2's desire to study kinesiology and become a medical doctor.	Participant 2 experiences significant sensory issues and fine motor delays, so a career in medicine may not fit according to her instructor.	The instructor went out for tea with Participant 2 and got to know her better. She was able to help her consider other college majors. They determined that geology may be a better fit. The major involves the participant's interest in math and the outdoors.

*Note.* Adapted from Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research by J. W. Creswell, 2015, p. 513.

With the same instructor, Participant 2 provided another interaction. Participant 2 relayed her experience of a day when certain changes affected her routine, see Table 7. The student experienced a change in her exercise class and math final test schedule. After both changes, she attended a math homework session near her professor's office, where the professor assisted. She expressed optimism that the math session would prevent an ASD meltdown. The participant shared, "After all, math is structured, and once you figure out a problem, the process for solving it is much like a routine." At the math session, she experienced a loud noise and jumped out of her chair and flapped her arms. She sat down in her chair and rocked. She collected herself enough to ask her math question and got to work on her math problems.

Table 7

*Problem-Solution Narrative for Participant 2, Instructor 1, Interaction 3*

Setting	Characters	Actions	Problem	Resolution
A 4-year university office area of a math professor.	Participant 2, math instructor, and random students are sitting in the math homework help area.	Participant 2 planned to attend math help session outside her professor's office. Before that, she went to her workout class, which was canceled without notice. Once at the math homework help session, the instructor helped her reorganize her backpack. The instructor also announced earlier the upcoming final test changed time and location.	The change of routine made the participant wonder if she would have a meltdown. While at the math help session, she hoped doing math would keep her calm. Then, the janitor turned on a vacuum nearby, and the participant explained she jumped out of her chair and flapped her arms. She wore noise-canceling headphones, but the noise was too loud.	The participant then sat down, rocking to avoid a "public meltdown." She asked a math question to the professor and calmed down by doing the math. The professor expressed concern and invited the student to her office to determine if she could help in any way. Later, the participant sent an email to the professor explaining ASD.

*Note.* Adapted from Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research by J. W. Creswell, 2015, p. 513.

In another example, the participant shared interaction with the same math professor concerning a low exam grade, see Table 8. Participant 2 recounted a low grade received on the last test before the final exam in trigonometry. She recalled the test required extensive writing, and she experienced fatigue which her instructor noticed too. She and her instructor expressed concern over the low grade during a meeting. The instructor told the student her posture

“hunched” half-way through the test, and in examining the test, her writing got progressively worse. During their meeting, the student answered a difficult question from the test correctly without working the problem on paper. The instructor explained that the student knew the material but requires more time and breaks on tests to resolve the issue in the future.

Table 8

*Problem-Solution Narrative for Participant 2, Instructor 1, Interaction 4*

Setting	Characters	Actions	Problem	Resolution
Math course in Trigonometry at a 4-year university.	Participant 2 and math professor. The participant described the professor as someone open to learning about ASD and served as a mentor to her.	The participant explained in trigonometry she always made high grades except on the test before the final exam. She knew the material. The test required much writing to show work. The participant explained, “This particular test had twice as much writing as our previous tests did.”	The student made an unacceptable grade on her test. She told the instructor she would try harder next time. The instructor showed some frustration too. The instructor explained that she knew why Participant 2 made the low grade. The instructor noticed the student hunching over halfway through the test, and the student recalls rocking back and forth during. Writing fatigues, the student due to low fine motor skills.	The instructor and she looked through her test and saw her writing got progressively worse. The last question she answered with a “rushed answer.” In the meeting with the instructor, she was asked to compute the answer without paper, and she was successful. They decided to have the student arrive early for the test and take 15-minute breaks. The participant explained she used to the breaks to run to assist with focus.

*Note.* Adapted from *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* by J. W. Creswell, 2015, p. 513.

In a final example of instructor interaction, Participant 2 details an experience within an undergraduate studies course, see Table 9. The instructor invited a guest speaker from the Wellness Center to discuss and lead some activities on the topic of sexual relationships. The participant explained her low level of maturity on the topic and the confusion experienced during the activities. Many of the activities required prior experiences in a romantic relationship to participate and students shared intimate stories of sexual behavior and relations. In the end, the instructor offered no assistance and refrained from ending the activities.

Table 9

*Problem-Solution Narrative for Participant 2, Instructor 2, Interaction 1*

Setting	Characters	Actions	Problem	Resolution
An undergraduate studies course at a 4-year university.	Participant 2, a professor, a Student Wellness representative, and 25 students.	The professor allowed a Student Wellness guest speaker to come to class and talk about sex and relationships.	Participant 2 felt her “immaturity” in the area of sexual relations due to the activities conducted by Student Wellness. Also, she wondered why the professor allowed this sort of guest speaker.	Participant 2 admitted in the activities that she never experienced a romantic relationship. Her maturity level varies from her peers due to ASD. The professor refrained from interfering with the presentation by Student Wellness.

*Note.* Adapted from *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* by J. W. Creswell, 2015, p. 513.

Participant 3 explained his interactions with instructors as “fairly typical.” He relayed an experience of difficulty in progressing at the same rate as other students, see Table 10. The participant shared his experience of not being able to keep up with a question and answer activity in class. The instructor and other students moved along at a faster pace. He stressed the issue as

being unique to him and not related to ASD. In the second example of instructor interaction, Participant 3 shared an ongoing positive student-teacher relationship experience with his philosophy instructor, see Table 11. In the story, Participant 3 and a philosophy instructor frequently engaged in academic conversation after class. He felt ASD did not impact the teacher-student relationship as they experienced a shared interest in the topic of philosophy.

Table 10

*Problem-Solution Narrative for Participant 3, Instructor 1, Interaction 1*

Setting	Characters	Actions	Problem	Resolution
A community college class.	Participant 3 (college student), instructor, and classmates.	Participant 3 attended a class and had trouble keeping up with the daily exercises during class. The instructor and most of the other students had already moved on to another question and answer.	The instructor and students moved through questions and answers, and Participant 3 could not keep pace.	Participant 3 explained when he approached instructors on issues of this sort, he was not dismissed, but the problems were. He believes the learning issue was not related to ASD. He explained the issue was unique to him in the following way: “difficulties in the rates of adsorbing the curriculum [ <i>sic</i> ] and material is probably more often a problem for me than other people.”

*Note.* Adapted from *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* by J. W. Creswell, 2015, p. 513.

Table 11

*Problem-Solution Narrative for Participant 3 Instructor 2, Interaction 1*

Setting	Characters	Actions	Problem	Resolution
A community college campus.	Participant 3 and a philosophy instructor.	Participant 3 approached his philosophy instructor after each class for a discussion on the topic. The instructor engaged in conversation with the student to discuss or debate a philosophy topic.	Participant 3 explained, “It was the one person I could go in-depth over questions I was interested in and that was not class material specific.”	Participant 3 did not believe ASD impacted the student-teacher relationship except that his interest was intense enough to go out of his way to talk and debate the topic with the instructor.

*Note.* Adapted from *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* by J. W. Creswell, 2015, p. 513.

