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Experiences of Autistic College Students in Higher Education and Their Relations with Faculty

A dissertation submitted in partial satisfaction of the

requirements for the degree Doctor of Philosophy

in Special Education

by

Jessica J. Johnson

2022

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ABSTRACT OF THE DISSERTATION

The Academic Concept of Autistic College Students

and their Relations to Faculty

by

Jessica J. Johnson

Doctor of Philosophy in Special Education

University of California, Los Angeles, 2022

Professor Jeffrey J. Wood, Co-Chair

Professor Robin Dodds, Co-Chair

Autistic students are increasingly enrolling in postsecondary institutions. While studies examining faculty-student relations is rising, there are few to no studies looking at how these relations may impact academic self-concept for autistic youth. The purpose of this dissertation was to investigate autistic college students' academic self-concept and their interactions with faculty. A sample of participants (n=12) was recruited for investigation regarding autistic college students' experiences. The interviews with students revealed that most students have a positive academic self-concept due to factors like personal motivation to do well, following family values, striving for high academic achievement, and proving someone wrong. Other factors were also found to have an impact on academic self-concept in general. These included accommodations (disclosing based on necessity, The Disabilities Services Office failing to

provide necessary supports, and community colleges providing better accommodations), impact of the pandemic, and learned self-awareness. Faculty relations with students seemed to vary where each student had situations with both positive and negative interactions. The theme of accommodations was prevalent as it was found that faculty play an important role in students receiving both formal and informal accommodations needed to succeed in their courses.

The dissertation of Jessica J. Johnson is approved.

Kashia Axthelm Rosenau

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University of California, Los Angeles

2022

DEDICATION

This dissertation is dedicated to my mother, Melanie Chu; my father, Chris Chu; and my brother, Max Chu.

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VITA

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CHAPTER I: INTRODUCTION

Autism is a neurodevelopmental disorder that is characterized by behavioral symptoms in two domains: difficulties with social communication and presence of restricted and/or repetitive behaviors (American Psychiatric Association, 2013). According to estimates from the Centers for Disease Control and Prevention (CDC)'s Autism and Developmental Disabilities Monitoring (ADDM) Network, 1 in 44 children is diagnosed with autism (2022). This is a significant increase in the prevalence rates of autism from 10 to 20 years prior. With this rise in diagnoses there has been a growing number of autistic adolescents, who received autism focused interventions and supports since an early age, that are graduating from high school and aspiring to attend college or working as an employee (Zeedyk et al., 2016). In the United States, approximately 49,000 autistic students graduated high school in 2015, with many finding an interest in attending a post-secondary institution (Sarrett, 2018). Owing to a variety of reasons, including increased understanding of learning disabilities at all stages of growth, enhanced diagnosis and diagnostic procedures, improved individual learning strategies, and more successful special education practices, autistic students are finishing secondary education and enrolling in colleges and universities at higher rates (Bakker et al., 2019). Furthermore, enrollment of autistic college students has more than doubled from 2010 to 2016 (Bakker et al., 2019). Given that there is an increase in enrollment from autistic students, this study will focus on this population and explore further details about their college/university experiences.

According to recent studies, there has been a growth in education, understanding, and recognition of autistic people on college campuses (Gardiner & Iarocci 2013; Nevill & White 2011; Petry, 2018). A survey assessed college students' attitudes towards autistic individuals through measures of knowledge of the disorder, quality of prior interactions with individuals that have autism, and views of appropriate social behaviors (Nevill & White, 2011). The results

showed that students had positive views and acceptance levels which were positively correlated to these participants' knowledge of autism and the number of prior encounters with autistic individuals (Nevill & White, 2011). Although these results seem promising, it is important to note that openness to autistic individuals does not always mean a willingness to spend time with these peers and think of them as friends. Furthermore, relatives of autistic college students have voiced fear that these students were bullied, easily overwhelmed, unable to prioritize and lacked the opportunity to structure their schedules due to lack of proper accommodations (Gelbar et al., 2014). These relatives also felt frustration as they were unable to have a role in the collaborative relationship between these college students and the disability service coordinators who were responsible for the supports that these students had (Gelbar et al., 2014). Additionally, even though some of these students prove to have a desire to advance in their education and career pathways, there are still low graduation rates and low rates of post-graduation employment for autistic individuals when compared to typical developing students (Sarrett, 2018).

Faculty play a crucial role in student success in college (Zerquera et al., 2018). However, college faculty may not always provide the appropriate level of supports that autistic college students require to succeed in an academic setting (Cox et al., 2021; Accardo et al., 2019; Sarrett, 2018; Bolourian et al. 2018). Past literature has shown that faculty at universities have the desire for more professional development efforts that can teach them ways to utilize best practices in supporting autistic students (Austin & Peña, 2017; Glennon, 2016; Gobbo et al., 2018; McKeon et al., 2013; Zeedyk et al., 2019). It has also been shown that some professors do not implement necessary teaching supports that could benefit their students (McKeon et al., 2013). In short, the limited works in literature pertaining to faculty relations with autistic students, strongly demonstrate faculty's lack of awareness around students' diverse learning needs and abilities. Understanding autistic students' perspectives can help clarify how professors can better support

their students in college settings. Therefore, this study investigated autistic college students' experiences at the university and how faculty have played a role in their academic journey.