The stories illustrated that students experienced positive and negative instructor interactions. Participant 1 recounted two experiences with professors who exhibited rigidity in grading and pessimistic outlook on the art profession. The third story from Participant 1 contained experience with a caring, easy-going instructor who offered advice when asked. Participant 2 provided several stories of instructor interactions with a math instructor and a university studies instructor. The participant recounted several stories of her time with a math instructor whom she had for several semesters. The math instructor exhibited an interest in the student and a desire to be an ongoing mentor.

On the other hand, the university studies instructor failed to exhibit vigilance over students and their unique needs in the instance of a Wellness Center guest speaker. Finally, Participant 3 experienced frustration with his learning issue, which instructors failed to address

but never dismissed him as a student. With another instructor, Participant 3 built a student-teacher relationship through the discussion of academic topics.

### **Peer Interactions**

The second area discussed and journaled by participants included peer interactions. The researcher requested each participant share at least one experience of peer interactions. Through the stories, the researcher noted that two of the participants failed to make long-term friendships, while one participant made four friends.

Participant 1 told of a peer, “Jill,” whom she met in an art course and befriended briefly, see Table 12. She took “Jill” on an outing with her and her husband. The outing became uncomfortable when the participant asked if “Jill” wanted her spouse. “Jill” never went on an outing again with the participant. Participant 1 noted she heard through classmates “Jill” graduated after the class and obtained employment with a college.

Table 12

*Problem-Solution Narrative for Participant 1, Peer 1, Interaction 1*

Setting	Characters	Actions	Problem	Resolution
The setting was a large community college and an art course.	Participant 1 and a class peer named “Jill.” “Jill” had “very pretty long dark straight hair with a gold necklace that sparkled.” She “had a bite to her” and sarcasm.	Participant 1 took “Jill” out with herself and her husband. She wanted away from her husband. “Jill” was asked by Participant 1 if she wanted her husband.	She explained “Jill” looked uncomfortable when asked if she wanted her husband.	“Jill” did not go out with Participant anymore, and she graduated after that class and obtained a job. Participant 1 said, “I was impressed with how she carried on through” meaning finished the program and got a job. Participant 1 dropped out after the class because she separated from her husband.

*Note.* Adapted from *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* by J. W. Creswell, 2015, p. 513.

Participant 1 described a second peer interaction with a male classmate, “Leo.” The interaction occurred during a drawing class at a community college, see Table 13. “Leo” explained to Participant 1 he needed a model for his photography class assignment. The participant agreed but felt no attraction to the peer. The brief interaction did not last long and they never spent time together again.

Table 13

*Problem-Solution Narrative for Participant 1, Peer 2, Interaction 1*

Setting	Characters	Actions	Problem	Resolution
The setting was a large community college and a drawing art course.	“Leo” and Participant 1. “Leo” was a classmate/peer. He was easy to get along with, and “very sweet.” Participant 1 was an art student.	“Leo” was in the drawing class with Participant 1. In art classes, students had the opportunity to talk more so “Leo” initiated a conversation with Participant 1.	“Leo” was taking another course on photography. He asked Participant 1 if he could take photos of her for his other class.	Participant 1 explained, “We went on a kind of date . . . I did not have any attraction but liked him as a friend.” They went to the forest area of campus and took photos for his art class. The friendship did not go any further, and they did not meet up again. Participant 1 felt honored to be in his photos, and “Leo” gave her a copy of the work.

*Note.* Adapted from *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* by J. W. Creswell, 2015, p. 513.

Participant 2 recounted one detailed account of peer interactions (see Table 14) then briefly discussed two other occasions. In her detailed account, the story took place in an undergraduate university studies course. Participant 2’s professor grouped students to complete various projects, and the participant’s assigned group created a project to talk to children and parents with Autism on nutrition. The participant recounted difficulty knowing how to break into casual groups and converse during or after class. She shared the group work provided a positive experience, “My group members were amazing [*sic*] it was the best experience I have ever had doing group work!” During the group project presentation, the participant shared with

her peers and the parents of the children about living with Autism. She added about her group members, “When I see them around campus they stop and say hi to me, and it feels good.”

In another instance, Participant 2 made four friends through a university summer program and a hiking club. The participant explained she enjoys hiking and lives in an area conducive to that activity. On one occasion, she sent a text to her friend to meet up. The friend agreed to meet her for a nighttime hike then dinner. When asked if she kept in contact with these peers, she replied, “I do keep in touch.”

As a side note, the participant mentioned two other common experiences with peers. She recounted most students ask her about her recording pen used in class. Peers asked her, “what is that?” She felt embarrassed and she tried to not mention experiencing a disability in situations of this sort. In a final instance, the participant explained a peer promised to hang out with her, if she helped study for math quizzes. When the peer received an A on a quiz, they cancelled plans to hang out with the participant. The behavior occurred over three times. Participant 2 explained, “So I realized I was being used [*sic*].”

Table 14

*Problem-Solution Narrative for Participant 2, Peer 1, Interaction 1*

Setting	Characters	Actions	Problem	Resolution
A 4-year college in a university studies course.	Participant 2 and various classmates. The participant provided additional information on her Autism. She explained that people could only tell she has ASD when sensory issues flare up. At other times, people may view her as quiet, serious, and intelligent. She prefers small groups and one on one interaction. Large groups take more energy to listen and to “filter out external stimuli.”	Participant 2 explained her difficulty in understanding when to enter into conversations other students were having casually during or after class as they would break into small social groups. Every time she felt it was appropriate to add to the conversation, someone began speaking. Eventually, students invited Participant 2 to engage in the group social chats.	Often, the participant experienced difficulty knowing how to break into casual groups and converse during or after class. At the end of the course, a group project required the participant to work with five other students.	One group project was to speak on nutrition to a group of children with Autism, and with instructor permission, the participant worked in that group. The experience allowed her to explain autism to her peers and the parents of the children. She found the largest misconception involved the terms of Autism and intellectual disability. The participant explained, “My group members were amazing; it was the best experience I have ever had doing group work!”

*Note.* Adapted from *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* by J. W. Creswell, 2015, p. 513.

Participant 3 reported he experienced no contact with classmates outside of class but recounted a group experience during an engineering class. He explained difficulty getting along with others in the group and he believed others perceived him as bossy. He explained the experience in the following manner, “If I didn't [*sic*] inject enough, I was left [*sic*] with less work

than the others and I think they resented me for it.” He added none of the friction occurred overtly, but he perceived the others as not wanting to work with him. Also, he made a point to relay an experience from ten years ago, when he participated on a track team. Participant 3 explained he was the “black sheep” of the team but admired for “perseverance and skill.” He reported he did not spend time outside of track time with the team members except for attendance at team party events.

Two of the three participants failed to make friendships. Participant 1 explained two instances that allowed her to develop longer-term friendships, but she refrained. Participant 2 detailed a positive group experience within a classroom environment with cordially friendly students and shared a story of making long-term friendships through university programs. Participant 3 explained no peer interactions outside of class and difficult group experience in class.

### **Staff Interactions**

Each participant experienced interactions with staff while at college. Participant 1 and Participant 3 expressed a negative experience with the financial aid office. The communication with the advisor and lab assistant appeared clear making for a positive experience, but Participant 3 experienced some negativity with the financial aid office staff.

Participant 1 detailed her experience with an academic advisor. She dropped out of the college after the winter term, and she sought guidance on the process to reenter the college through the advising center. The advisor provided helpful and sincere help to reenroll the participant, as shown in Table 15. In the end, the advisor’s assistance failed to motivate the student to reenroll.

Table 15

*Problem-Solution Narrative for Participant 1, Staff 1, Interaction 1*

Setting	Characters	Actions	Problem	Resolution
A community college academic advisor's office during the current Spring term.	Participant 1 recently dropped out of community college. A female community college advisor. The participant reported the advisor as being nice and encouraging.	The participant dropped out of college during the Spring term. She returned to speak with an advisor on how to reenter the college. The advisor listened to the participant's concerns.	The participant needed information on returning to college after being gone for one term. She received the information through an advisor on how to reenter the college.	She is not certain she will start again since she is working a full-time job. She reminisced about her time at the college and expressed her love of the classes and how much she learned.

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*Note.* Adapted from *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* by J. W. Creswell, 2015, p. 513.

Participant 2 provided interaction with a disability service center employee (see Table 16) plus three shorter stories. The participant visited her disability advisor at the start of her postsecondary education to ask about seating in the classroom. She needed to ensure a seat upfront, and she never experienced a college classroom environment. The advisor told her to arrive early or allow disability services to attach a disability sign to the chair. Participant 2 declined the sign stating, "Obviously no one would want a sign saying that clearly labeling you in front of the whole class."

In a second interaction with the same advisor, the participant shared a time she accessed help for the selection of an art course. The participant wanted to locate a course that complimented her "weak" fine motor skills. The advisor exclaimed art is fun and the participant

need not worry since she aced her math course. In two other instances, the participant retold short stories of positive interactions with a mentor and library employee. Disability services provided a mentor, and the participant described the mentor as helpful. The mentor assisted in deadlines, appointments, and drafting emails. The employee served as someone who checked in with the student on classes and extra-curricular activities. Participant 2 also reported a positive experience library staff member. In one instance, she needed to use a scanner and upload a photo for an art class but needed assistance with the computers. A library worker sat with her and assisted her step by step in the process. The participant stressed that the assistance saved her time.

Participant 3 provided a short story on college staff interactions with a disability services advisor. He had a positive experience when he utilized the office to receive disability accommodations for class. He received extra time on projects, one and a half extra time on tests, and quite working space.

As with other areas in this study, participants reported mixed interactions with college staff. Participant 1 reported cordial interaction with an academic advisor on the process to reenter the community college. Participant 2 experienced mixed interactions with staff. She reported two negative experiences with the same disability services advisor who failed to understand the nuances of ASD. Finally, Participant 3 shared one experience with a disability services advisor that assisted him in successfully obtaining academic accommodations.

Table 16

*Problem-Solution narrative for Participant 2, Staff 1, Interaction 1*

Setting	Characters	Actions	Problem	Resolution
A 4-year university.	Participant 2 and an advisor from the disability service center. The participant explained she disliked the advisor and “lacked understanding.”	The participant accessed disability services to assist her with classroom questions on access.	The participant had never attended university courses and needed to understand how seating worked because she needed to sit up front due to her disability. In high school, she had a seat up front. The participant accessed the disability advisor for information on where to sit in college classes.	The advisor told her to go early to class, or she could have a sign put on a chair indicating it was reserved for a student with a disability. The participant did not know students pick their seat in college, but she did not want a sign.

*Note.* Adapted from *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* by J. W. Creswell, 2015, p. 513.

**Event and Housing Interactions**

The researcher grouped event and housing interactions as both elicited little social interaction data. Participant 1 explained she attended one event which her previous course instructor planned as a reunion. The participant attended the event, and enthusiastically recalled delicious food and motivational speakers. She recalled not having any conversations with students who attended. She explained she saw one student in public later but did not dare approach the student and introduce her to family members. Participant 1 declined to discuss her home life memories based on trauma. Participant 2 recounted she attended a basic dance at

college. She left the inside dance and went outside to shoot some basketball hoops for ten minutes then left the event. The participant explained, “I am not a fan of dances” and reported no interactions. Participant 2 reported living with a roommate in an apartment, and the application process matched her to the roommate. She admitted to getting off a task on cleaning and forgetting to turn the oven off. The roommate exhibited annoyance at the behavior. The participant asked the roommate if she was happy, and she expressed she was. The participant explained that she would be getting assistance with life skills soon. Participant 3 failed to report any housing stories but provided a brief instance of a college event. He participated in a faculty versus student dodgeball game lasting thirty minutes to one hour. Participant 3 explained that he worked to win the game and did not talk to anyone.

#### **Chapter 4 Summary**

The study allowed college students with ASD the opportunity to share the life stories of their social experiences from college. By utilizing a narrative inquiry method, the study filled a gap in the literature on the social experience of college students with ASD. The study had the following problem statement: The study needed to be conducted as there was a scarcity of research giving ASD college students, a traditionally marginalized population in society and education, a voice through unique life stories of their social experiences within the higher education environment.

I posed the following research question presented for research as follows: What are the life stories of the social experiences of ASD college students? The researcher used interviews and journal writing as tools to gather data. Once the researcher obtained the participants’ data, analyzation occurred in the form of narrative coding and *problem-solution narrative*. The researcher presented the data in the form of tables where appropriate and within the framework

of the topics presented through the participant interview questions and writing prompts. The participants reported a mix of positive and negative interactions with instructors, peers, and staff. None of the students held campus employment, so the researcher collected no data on the topic.

## **Chapter 5: Discussion and Conclusion**

### **Introduction**

Today, one in 59 American children experience ASD according to the Centers for Disease Control (Centers, 2018). ASD is a neurodevelopmental disorder producing social interaction and communication deficits along with repetitive and restrictive behaviors in adults and children. The passage of disability legislation, early diagnosis, and improved treatment programs facilitates the attendance of adults with ASD in higher education (Van Hees et al., 2014). A personal and professional interest in the topic of ASD adults in higher education spurred the pursuit of the completed study.

The study had several objectives. First, the researcher gave a voice to traditionally marginalized participants through the study. Second, the study increases awareness within the Autism community, families, and higher education institutions of the social experiences of students with ASD. Third, the study through awareness educated the higher education community on the needs of ASD students allowing discussion on the creation of new programs or improvement on current student support systems.

The purpose of the study allowed college students with ASD to share their lived life stories. The stories collected for the study provided lived stories of students' social experiences while attending an institution of higher education. Three participants provided stories of their social interactions while attending a college or university.

A thorough literature review shows the need for a narrative inquiry approach to studying the topic of the social experiences of ASD adults in college. The body of research available for review on Autistic college students focuses on the students' social deficiencies and needs in the higher education environment, as well as, determining the social and academic needs of students

experiencing ASD. The study had the following problem statement: The study needed to be conducted as there was a scarcity of research giving ASD college students, a traditionally marginalized population in society and education, a voice through unique life stories of their social experiences within the higher education environment.