CHAPTER II: BACKGROUND

Historical Context

Historically, autistic young adults have not had the opportunity to receive a college education (Zager et al., 2012). In 1975 the Education for All Act was passed which allowed children with disabilities to have the right to a free and appropriate education in the most inclusive setting (U.S. Congress, Senate, 1975). Due to this change in the education system, children with disabilities started to learn alongside their TD peers. Because of parent advocacy groups, self-advocacy, legislators, educators and professional organizations, there has been ongoing improvement in the inclusion movement. As a result of the increase in inclusive classroom settings, there have been more students with learning differences (e.g., autism), that have desired to receive a degree in a post-secondary educational environment. In 2009, the U.S. Department of Education brought stakeholders and experts together to look at problems related to post-secondary education for students with intellectual and developmental disabilities (e.g., autism) (U.S. Department of Education, 2009). This meeting discussed future steps for enhancing access to a quality post-secondary education for individuals with disabilities. As of today, there are many policies, as discussed below, that allow for autistic students to receive the appropriate supports and accommodations in ensuring their ability to receive a college education.

Section 504 of the Rehabilitation Act of 1973

Section 504 of the Rehabilitation Act of 1973 is an antidiscrimination law that protects college students with disabilities by making sure that there are equal opportunities for them to participate in college-sponsored groups and activities (US Department of Education, 2015). This law also ensures that students from K-12 and college will have the ability to ask for academic accommodations (e.g., extra time to take exams, curriculum adaptations for courses, audio texts or note taking services) which would be provided through the disabilities service office (DSO)

(US Department of Education, 2015). Students must also disclose their disability with the necessary documentation under this law and be assessed as eligible for services to legally receive support (US Department of Education, 2015).

The Family Educational Rights and Privacy Act, FERPA

The Family Educational Rights and Privacy Act (FERPA) was passed in 1974 and is meant to protect students' privacy when transitioning their educational records and information from their parents to themselves once they begin learning at the university (FERPA, 1974). These regulations do not allow college staff to interact with families in order to understand how to best serve the student (FERPA, 1974). The student must sign a waiver for the family to still have the right to communicate with the college about their students' needs (FERPA, 1974).

The Individuals with Disabilities Education Act, IDEA

The Education for All Handicapped Children Act of 1975 (EAHCA) mandated inclusion of children with disabilities in the public education system (Education for All Handicapped Children Act of 1975, Pub. L. No. 94-142, 1975). This law provided federal funding under the expectation that children with disabilities would be granted a "free appropriate public education." The EAHCA helped states meet the educational needs of students with disabilities by providing them with educational supports (Katsiyannis, 2001). This legislation has benefited students aged 3 through 21, considering a student may stay in high school until the age of 21 (Katsiyannis, 2001; Anderson et al., 2019). Under the IDEA, a free appropriate public education (FAPE) is provided to students. With the reauthorization of the EAHCA as the Individuals with Disabilities Education Act (IDEA), obligations to provide transition services to students aged 16-22 and to include these students in their IEP team meetings were added. The IDEA also includes the Individualized Education Program (IEP) which individualizes a child's education to meet

their unique needs and provide FAPE in the least restrictive environment (Individuals with Disabilities Education Act | SeeWriteHear, 2020). After ongoing revisions, the IDEA now promotes research and technology development, provides more detailed information about transitioning from childhood to adulthood, and advocates for children to be educated with others instead of separate classrooms (Individuals with Disabilities Education Act | SeeWriteHear, 2020).

Title II of the Americans with Disabilities Act of 1990

The Americans with Disabilities Act (ADA) is a civil rights law that outlaws discrimination against people with disabilities in all aspects of public life, including work, schools, transportation, and all public and private venues open to the public (What Is the Americans with Disabilities Act (ADA)? | ADA National Network, 2022). It was enacted with the intention of being a flexible statute that would apply to a wide range of scenarios involving people with disabilities. The law's goal is to ensure that people with disabilities have the same rights and opportunities as the rest of the population. It encourages the general public and institutions to incorporate disabled people into American society. Regardless of students' eligibility for special education and other related services under the IDEA, Title II of the Americans with Disabilities Act of 1990 protects students with disabilities in every public elementary and secondary school in the United States (ADA, Title II, 2005). Title II also includes state-funded programs like universities, community colleges, and career and technical educational programs (The ADA, Section 504 & Postsecondary Education, n.d.). Regulations under Title II stated that public schools must provide students with disabilities equal opportunity to be part of various school activities. Additionally, public schools must ensure that communication for students with disabilities is just as effective as it is for those without disabilities (ADA, Title II, 2005).

Section 504 and the ADA in Postsecondary Education

Under 504 and the ADA, people with physical or mental disability cannot be excluded from postsecondary programs based on eligibility criteria for university admissions (The ADA, Section 504 & Postsecondary Education, n.d.). Institutions may inquire about safety risks that are on the basis of facts rather than stereotypes or assumptions. They are not permitted to ask applicants about any history of mental illness or other disability. Postsecondary programs must also incorporate extracurricular activities that are accessible to students with disabilities (e.g., providing architectural access, providing aids and services for effective communication and accommodations, modifying policies, practices, and procedures). Institutions may require that a person with a hidden disability (e.g., learning disabilities, mental disorders, or chronic health conditions) provide documentation to validate the need for accommodations. This documentation would need to be signed by a physician, psychologist, special educator, evaluator, or rehabilitation counselor. The disability must be validated, and appropriate accommodations should be recommended. Documentation must be current (i.e., less than three years old), and if not, the students may need to pay to have a new evaluation completed.

The ADA and IDEA have different definitions of disability meaning that a student with special education services in high school may not be eligible for accommodations in a postsecondary institution (The ADA, Section 504 & Postsecondary Education, n.d.). Each postsecondary program determines if a student may receive accommodations on a case-by-case basis with consideration of the definition of disability under the ADA. The student must make their needs known and work with the Office for Students with Disabilities to ensure they receive reasonable modifications and/or appropriate services.

Theoretical Framework

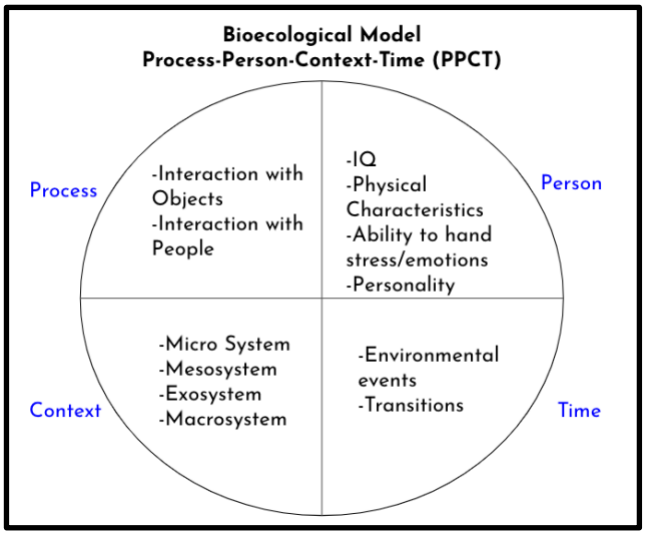


Figure 1: Bronfenbrenner PPCT Model

Bronfenbrenner's Model of Human Development

Urie Bronfenbrenner developed the Process-Person-Context-Time (PPCT) model, which has four components that are thought to have a profound effect on human development (Bronfenbrenner, 2005). The essence of ongoing and bidirectional interactions between a person and the people, objects, and environmental factors that affect their development is the first component in the PPCT model. The second component is considered the "person", also known as the traits, such as: race, gender, identity, disposition, experiences, skills, and needs that affect an individual's growth. The third is the "context" which can be seen as the four systems that surround an individual. This is composed of the microsystem (e.g., family, professors, close friends, co-workers), the mesosystem (e.g., interactions between microsystems), the exosystem (e.g., family well-being and available services and resources), and the macrosystem (e.g., values, customs, and bias) (Bronfenbrenner, 2005). The fourth part is "time" which is the influence that change over time can have on a person and their development. This model can be applied to students' personal characteristics, interpersonal interactions (e.g., faculty), resources in the

academic setting available to these students, stigmas associated in relation to individuals with disabilities, and integration into the university, all of which are factors that can affect the progress of an autistic college student as they begin to enter college.

Astin's I-E-O Model

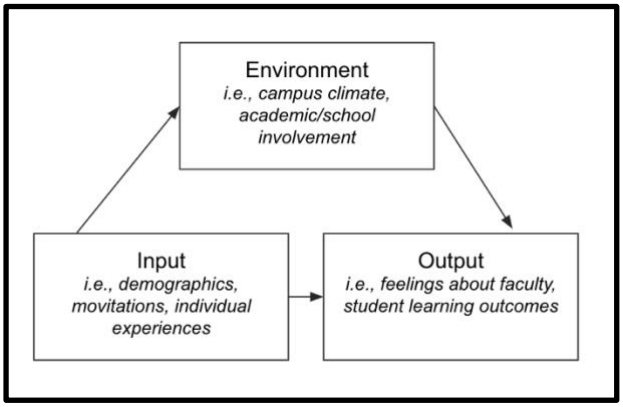


Figure 2: Astin's IEO Model

Astin (1991) developed the inputs, environment, and outcome (IEO) model to provide a framework that emphasizes the impact that colleges and universities have on students. The inputs represent the traits and characteristics that students have before they enter college as well as the demographic and educational background they hold. The environment consists of institutional characteristics like the campus climate and academic/school involvement. Once inputs and environment are considered, outcomes can be observed such as feelings about faculty and possible additional barriers like psychological disorders that may play a role in student success. Astin and Antonio (2012) explain that inputs and outcomes can be seen as two time points at different stages in a student's life, while the environment refers to the experiences that occur in between these stages. Furthermore, they discuss the fluidity with assigning certain variables under any of these categories and elaborate on the flexibility of determining the specific labeling based upon the research questions in place. Astin (1993) discusses how having consistent

student-faculty interaction is positively associated with student outcomes like intellectual and personal growth, academic achievement, college satisfaction, and career outcomes.