From the problem statement, the researcher developed the research question as follows: What are the life stories of the social experiences of college students with ASD? Narrative inquiry served as an appropriate method in the research as Clandinin and Connelly (2000) explained that people live in narrative moments and fragments in life understood as stories. Utilization of the narrative method allowed the researcher to capture stories of the social experiences of college students. The researcher collected stories and analyzed them through narrative coding and the *problem-solution narrative*. A discussion and review of the results, relation to the literature, limitations, implications, and recommendations for further research occurs in Chapter 5.

## **Summary of the Results**

### **Summary of Study**

The impetus for the study stems from a personal and professional interest in the lives of adults with ASD within the higher education system. Upon completion of a thorough literature review, the researcher determined a gap in literature existed, and a study on the actual experiences of ASD students could benefit the current state of the literature.

The researcher viewed students' social experiences through a student development lens. The researcher utilized Chickering and Reisser's (1993) psychosocial theory of college student development to guide the research question *The Seven Vectors of Identity*. The researcher posed

the following research question: What are the life stories of the social experiences of ASD college students?

Chickering and Reisser's (1993) psychosocial theory of college student development contains seven vectors (see Figure 1): *Develop competence, manage emotions, move through autonomy towards interdependence, develop mature interpersonal relationships, establish identity, develop purpose, and develop integrity*. Students eventually pass through each vector but in no specified order according to Chickering and Reisser (1993). Utilized in the completed study, Vector #4 centers on "developing mature interpersonal relationships" (see Figure 1; Reisser, 2013, n.p.). Students experiencing the fourth vector develop "tolerance and appreciation of differences" and the "capacity for intimacy" (Chickering & Reisser, 1993, p. 146). Exercising tolerance of differences means students accept intercultural and interpersonal differences and ultimately communicate without stereotypes or unconscious bias. Within current friendships, students exercise an understanding of differences that can transfer as tolerance into new acquaintances. Chickering and Reisser (1993) explained that the goal remains to lower bias, exercise empathy, and appreciate diversity. The fourth vector served as a framework to influence and focus the research on an area of student development.

The significance of the study lies in the use of the narrative method to retell the lived life experiences of students with ASD. The study adds to and compliments the current literature on the subject that encompasses and acknowledges the social issues of adults with ASD experience. The researcher believes the narrative study inspires new ideas for research within the community. Furthermore, the study creates awareness of this population of students and their potential needs. The awareness of students with ASD inspires universities and institutions of higher education to consider improved or innovative supports to students with ASD.

## Seminal Literature

With students experiencing ASD on college campuses, academic literature focused on the social challenges of students, needed support programs, and neurodevelopmental background behind ASD symptoms. The researcher completed the study as there was a scarcity of research that shared the unique life stories of college students who identify as students with ASD. The seminal literature on the topic utilized varied methodologies, including quantitative and qualitative methods.

Researchers in the literature studied Autistic college students' social deficiencies and needs in the higher education environment. Hanley et al. (2015) chose a neurodevelopmental model in studying social deficits in ASD adults with a quantitative study tracking and measuring the movement of the eyes (e.g., *eye-tracking*) to understand social attention. Hanley et al. (2015) advocated ASD adults bring into adulthood social difficulties experienced from adolescence. Through a structured social interaction experiment gauging *eye-tracking*, Hanley et al. (2015) proved that social difficulties related to ASD persist into adulthood. White et al. (2011) explored through a study the psychiatric risks (e.g., social anxiety, depression, and aggression) and their positive correlation with ASD screening measures and determined the topic needed exploration. Freeth (2012) studied specific traits of social skills and attention switching ability as the traits related to ASD and social anxiety. White et al. (2011), and Freeth (2012) used a neurodevelopmental lens, highlighting the social difficulties and deficits in young ASD college students' experiences. The researchers selected methodologies that failed to gather experiences of students through stories. For example, Hanley et al. (2015) and White et al. (2012) confirmed neurological deficits affecting social interaction but failed to capture stories of the relationships.

The completed narrative inquiry study added to the existing literature on social deficits by providing life stories of ASD students.

In other literature, researchers explored the social and academic needs of students experiencing ASD. Chiang et al. (2012) examined factors of participation in higher education by ASD students through a quantitative methodology. The researchers discovered attendance in postsecondary environments depended on a variety of factors (i.e., family involvement, student characteristics, and transition planning). Chiang et al. (2012) suggested that universities and colleges provide ASD students' supports. In another study, Cai and Richdale (2016) concluded that ASD students experienced difficulty in written communication exchanges with instructors but generally received the customary accommodations for students with disabilities. Fleischer (2012b) gathered data from ASD family members who explained that families lacked access to situational experiences encountered by Asperger Syndrome (AS) students. Fleisher (2012b) concluded that parents and families served as support systems to students and shared their understanding of student impairments but possessed limited influence in the actual classroom environment. Through examples from the literature review, the completed study on the actual experiences of ASD students in the form of stories adds to and complements existing literature.

### **New Literature**

The work for the completed study began in 2017. A scarcity of new literature existed on the topic of ASD adults in college with existing literature focusing on the areas of retention, faculty perspectives, twice-exceptional college students, and accommodations/support services. Through a qualitative study utilizing in-depth semistructured interviews, Berry (2018) studied the overall experience of college through Mississippi community college students with ASD and degree perceptions. The dissertation utilized Labaree's framework of education as a public and

private good along with person-environment fit models. Berry (2018) found ASD students experience challenges in organization, social interactions which fall under the topic of retention. Berry (2018) defined retention as the interaction a student experiences with the institution. The completed study compliments Berry (2018) by providing examples of life stories of at least two students who persisted in higher education.

Gobbo, Shmulsky, and Bower (2018) conducted a qualitative study on faculty members who taught ASD college students in science, technology, engineering, and mathematics (STEM) programs. The study focused on the experiences of faculty members with ASD students. Faculty described ASD qualities that hindered the students socially, such as awkwardness and expressing themselves inappropriately in class. My completed study compliments the opinions and experiences of the faculty by providing classroom experiences from the students' perspective.

Tagtmeyer (2017) conducted a case study and used a grounded theory for analyzation in a dissertation on the experiences of early diagnosis of giftedness and ASD for young college students. The researcher concluded after conducting twenty-five interviews with students and advocates that early diagnosis is essential in having a successful college experience. Early diagnosis assisted in determining individual differences and support for the social and emotional needs of students. The completed study added to Tagtmeyer (2017) by providing experiences of at least one students who received early diagnosis and persisted in college.

In a final example, Accardo, Kuder, and Woodruff (2019) conducted a two-year study on accommodations and support services students with Autism accessed. The researchers utilized a mixed-methods approach to the topic using nonexperimental survey and semistructured follow-up interviews. The researchers reported that ASD students accessed academic and nonacademic

resources, which compliments Cai and Richdale (2016) that found students accessed academic help but lacked social supports. In Accardo et al. (2019), students chose nonacademic supports of one-on-one assistance from either faculty or academic coaches and academic assistance in the form of extended time for examinations and transition programs. My study illustrated two of three participants refrained from seeking out nonacademic assistance. The presence of academic and nonacademic services at the institutions attended by participants was not part of the completed dissertation study.

## **Methodology**

To capture the lived stories of colleges students' social experiences, the researcher utilized the narrative methodology to collect and retell stories. Clandinin and Connelly (2000) advocated for the study of educational experiences through a narrative method. Experiences occur naturally through the course of their lives. Clandinin and Connelly (2000) explained that narrative inquiry takes into account that life contains narrative fragments in time and space.

Creswell (2013) cited Dewey who held experience as a means to gain an understanding of an individual, while one experience leads to more experiences for the individual. Creswell (2015) explained that biographical recording by the researcher is a means of writing and recording the participants' life stories. Also, Creswell (2013) explained, "the narrative researcher provides a voice for seldom-heard individuals in educational research" (p. 507). By utilizing narrative inquiry allowing ASD students the opportunity to share their social experiences through stories, the researcher recorded the voices of the marginalized population. I followed the narrative inquiry process of collecting stories through interviews and journaling, analyzed data, and retold the participants' stories through the *problem-solution narrative structure* (Creswell, 2015).

## Summary of Findings

Narrative inquiry allowed the researcher to collect stories of the social experiences of college students who experience ASD. The questions related to instructor interactions yielded a wealth of data. Each participant shared stories of positive student-instructor relationships, but each participant shared at least one story of a negative experience. The positive experiences included caring, understanding reciprocal interactions with instructors but contained a small number of stories exhibiting instructors' aloofness to students' needs. Participants 2 and 3 described instructor relationships involving give and take in conversations on preferred class topics and career aspirations. On the other hand, Participant 2 described an instructor not attentive to the diverse backgrounds of students when the instructor scheduled a guest speaker who presented a topic that made Participant 2 uncomfortable. Participant 1 detailed interaction with an instructor on grading practices, but she failed to express her beliefs or to resolve the issue with the instructor.

Another question dealt with peer interactions and yielded information on participants' interactions with peers within the classroom environment. Participant 2 reported positive contact with peers outside of the classroom through university programs. Participant 1 interacted with peers but failed to establish long term friendships with classmates. Each participant accessed campus resources and reported interactions with staff.

Participants were asked to discuss interactions with campus staff, which generated cordial interactions except in one instance. Participant 2 gave an example of staff not understanding ASD, which resulted in her not receiving assistance in locating an appropriate course. Finally, questions related to campus events and housing produced fewer detailed stories on events and few on housing. Most students had at least one experience at an event but lacked any social

interaction. The stories presented below, presented in tables when appropriate, exhibited in detail the findings explained in summary.

### **Discussion of the Results**

This section discusses how the study addressed the research question and the conceptual framework selected for the study. The study answered the research question and provided another way to view the conceptual framework by Chickering and Reisser. Participants provided data through the narrative method in the form of stories of their life experiences.

The researcher posed the following research question for the completed study: What are the life stories of the social experiences of ASD college students? By utilizing the narrative method, the researcher collected the life stories of college students with ASD within a higher education setting. The researcher answered the research question by collecting stories. The method allowed the researcher to contribute a body of research that kept the stories and participants at the forefront of the study (Clandinin, 2007). Clandinin (2007) believed that research participants' stories come to life about their human experience when researchers utilize the narrative method. For example, Participant 2 shared detailed accounts of her experience at a 4-year university. The narrative method allowed her to explain several instances of interaction with a math instructor. The narrative brought the reader into the instructor-student relationship detailing interactions that provided support and assistance to the student. An implication of the stories concerning the understanding and supportive instructor suggests these types of professors assist in a student's persistence and overall may strengthen retention rates for universities. The accounts also made light of other departments and one instructor who lacked empathy for a population of students not at the same sexual maturity level as other students, as shown in the Wellness guest speaker story. Several implications exist including low student persistence for

not feeling included and the loss of belonging to the campus community. Participant 1 shared an account of an instructor recommending she not show art in a gallery without a bachelor's degree. She explained to her wonderment of how someone in this position could "squash enthusiasm and confidence" in their students. Participant 3 shared instructors listened to his issues but failed to address them for resolution. The potential to avoid negative interactions exists through studies of this sort that detail actual stories. The researcher not only collected stories on student-instructor interactions but also included peer and staff experiences, as well as housing and events.

The researcher called on participants to recount peer interactions. Through the data collection, participants shared their stories with mixed experiences with peers. Participant 1 told stories of peers being friendly but also some awkward moments interacting outside of class. The awkwardness may have contributed to the lack of long-term outside friendships. Individuals are experiencing ASD show challenges in dealing with social situations (Attwood, 2007). One implication lies in the support offered to students with ASD at colleges and universities, which institutions need to reevaluate. Participant 2 found positive interactions with peers when she participated in clubs or programs related to her interest in the outdoors. As Attwood (2007) noted, individuals with ASD enjoy discussing and participating in their interests, so universities need to pay attention to those needs of students with ASD. Universities need awareness of the implication that students benefit from special interest clubs and organizations. Furthermore, students with ASD need mentors and campus supports for navigating the peer interactions occurring in or out of the classroom. A sense of belonging is the implication and could ultimately hurt retention.

Participants explained that staff interactions offered positive experiences except in one instance for Participant 2. Participant 2 explained a disability services advisor failed to assist her due to a lack of understanding of how ASD impacts her fine motor skills and need for routine. The participant recounted positive and helpful interactions with a mentor and library staff who met her needs in terms of ASD. On the other hand, Participant 3 shared his experience with the disability services advisor as positive in providing him with classroom accommodations. Meanwhile, Participant 1 recounted a cooperative exchange with an advisor who assisted her with the process to reenroll in the college. The implication of these exchanges rests on the topic of retention. To retain students, colleges need to invest in students through advising and other programs. Early detection of student needs and a program of action remain essential in student success (Krumrei-Mancuso, Newton, Kim, & Wilcox, 2013).

The study gleaned little information on the interactions participants experienced at campus events or in their housing settings. When asked about interactions experienced at college events, none of the participants shared stories. Each recounted attending one event for a short period without any interactions. In a similar instance, two participants declined to recount housing interactions. Only one participant shared a housing interaction involving a roommate. From the findings, an inference could be made that the challenges for ASD students in social interactions may have created experiences where students did not have any interactions at social events. The low response rate for housing interactions contributed to the researcher determining the question may not have been a good fit for the students. If a researcher chose to replicate this study, I suggest only asking a housing situation to students living in student residence halls. Many residence halls offer opportunities for social interaction through programs, whereas students living off-campus or in an apartment lack access to those opportunities.

In the pursuit to gather stories, the researcher posed questions and writing prompts to the participants. Even though the researcher gathered stories that fulfilled the research question, some areas or topics of the questions yielded smaller amounts of data than expected or no data. For replication purposes, the researcher suggests not asking questions related to campus employment or housing. Rather more time should be spent on each participant by adding participant observation to the already described data collection tools. Participant observation allows for the researcher to spend long periods immersed in the participant's everyday world (Creswell, 2013). I believe a higher quantity of data may occur and a more in-depth view of the participants lives about instructors, peers, staff, and campus events.