Key Terminology

The following is a list of terminology with specific operationalizations based on the context of this study. There are multiple ways that these terminology can be defined in relation to the author's perspective. Therefore, this list is included to clarify the intended usage.

Autism: Autism is a neurodevelopmental disorder of communication, behavior, and cognition (Zager et al., 2012). These individuals have distinctive impairment in the nature of social communicative development (Zager et al., 2012).

Autistic College Students: Identification of autistic students on college campuses has increased (Zager et al., 2012). This population of students has communication and behavioral differences that can affect their learning environment (Zager et al., 2012). This population will be defined as young adults attending university/college with a formal or informal diagnosis of autism.

College/University: For the purpose of this study, the terms "college" and "university" will be used synonymously as various articles have specified different use of this terminology when referring to higher education institutions. Community colleges will also be included due to the high population of autistic students that enroll in a community college at some point in their postsecondary careers (Wei et al., 2014).

Faculty: The term "faculty" in this study will be used synonymously with the term "professors" to describe individuals teaching in the college setting. Faculty with and without experience teaching autistic students will be included to account for a wide range of interactions with these young adults. This includes adjunct, lecture, and tenure track faculty.

CHAPTER III: LITERATURE REVIEW

This chapter reflects the complexities that autistic students have to navigate when transitioning to a college setting. First this chapter will cover how important diagnosis and accommodations can be for autistic college students to receive the appropriate resources to succeed. Then academic self-concept and universal design for learning will be discussed as key components of the college experience for autistic students. Finally, college/university experiences of autistic students and faculty of autistic students will be shared.

Diagnosis of Autism

In 2013 the Diagnostic Statistical Manual (DSM-5) made changes to classifications for diagnosing autism such as removing subgroups like autism, Asperger's syndrome, and atypical autism to the single diagnosis domain of autism (American Psychiatric Association, 2013). The DSM-5 also recommended addressing each individual's strengths and needs by specifying symptomology for each of the autism domains such as whether someone has an intellectual disability or language impairment. Due to an increase in autism awareness and broadening of diagnostic criteria, there has been an increased awareness around autism assessment and diagnosis (Huang et al., 2020). Because there are no medical tests that can diagnose autism, doctors rely on developmental history and behavior to make the appropriate diagnosis (CDC, 2020). While most individuals may receive their diagnosis at an early age, there are situations where autism may not be detected until adulthood (Geurts & Jansen, 2012). Furthermore, even though males are diagnosed at higher rates, females are diagnosed more frequently at a later age (Rutherford et al., 2016). There is an under recognition of autism in females prior to referral for diagnostic assessment. As a result, they often experience delays in their diagnosis (Rutherford et al., 2016).

Accommodations

The IDEA and Section 504 of the Rehabilitation Act of 1973 mandate that accommodations be used as necessary to provide an appropriate education for students with disabilities (Byrnes, 2008). According to Tindal & Fuchs (2000), accommodations can be categorized into (1) presentation accommodations where materials presented to students are modified, (2) response accommodations where students can choose to formulate their responses on assignments or exams in varying ways, (3) setting accommodations where the location of an exam can be altered, and (4) timing and scheduling accommodations where the amount of time allotted for a presentation, test, or assignment can be adjusted to fit the needs of the student. For college/university students to receive disability-related services like accommodations they must provide the appropriate documentation to the disability services office/accessibility office (U.S. Department of Education, Office for Civil Rights, 2011). Even with documentation, some faculty in university settings have shown reluctance about willingness to accept accommodations due to their view of this being non transferrable to 'real life situations' where employers may not be as keen to provide an accommodation like extra time for projects (Rao & Gartin, 2003).

Academic Self-Concept

Self-concept is defined as the view one has of themselves (Bong & Skaalvik, 2003). Self-concept can stem from social comparison where others can serve as a standard in which to judge one's own traits and accomplishments (Bong & Skaalvik, 2003). This frame of reference can play a strong role when one develops their academic self-concept (Marsh, 1986,1987). Academic self-concept is defined as individuals' knowledge and perceptions about themselves in academic situations (Byrne, 1984; Shavelson and Bolus, 1982; Wigfield & Karpathian, 1991). Wei and Marder (2012) examined a longitudinal data set of self-concept in the populations of students with disabilities in the US comprising each disability category from early elementary to high school. These included 12 categories from the Individuals with Disabilities Education Act:

learning disabilities, speech impairments, visual impairments, other health impairments, orthopedic impairments, traumatic brain injury, autism, death blindness, and multiple disabilities. This study found that there were relatively low levels of self-confidence in autistic students in social and overall domains. Furthermore, academic self-concept had dropped for disabled students from the ages of 8 to 17 which could have suggested their frustration with lack of school success and as a result, low academic self-confidence. Another study by Pijl and Frostad (2010) found that disabled students tended to have low self-concept due to not being accepted by peers in regular classrooms. The sample in this study consisted of 498 students with disabilities in seventh grade.