The researcher has established stories of social interactions, which met the research question to collect lived social experiences of college students with ASD. The study utilized Chickering and Reisser's (1993) psychosocial theory of college student development as the conceptual framework. The study provided data to question the applicability of Chickering and Reisser's theory to students experiencing a disability. Chickering and Reisser (1993) stressed that students need additional skills in relationship building when they enter college to build long-term relationships. The theory contained seven vectors or areas of development college students pass through at some point in their postsecondary education. The study focused on only Vector #4, "developing mature interpersonal relationships" (Reisser, 2013, n.p.). Students develop "tolerance and appreciation of differences" and the "capacity for intimacy" in the fourth vector (Chickering & Reisser, 1993, p. 146).

According to the theory, tolerance of intercultural and interpersonal differences happens as students interact with diverse peers. Students' use of stereotypes and biases diminishes. The theory refers to intimacy as "responsibility, respect, and honesty" (Chickering & Reisser, 1993,

p. 172). Developing tolerance and intimacy serves a role in students' ability to experience deeper relationships. Attwood (2007) stressed that individuals are experiencing ASD struggle with social interaction the clearest indicator of ASD. Social understanding and friendship problems may occur in individuals experiencing ASD (Attwood, 2007). Participants in the completed study failed to provide data necessary to determine whether they experienced or passed through the fourth vector. The framework served a purpose for the study by providing a narrowed area for exploration, the social experiences of college students. The obvious implication of ASD students not adhering to the fourth vector indicates they may follow their timeline in accomplishing these types of relationships.

### **Discussion of the Results in Relation to the Literature**

#### **Relation to the Community of Practice**

The completed research study requires attention to how the findings relate to the community of practice, literature, and scholars. Higher education institutions comprise the community of practice. Disability laws govern colleges' and universities' practices related to students who experience ASD. The Americans with Disabilities Act (ADA) Title II refers to access to colleges and universities for students with disabilities. The current practice offers some of the following forms of access to higher education: physical access to buildings, communication aids, assistive technology, and modification to practices and procedures. Disability accommodations for students reduce barriers created by the disability, while not weakening or changing a course (ADA National Network, 2019).

Current literature supports the assumption that higher education provides access through specific services and supports. Ellison (2013) found that colleges accommodate students through the offices of disability services, assisting students with accommodations, advocacy, and

disclosure processes. For example, universities devote websites to their offices of disability services explaining the process to follow for disability support including note-taking services and adaptive technology (PSU, 2019). Participant 3 shared his college disability advisor assisted him in obtaining accommodations for assignments and extra time for tests.

Higher education institutions adhering to the ADA by providing a disability office can utilize the findings of the study to improve services. Through the completed study, Participant 2 detailed the usefulness of having a mentor, whom the university employed, to assist her in keeping organized, navigating college courses, and activities outside of class. Universities can improve their practices by offering paid or volunteer mentors for students with ASD. The practice not only assists students with ASD with navigating college but serves to educate staff or student volunteers of ASD. The findings of the completed study indicate with Participant 2, her disability service advisor displayed insensitivity to her ASD as well as a lack of knowledge into how ASD affects individuals. Higher education can properly educate disability advisors through training, so employees build rapport and trust with ASD students.

As mentioned, the ADA requires access to higher education and some universities go beyond the basic requirements and offer specialized programs especially for students with ASD. Bellevue College offers at an additional cost a program geared towards the success of ASD students. The Navigators program strives for academic success in students through assistance in the following areas: Executive function, social interaction, self-advocacy, and self-regulation (Bellevue College, 2019). Highlights of the program include facilitation assistance with instructors, quarterly parent meetings, mentor sessions, career prep course, and a cohort orientation. Also, the program offers informational sessions for interested students, and those participating provide support for three years of study. None of the participants in the completed

study shared the institution they attended offer specialized programs, but the findings can be used to improve current programs. From the study findings, participants shared a lack of involvement in campus events. Programs similar to the one at Bellevue offer a cohort learning environment which can provide support and guidance to students navigating the social aspects of college. Even if a college or university has limited staff and resources to offer specialized support programs for ASD students, the completed study's findings provide an insight into the life experiences of students and their point of view regarding higher education institutions.

### **Relation to the Literature**

The literature on the topic of ASD students in higher education focused on neurodevelopmental foundations and the social and academic needs of college students. Hanley et al. (2015) tracked and measured the movement of participants' eyes (e.g., *eye-tracking*) to understand social attention. According to Hanley et al.'s (2015) findings, ASD adults bring into adulthood social difficulties experienced at younger ages. Freeth (2012) asserted that social skill and attention switching abilities are related to ASD and social anxiety. Studies failed to gather specific experiences of students through their lived life stories. For example, Hanley et al. (2015) confirmed neurological deficits affecting social interaction but fell short in capturing the nature of relationships ASD students experience in college. The completed research adds to the body of literature on neurodevelopmental foundations by providing individual lived life stories of the social experiences of ASD college students. These social experiences illustrate the social deficits asserted by Hanley et al. (2015) and Freeth (2012). Alpern and Zager (2007) explained that building friendships involves mutual responsiveness between two people participating in reciprocal activities. Participant 2 explained her experience with social group situations in class. She shared her difficulty in understanding the way students automatically break into groups after

class and begin talking. Participant 3 recounted his experience in a campus sports event. His concern only laid in performing well in the sport, and he possessed no interest in socializing with teammates.

Other literature focused on the needs of college students with ASD. Cai and Richdale (2016) learned through their study, ASD students received assignment extensions but experienced difficulty in written communication exchanges with instructors. In the completed study, participants reported no written communication exchanges with instructors. The study compliments Cai and Richdale (2016) by offering an insight into verbal communication exchanges students experienced with instructors. Overall participant has experienced positive interactions with instructors except for one participant but the issue appeared to be an overall negative attitude on behalf of an instructor. Participant 2 reported multiple instances of assistance from a math instructor who provided sensitive help with test issues and accommodations. Participant 3 shared instructors always accepted him but at times, failed to address his problem. Participant 1 recounted two negative interactions of instructors who exhibited inflexibility in grading and a negative attitude towards a career in art.

Another issue in the literature on ASD college students involved transitions from college into a career. Howlin and Moss (2012) asserted that ASD adults experience disadvantages upon entrance into adulthood with employment, relationships, mental health, and overall quality of life. A lack of support exists for ASD individuals entering adulthood and integration into society.

Dipeolu et al.'s (2015) research aligned with Howlin and Moss (2012) who explained that ASD students experience challenges through social deficits and life skills. Dipeolu et al. (2015) not only suggested colleges provide supports to assist students with the social deficits, but higher

education institutions need to prepare ASD students for careers through exploration based on the student's strengths. The completed study provides an example of a faculty member who assisted a study participant in determining the best career path taking into consideration her ASD.

Participant 2 mentioned to her math instructor her career plan to major in kinesiology and later medicine. The instructor discussed the majors with the student providing her valuable information. The instructor and student determined the sensory issues, and fine motor challenges associated with her ASD may pose issues for the student. The participant decided in consultation with her instructor to consider Geology, which encompasses her love of the outdoors with her academic interest in mathematics. The example implies that if institutions do not assist ASD students in career planning, they may follow an attainable career path.