It has also been found that positive academic self-concept can be a result of student-faculty interaction (Bjorklund et al., 2002; Komarraju et al., 2010). Although this has been found in multiple studies, it is important to note that the nature of the interaction can have a significant role in whether college students' have a positive academic self-concept (Kim & Sax, 2014; Komarraju et al.; 2010; Cole, 2007). Kim and Sax (2014) found that academic self-concept was not only impacted by the type of student-faculty interaction but also the student academic major, shedding light on the multiple factors that can affect student-faculty interactions and in turn affect students' academic self-concept.

Universal Design for Learning (UDL)

Universal Design for Learning (UDL) is based on findings related to brain development, learning and digital media (Rose & Meyer, 2002). Rose and Meyer who were part of the Center for Applied Special Technology (CAST) had the goal of helping students with disabilities and reducing barriers within the educational setting. They saw that the "one-size-fits-all" curriculum was an inaccurate way to produce academic achievement from all students. CAST identified key components of UDL such as using multiple ways for instructors to present information,

expression, and engagement to learners (Edyburn, 2005). The term of UDL was adopted by the IDEA in 2004 and defined within federal law (20 U.S.C § 1401). The three main principles of learning from UDL are; 1) multiple means of engagement 2) multiple means of action and expression, and 3) multiple means of representation (CAST). Each principle is intended to give students the option and chance to become expert learners, not just in the information being delivered, but in their own learning as well. UDL has provided a framework that allows for opportunities in learning from all types of students with various learning needs and backgrounds (Edyburn, 2005).

Current Research on Autistic College Students and their Relations to Faculty

While there are studies that discuss autistic young adults and their experiences and supports in college (Anderson et al., 2017; Gelbar et al., 2014; Highlen, 2017; Jackson et al., 2018; Kuder & Accardo, 2018; Zeedyk et al., 2016), there is a limited amount of research that investigates faculty contributions in relation to the success of autistic students in higher education (Austin & Peña, 2017). The lack of scholarship in this area is a disservice to both autistic students and faculty. To address these gaps, the search for literature on this topic aimed to provide information on the recurring themes that emerge when looking at perceptions of both autistic students and faculty, as well as areas that still need further examination. The scarcity of literature demonstrates a need for more scholarship on this particular subject.

Inclusion criteria

To be included in this study, articles had to include a population of autistic college students, autistic individuals that reflected on college experiences, or faculty of autistic college students. Articles also included experiences and perspectives from each population. Articles had to be either quantitative or qualitative research that was related to autistic students and higher education. Due to the high nature of co-occurring conditions in autistic individuals, students with

any co-occurring conditions (e.g., anxiety, depression, attention deficit hyperactive disorder, epilepsy), even if not formally diagnosed, were still included in the study. Additionally, to account for changes in the university system over time (Moran & Myringer, 2002), the articles included in this study were published between 2010 to 2021 in order to capture current university environments. Furthermore, the articles focused on higher education in the United States to focus on similar school policies and regulations regarding students with disabilities.

Exclusion criteria

Source types of dissertations and literature reviews were not included in this study. The source type was filtered to journal articles and additional examination after the initial search results led to removal of papers that still did not meet the source type criteria. Papers that were not written in English or focused on an education system outside of the United States (e.g., United Kingdom, Australia, Belgium, Spain, Slovenia) were also excluded from the study. Additionally, studies could consist of up to 20% of students without a formal diagnosis of autism to account for the difficulties and expenses in getting a formal diagnosis as well as the perceived stigma of an autism label. This also accounted for the students who did not wish to disclose their diagnosis. Although studies could include information about overall supports for autistic students enrolled in college and university programs, they required discussion of faculty as one of the supports or factors that affected the student.

College/University Experiences of Autistic Students

Nine articles focused on the perceptions from autistic students on their college/university experiences. All nine of the articles either only used qualitative methods or used mixed methods by incorporating surveys or questionnaires. The majority of the studies utilized interviews which provided a breadth of information regarding students' feelings and opinions about their time at the university. Only one of the articles (Anderson et al., 2019) included students without a formal

diagnosis of autism because this article utilized a discussion board in an online environment. The literature in this area can be categorized into the four subcategories: the role of autism characteristics and identity in shaping college experiences, defining and addressing academic issues, overcoming academic difficulties through personal supports, and students' perspectives on faculty roles.