The completed study compliments a Swedish study by Fleischer (2012a) by providing a look into ASD students at American public colleges. Swedish universities failed to assist students in day to day living, according to Fleischer (2012a). Participants in Fleischer's (2012a) study reported being outsiders, and "alienation" emerged as a common theme (p. 182). In the study, alienation related to identity, diagnosis, bullying, and loneliness. Fleischer (2012a) characterized belonging and obtaining confidence as a "struggle" for students (p. 182). Fleischer (2012a) explained that struggles were in the areas of daily routines, support, interests, and plans. The completed study confirms some of the claims made by Fleischer (2012a). Participant 2 recounted issues with future career plans and daily routines involving meltdowns related to schedule changes. Participant 1 explained that her interest in art received little support from instructors and failed to locate support for the interest anywhere on campus. The participants' accounts confirm the previous study's assertions concerning challenges for students in career

planning, daily routines, and interests. The implication for colleges resides in student support services which need to be evaluated to confirm institutions meet the needs of students.

The completed study compliments and added to previous studies on students with ASD in higher education institutions. Hanley et al. (2015) and Freeth (2012) conducted studies related to social deficits in students with ASD, which carried through adolescence into adulthood. The completed research study adds to the literature on neurodevelopmental foundations through individual lived life stories. Cai and Richdale (2016) concluded that difficulties exist in written communication exchanges with instructors. In the completed study, participants reported no written communication exchanges with instructors. The study compliments Cai and Richdale (2016) by providing insight into verbal exchanges students experienced with instructors. Furthermore, the completed study confirms Dipeolu et al. (2015) who advocated for support for students in the area of social skills and career planning.

### **Community of Scholars**

Within the community of scholars who report and write on higher education the subject of ASD college students, the completed research has the potential to inspire further research through the narrative method. Through the literature review, narrative method received little mention. Quantitative studies and case studies received attention from scholars. The narrative method allows scholars to record and experience lived stories by participants allowing a glimpse into their lives and thoughts. More importantly, the narrative method gives a voice to underrepresented groups.

Another possible implication of the study on the community of researchers is to inspire more research on ASD students. Other lenses or perspectives exist to view the population of

students through within a college environment. Other lenses include looking at the population's college experience through race, ethnicity, gender, or sexual orientation.

Also, the researcher hopes the study has informed the community of scholars on the exact issues affecting ASD college students. Many scholars may work within higher education as professors or student affairs professionals. The study has the power to influence professor practices within the classroom. Classrooms remain diverse environments requiring instructors to be aware and sensitive to students who bring unique abilities and backgrounds into the classroom learning environment. From the completed study, participant accounts of professor interaction meant a great deal to students from discouraging a student to supporting another. The community of scholars cannot ignore the influence of professors on student success.

Furthermore, student affairs professionals who also serve as scholars must acknowledge the importance of support in the form of specialized programs or continuous improvement in student services for students experiencing ASD. The completed study conveyed that one student made friends through a special interest club, but at the same time, most of the participants shied away from large campus events. An institution being mindful of the needs of students can begin to meet the needs of unique populations.

### **Limitations**

The most significant limitation to the completed study rests in the time constraint imposed by the fact that the study serves as a dissertation. To strengthen the study, researchers interested in replication can conduct the study with observations to strengthen the data obtained through interviews and journal writing. One participant in the completed study provided short answers. I believe that with the addition of observation data collection; the researcher can supplement the short answers given in the interview or journaling portion of the study.

Observation allows researchers to record field notes related to participant behavior and activities within the actual research site. The researcher generally creates questions before the observation occurs to obtain information needed for the study (Creswell, 2014). In observations, the researcher may be a nonparticipant or fully participate in the environment. Also, participants shared little on event and housing interactions. By adding observation as a data collection tool, the researcher can collect data first hand of a participant at an event or in a housing situation. In addition, reducing the number of narrative participants would allow the researcher to spend more time with one or two participants. Furthermore, I believe more time with each participant assists in building rapport and trust yielding richer data.

### **Implication of the Results for Practice, Policy, and Theory**

#### **Practice**

The completed study has the potential to influence everyday practices at colleges and universities. One study participant mentioned two negative experiences with instructors who exhibited inflexibility in grading and a negative view of careers in art. While another participant reported being recognized and heard by instructors who failed to resolve classroom issues he experienced. Another participant experienced an instructor who failed to exhibit understanding and appreciation of diversity and backgrounds of the students when selecting a guest speaker. Higher education can improve their practice by managing staff to ensure they exhibit sensitivity and a high level of customer service to resolve student issues to support all students. Human resources can use the study results to inform methods of screening potential new employees who do not value diversity. Employees in the classroom and support service positions valuing diversity can be sensitive to student needs. The sensitivity and the value of diversity have the potential to put students at ease and meet their needs.

In addition, the study findings serve to inspire higher education to create a community of collaboration. Open communication and collaboration between professors, disability advisors, and students can become a practice within colleges to meet the academic and social needs of ASD college students. Collaboration of this type allows for students and professors to express their needs or issues with the company of a disability advisor who understands various disabilities.

### **Policy**

The results of the study have the potential to influence policy at universities and colleges. The participants explained instances of career issues. One participant experienced a negative reaction to a career question directed at a professor, while another student received one-on-one career assistance from a caring professor. Through policies, institutions can establish career assistance either in a separate office space or through a specialized program for ASD students.

In addition, participants detailed instructor, staff, and peer interactions lacking understanding of ASD. Universities and colleges can create policy making professional development training mandatory for employees and the student body covering disability as diversity. With today's information technology improvements, institutions can offer staff and students access to training online and complete modules at their own pace.

Furthermore, the completed study proved that issues do exist with professors and staff regarding understanding and assisting the needs of students. Universities and colleges can create policies to create anonymous surveys for students to gauge student satisfaction. The survey results can be used to improve in the classroom experience and to improve customer service provided by other college staff members.

### **Theory**

Many higher education scholars created theories before students with a disability received recognition in scholarly research. The completed study indicates that Chickering and Reisser (1993) created a theory with only the general population of students in mind overlooking those experiencing a disability. The theory contained seven vectors of development students experience during college. The theory can be strengthened by including a section on students with disabilities. The section could contain explanations to the higher education community that students with ASD may not bring specific social skills to college as those possessed by the general population. The completed study shows through Participant 2 that the maturity level, fine motor skills, and social skills lag behind the student population not experiencing a disability.

Other theories need reexamination based on the results of the completed study. For example, Astin's theory on student involvement rests on the idea that the student has the responsibility of using their physical and psychological energy to involve themselves in the academic experience (Astin, 1984). Involvement encompasses active participation in organizations, time spent on campus, and faculty communication outside of class (Long, 2012). As one participant pointed out, she expended large amounts of energy dealing with social situations due to her ASD, so the theory does not consider ASD students need additional supports based on their unique needs. The theory does offer that all students need high-quality programs and services. Students become more invested when they put forth serious habits and spend considerable time on their education, which may apply to ASD students given the correct supports through ASD programs (Long, 2012).