The Role of Autism Characteristics and Identity in Shaping College Experiences

Many students expressed problems they faced when first entering college due to their autism-related characteristics that did not align with their institution's norms set in place finding that instructional practices and support from professors were not accommodating to the characteristics of autistic students (Cox et al., 2021). Much of the frustration came from misalignment between the way these students felt their 'brain worked' (i.e., linearly) and the way the material was presented in class (i.e., nonlinearly) (Cox et al., 2021, p.262). Students also felt that large lecture courses were ineffective, as this kind of learning environment led to a lack of meaningful connections with the professors teaching these types of courses (Cox et al., 2021). Supporting this sentiment, a prior study has demonstrated the appeal of smaller class sizes for students with disabilities (Brown et al., 2016). Although the small class size was preferred by students, it is important to consider the drawbacks of smaller classes. Students in these smaller courses still felt that they had trouble with social communication and peer interactions (Cox et al., 2021). Students from the Cox et al. (2017,2021) studies described their experiences in learning to impose limits on their actions to avoid behaviors that were not deemed appropriate in public settings (e.g., ticks, flapping of arms, vigorous movement of their head). While adhering to societal norms by displaying appropriate behaviors resulted in outward success, this exacerbated internal difficulties as behavioral control resulted in excessive stress and sleep deprivation which led to complications in interacting with peers (Cox et al. 2021;2017). Students

also expressed difficulties inhibiting some of this behavior (e.g., frequently raising their hands, refusing to work in groups with other peers, and calling out in class without waiting for their turn to speak) which caused stress in coping with the college environment (Bolourian et al. 2019).

The Cox et al. (2017) study found that when students were diagnosed at an earlier point in their life, they generally had a better and more positive sense of identity. However, it should be noted that even students from the study with self-acceptance of their diagnosis still had internal struggles in relation to their identity and disability. This can be seen with students' reluctance to disclose their autism diagnosis until they found it absolutely necessary (Cox et al. 2017; Cox et al., 2021; Sarrett, 2018). Students explained their hesitation in revealing their diagnosis because they did not want others to feel "sorry" for them and they did not want others to view their disability as a way to define who they were as a person (Bolourian et al. 2018). Additionally, diagnosis is difficult for autistic students because it differentiates them from their TD peers (Lowinger, 2019).

Defining and Addressing Academic Issues

In order to address academic concerns, students often go to the DSO (Cox et al., 2021; Anderson et al., 2019). After speaking with personnel from this office, a student may realize that the source of their problem was not only academic, but also deeper difficulties including: 1) lack of academic preparation 2) needs involved with living independently, and 3) underdevelopment of emotional readiness (Cox et al., 2021). Students from the Cox et al. (2021) study described the need for introspection to identify how academic difficulties connected to the larger issues related to personal sense of identity. Additionally, these students explain the importance of reframing their mindsets to think of themselves as "differently abled" instead of "disabled".

Students from the Anderson et al. (2019) and Cox et al. (2021) studies explain the importance of receiving a formal diagnosis as this could open the door to formalized

accommodations that could enhance students' holistic well-being and academic success. Some students went even further, saying that students should pause their academic course taking until they receive a plan with university disability or counseling services in order to prevent poor grades from appearing on their transcripts (Anderson et al., 2019). Accommodations included life skill supports like assistance with executive functioning issues, relationship issues, advocating, budgeting, dealing with sensory overload through individual study spaces during exams, and help with housing (Accardo, Kuder & Woodruff, 2019; Anderson et al, 2019; Sarrett, 2018). It should be noted, however, that systematic barriers can make it difficult to receive this formal diagnosis, as students from the Cox et al. (2021) study describe feelings of frustration in efforts to obtain all necessary documentation to complete the appropriate requirements.

Students expressed that taking the initiative to develop a sense of self-awareness and being your own advocate is vital to succeed and progress as a college student (Accardo et al. 2019). They indicate that succeeding in college is tied with self-awareness of the diagnosis and identity formation which will lead to taking the necessary steps in receiving accommodational supports. Moreover, these students explained that limits in self-awareness led to reluctance in receiving accommodations which meant a lack of the skills necessary to navigate the academic setting.

Overcoming Academic Difficulties through Personal Supports

The importance of support outside of the school setting was a common factor that seemed to help students in their collegiate experiences (Cox et al., 2021). Students relied on family, friends, counselors, behavioral therapists and vocational rehabilitation counselors for support (Anderson et al., 2019; Cox et al., 2021). Students revealed the magnitude of assistance that came from individuals that supported the students' overall well-being (Cox et al., 2021). Another benefit from these casual networks of support systems was the ability to receive this support

without needing a formal diagnosis (Anderson et al., 2019). Family members can often times bridge the gap between personal supports and academic supports when being present for students during their meetings with academic advisors (Anderson et al., 2019). Although students do not need a formal diagnosis in order to obtain support from an academic advisor or counseling center, having a parent or guardian present can ease the stress for a student when communicating their needs. A vast number of autistic students have indicated that parent support was an impactful part of their journey to college (Accardo, 2017; Anderson et al. 2019; Bolourian et al. 2018). Parent expectations seemed to play a role in students' motivation to obtain a higher degree in learning as well as motivation rooted from parents' successes in college (Accardo, 2017).

Students' Perspective on Faculty Roles

Past studies have shown that interactions amongst students in college courses have been unstructured and this has resulted in stress amongst autistic students which causes an unwillingness to approach professors for individualized support (Cox et al., 2021). Many students from the Cox et al. (2021) study felt that they didn't want to be a nuisance to their professors and avoided bringing up the role that autism had played in their academic experiences. In the event that students did bring up their difficulties or need for assistance, the most common response from professors was to refer the student to someone else such as a student advisor or the DSO (Cox et al., 2021). Some professors even stated that the student's advisor "should have known better" than to put the student in their course (Cox et al., 2021, p. 263). Other professors responded with "too bad" when asked for clarity on lectures (Accardo et al. 2019, p.4884). Participants from the Sarrett (2018) study explain that there are professors who do not comply with accommodations that the student has requested. Students from this study felt that neglect to do so may be due to the misunderstanding of academic accommodations which

can be perceived as giving students an unfair advantage over others. Students from the Accardo et al. (2019) study describe the lack of understanding about autism from faculty and the scarcity of knowledge with ways to help and support students. Participants from the Zeedyk et al. (2019) study describe faculty members who expressed their hesitancy in signing forms for disability services because they did not believe the student "looked" disabled (p. 729). Students voiced frustrations with disclosing their "invisible disability". Their mild autism symptoms were viewed as unnoticeable and as a result, others perceived these students as being dishonest with their disability disclosure. Students expressed the need for improved faculty training, integration of disability policy discussions within classroom lectures, and restructuring of conventional orientations to avoid an excessive amount of information given to students all at once (Cox et al., 2021; Sarrett, 2018).

In contrast, the students from the Anderson et al. (2019) study describe ways that professors can be supportive and even become advocates for students once the student registers with the DSO and communicates their needs to the professor. Students from the Accardo et al. (2019) study revealed their preference of having faculty mentors as they transitioned into the university and felt that an established figure at the school could factor into their overall success as a student. Sharing these sentiments, students from the Accardo, Kuder & Woodruff (2019) study express their positive experiences from having a faculty mentor and how they often times felt that they could connect with these teachers because of their vast amount of knowledge and experience in their particular fields. This is clearly indicated in Bolourian et al. (2019) through the description of autistic individuals and their passion for a particular subject area that inspires their motivation to join postsecondary education and decide upon a specific major. The awareness faculty have in these subject areas is described as a positive area of student-faculty

relationships as this could lead to high quality work put into course requirements leading to increased student focus and interest (Bolourian et al., 2019).

College/University Experiences of the Faculty of Autistic Students

Six articles focused on the perceptions from faculty of autistic students on their experiences teaching this population of students. All six of the articles used qualitative methods or surveys. Even with the use of surveys, the results were described qualitatively. Many of the studies utilized interviews which allowed for informative viewpoints that these professors had in relation to teaching autistic students. The literature in this area can be categorized into the four subcategories: effective teaching strategies/practices, ways to improve teacher training and supports for autistic students, personal experiences tied to disability, and faculty perceptions of autistic students.

Effective Teaching Strategies/Practices

Faculty from multiple studies discussed various teaching strategies that they found to be the most effective when teaching autistic students (Austin & Peña, 2017; Gobbo et al., 2018; McKeon et al., 2013). Participants from the Gobbo et al. (2018) study utilized careful grouping, clarity of instruction, individualization, variety of assessments, and structured lessons. Faculty from this study discussed the importance of being attentive to students' personalities and characteristics in order to find ways to group students for group assignments based on their temperaments and strengths. Faculty also found that being clear and direct with instructions for in-class behavior and assignments proved to be helpful, rather than ambiguous and open-ended questions or prompts. Individualization worked for some students where the professor could tailor the assignment to fit the interests of the student. The professor and student would find an area of interest the student had and put the assignment in a context relevant to that interest which oftentimes increased the productivity and quality of the work that was submitted (Austin & Peña,

2017; Gobbo et al., 2018). Additionally, professors utilized strategies aligned with UDL by incorporating different modalities of assessments and teaching material in order to adhere to students' visual or auditory preferences in learning (Gobbo et al., 2018). They would implement posting notes online, posting videos and webpages, facilitation of discussion, and lecturing about main ideas. There would also be use of take-home tests, projects, and online as well as in-class discussions. The faculty from the Austin and Peña (2017) study made use of various methods such as utilizing technology, lecture style discussions, small group projects, and interactive activities. Professors from the McKeon et al. (2013) study utilized strategies like having students repeat back directions orally in individual sessions and being flexible with the type of assignment submission. Faculty stressed the importance of stepping away from traditional teaching methods in higher education (e.g., large lectures) and moving towards hands-on and creative teaching approaches (Austin & Peña, 2017; Gobbo et al. 2018; McKeon et al., 2013). Another important aspect of keeping students engaged was the use of structure and routine in lessons. Instructors explained that these routines create a pattern of learning for the student in which they can feel a sense of predictability for what to expect in class (Gobbo et al., 2018).

In Austin and Peña (2017), faculty expressed the importance of scaffolding in which they would take apart a larger assignment into manageable components that were easily digestible for students to comprehend. They explained the process of breaking apart the requirements of a task and then offering many different options for students to display their knowledge of the assignment. Most of the faculty from the Austin and Peña (2017) had limited knowledge about autism, however they felt that their individualized approaches to teaching was useful for these students. The student participants from the Sarrett (2018) study explain frustration they felt when their faculty saw accommodations as unfair advantages. Although the students from that study had negative experiences with accommodations from professors, the professors in the Austin and

Peña (2017, p.24) study, described accommodations as ways to "level the playing field" and make the school setting fairer for those that need the adjustments. Much of the success that faculty experienced in working with autistic students came from the faculty members voluntarily reaching out to the DSO or other faculty with experience in order to receive guidance in how to best support their students (Austin & Peña, 2017). Another reason the faculty from the Austin and Peña (2017) study may have differed from the faculty described in the Sarrett (2018) study is that the results were not typical of a traditional university setting since the professors were from a private urban university in which technology, enhanced curriculum, and a focus on teaching was emphasized at the school.