Tinto's theory of student departure can be used as a retention lens to view students with ASD in higher education. The theory asserted that students end enrollment in higher education based on their interactions with the college or university (Long, 2012). Tinto recognized

students enter college with unique characteristics from varying socioeconomic backgrounds, family assistance, and social values. Students and colleges have their unique characteristics, and any conflict between the two can lead to student departure or dropout (Long, 2012). Tinto held universities and colleges need intentional action to plan opportunities for interaction and activities. The implication of the study results indicates that if institutions fail to recognize the uniqueness of students with disabilities, students may not receive the support needed and depart. One participant in the study departed college, but no way to prove a mismatch between student and college characteristics. The idea deserves consideration for further studies. These examples of theories and how they relate to ASD populations need consideration by scholars and higher education administrators to meet the needs of ASD students and to develop sensitivity to their needs which may not fit perfectly into these theories. Theories need to address populations of students who experience disability, especially ASD.

### **Recommendations for Further Research**

The researcher asserts a study on ASD college students using various ethnography methodologies has benefits to the community. For example, critical ethnography requires a researcher who exhibits interest in advocating for marginalized groups. Typically, researchers in critical ethnography have interests in inequality, dominance, and repression. Critical ethnographies contain collaboration with the participants, exhibit care in conducting on-site research, and require active participation by the researcher in the study (Creswell, 2015).

Case study ethnology has appropriateness with the population of students with ASD who participate in a support program specifically for their population. Case study ethnology differs from a regular case study that focuses on the activities of individuals from a program, event, or activity. In case of study ethnology, the researcher seeks shared patterns of a group over time.

(Creswell, 2015). With some colleges offering programs for ASD students, the case study ethnology offers an insight into the cohort experience of ASD students.

In addition, the researcher recommends further research on ASD students with a focus on gender or race. Students with ASD can be of various genders and races. Obtaining participants from one demographic could provide valuable data on their experiences. The researcher recommends narrative studies on ASD students focusing on a small number of students who share the same race or gender. A study with ASD students who identify as African American can complement the completed study since the study obtained only Caucasian participants. A study of this sort could shed light on how race plays a role in social interactions with instructors and staff. Also, a study based on Chickering and Reiser's (1994) Vector #4 exploring only female ASD students could yield results different from a study entirely focused on male participants. Researchers could explore Vector #4 in relation to female participants and their social interactions and experiences. Many options exist for future research. I look forward to contributing to future studies, and I am hopeful for additional studies within the community of scholars.

### **Conclusion**

With one in 59 American children being diagnosed with ASD annually and with the potential to attend higher education, researchers need to study this unique population of learners (Centers, 2018; Van Hees et al., 2014). ASD, a neurodevelopmental disorder, produces social interaction and communication deficits along with repetitive and restrictive behaviors in adults and children. The passage of disability legislation, early diagnosis, and improved treatment programs facilitates the attendance of adults with ASD in higher education (Van Hees et al., 2014).

The researcher conceived of the study based on a personal interest in ASD spurred through various volunteer opportunities and later through a master's degree program theory to practice project focused on the creation of a program for ASD college students. Through volunteer work, I heard more and more young adults discussing their experiences in higher education. I saw their enthusiasm and internal drive to attain a college education. As a graduate student, I studied the needs of ASD college students and created through a theory-to-practice project of a program of support for college students.

With more students on campus experiencing ASD, research focuses on the social challenges students' experience, needed support programs, and the neurodevelopmental background behind ASD symptoms (Barnhill, 2014; Cai & Richdale, 2016; Fletcher-Watson et al., 2013). A gap appears in the literature in the research method and type of data collection procedures. The literature review failed to reveal a detailed narrative study only focused on three ASD students to produce and retell their stories on the social experience of college. The researcher defines social experience for the study as interaction with college peers, faculty, or staff members.

The completed dissertation research answers the following research question: What are the life stories of the social experiences of ASD college students? The research design of narrative inquiry allowed the researcher to collect lived life stories from three college students experiencing ASD. The researcher collected stories through interviews and journals. Participants recounted stories of interactions with instructors, peers, and staff. The stories relayed positive and negative interactions. The interactions confirmed ASD students experience deficits in social skills with peer interactions and avoidance of campus event involvement. The study uncovered instructors and staff who may benefit from training on disabilities and

illustrated university personnel who exhibited sensitivity and empathy for students with ASD. From the study, institutions can use the results to improve student services, create ASD programs, and improve hiring and training of employees.

I look forward to continuing research on ASD college students with a focus on gender or race. I am encouraged by the subjects' participation that other scholars will be inspired to investigate the population of students who experience ASD. Finally, I look forward to the contribution students with ASD will make in our society and world now that they are participants in the U.S. higher education system.

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## **Appendix A: Statement of Original Work**

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

### **Statement of academic integrity.**

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

### **Explanations:**

#### ***What does “fraudulent” mean?***

“Fraudulent” work is any material submitted for evaluation that is falsely or improperly presented as one’s own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate’s final work without full and complete documentation.

#### ***What is “unauthorized” assistance?***

“Unauthorized assistance” refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another’s work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.

**Statement of Original Work (continued)**

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University–Portland Academic Integrity Policy during the development and writing of this dissertation.
2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association*.



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Digital Signature

Deborah Bogle

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Name (Typed)

March 16, 2019

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Date

## **Appendix B: Interview Questions**

### **Interview Question 1:**

Talk about a recent interaction or account of a recent communication exchange you had with an instructor. This can have occurred during your current term or semester or a previous one if you are on a break from school. The communication may have occurred by phone, email, or in person.

### **Interview Question 2:**

Talk about a recent interaction or account of a recent communication exchange you had with a college peer or friend. This can have occurred during your current term or semester or a previous one if you are on a break from school. The communication may have occurred by text, phone, email, or in person.

### **Interview Question 3:**

Think about where you reside as a student (i.e. residence hall, apartment, multi-person dwelling). Talk about a recent interaction or account of a recent communication exchange you had with a roommate or neighbor. This can have occurred during your current term or semester or a previous one if you are on a break from school. The communication may have occurred by text, phone, email, or in person.

### **Interview Question 4:**

Have you recently attended an event on your college campus (i.e. sporting event, dance, Welcome Week, etc.?)

Tell me about a recent interaction or account of a recent communication exchange you had with a person at a campus event. This can have occurred during your current term or semester or a previous one if you are on a break from school.

### **Interview Question 5:**

Are you employed through a campus job?

Tell me about a recent interaction or account of a recent communication exchange you had with a person at your campus job.

## Appendix C: Journal Questions

### **Journal Questions/Prompt DAY 1 [date].**

Name a current or former college instructor you had for a class?

I want to read about one interaction or conversation you had with your instructor. The conversation could have taken place during class, after class, or during office hours in person, by phone, or through email. Write a true story at least one page in length or you can write two pages.

### **Journal Questions/Prompt DAY 2 [date].**

Name one class you are taking at college this semester or term? If you are no longer in school, choose one of the last classes you were enrolled in.

Did you ever talk to a classmate during that class?

Write a true story in your journal at least one page or you can write two pages. Write about when you communicated with that classmate. If you did not communicate or talk with a classmate during that class, you can write about not talking to classmates.

### **Journal Questions/Prompt DAY 3 [date].**

Have you talked to an employee other than your instructor at your school this semester or term?

What office or department did the employee work?

Write a true story about when you talked to this employee. Write at least one page or you can write two pages.