Personal Experiences Tied to Disability

Personal interactions and experiences with individuals with disabilities allowed for an open mindset and willingness to practice responsive teaching when instructing students on the spectrum (Austin & Peña, 2017). More than half of the participants in this study had an autistic family member or a friend that had an autistic child. Faculty from this study explained that these close encounters allowed them to be more responsive when teaching autistic students. The participants from the Zeedyk et al. (2019) study describe interests in autism occurring from personal exposure to the disability such as perseverance from a faculty member in getting their own child to attend college when many expressed disbeliefs in the ability of their child to do well due to their disability (i.e., learning disability and ADHD with traits on the spectrum). Other professors from the Zeedyk et al. (2019) study describe their own personal interests in autism due to their lack of encounters with individuals on the spectrum and their curiosity in learning about ways they can provide supports or adjust their curriculum for these students.

Faculty Perceptions of Autistic Students

Faculty from the Gobbo & Shmulsky (2014) study shared their observations around autistic students having difficulty with social skills, critical thinking due to lack of awareness around other individuals' mindsets, and anxiety that can impact their learning in a negative way. Faculty also described autistic students as being over reliant on their parents and as a result, lacking the appropriate skills to navigate the university and college setting on their own (Elias et al., 2019).

According to the findings from the survey in the McKeon et al. (2013) study, more than half of the participants said that they had witnessed students that were disorganized and/or had poor schedule planning. The participants from this study further explain that students in their classes can respond off-topic, repeat claims that have already been stated, struggle with understanding different viewpoints, take over the entire class discussion without turn taking, and/or speak without providing sufficient context for the individual listening. Further, the faculty from the McKeon et al. (2013) study noticed that autistic students had trouble with noise in the background, bright excessive lighting in a classroom setting, and other students talking when they were trying to focus and process information being taught in class. Although faculty from the Gobbo et al. (2018) study had similar observations about students' challenges, they did notice strengths that students brought forth as well. They highlighted students' abilities to pay attention to detail, execute work when given complex instructions, capacity to follow steps in order, as well as awareness and utilization of patterns.

Ways to Improve Professor Training and Supports for Autistic Students

Professors provided insights into the methods that need improvement when supporting autistic students (Austin & Peña, 2017; Glennon, 2016; Gobbo et al., 2018; McKeon et al., 2013; Zeedyk et al., 2019). Faculty described how being aware of students' diverse learning needs and abilities will allow for a richer and more effective learning experience by individualizing

learning for students at varying academic levels (Gobbo et al., 2018). Faculty from this study went on to explain the importance of stepping away from a deficit lens and instead viewing the strengths of autistic students by understanding that various individuals learn and think differently which allows them to contribute to the class in a unique manner. In terms of institutional recommendations, faculty felt that universities should increase training and professional development opportunities for ways to support students on the spectrum (Austin & Peña, 2017; Glennon, 2016; Gobbo et al., 2018; McKeon et al., 2013; Zeedyk et al., 2019). Participants from the Gobbo et al. (2018) study also expressed concern for student success post-graduation and recommended mentoring programs to guide students in communication, teamwork, conflict resolution, and effective communication in order to thrive in the work industry when applying for jobs.

Participants from McKeon et al. (2013) explain that the accommodations that are required for students do not always tie in with the current curriculum being taught in the course. Professors from this study elaborated further by indicating their surface level understanding of autism, but lack of knowledge in effectively supporting or guiding these students in their own courses. Although the percentage of responses utilizing teaching supports that benefited students (e.g., extra opportunities for individual conferencing, providing support for long term assignments) was high, there was still a percentage of participants that did not utilize these basic teaching supports (McKeon et al., 2013).

The Present Research

To address the issues that autistic college students face, it is vital to connect with individuals they interact with on campus and find ways that these students can best be served. Wenzel & Rowley (2010) discuss the need to engage with faculty members on campus to educate them on how to best interact and work with this population as well as learn about their

experiences with these students to see which behaviors, if any, need attention. There is a lack of literature on college student-faculty relationships and work that has focused in this area has shown that relations among faculty and students with developmental disabilities are usually of lesser quality and closeness than TD students (Blacher et al., 2009; Eisenhower et al., 2007). Furthermore, although academic self-concept has been studied in various populations and age groups, there have been no studies that have focused on academic self-concept on the population of autistic college students. The proposed qualitative study aimed to investigate the beliefs that undergraduate and graduate students have about their academic abilities as well as the relations they have with faculty at the university. This led to the following research questions:

1.) How do autistic students view themselves academically in a college/university setting?
    a.) What are the main factors that contribute to this?
2.) What experiences do autistic college students have with their faculty?

CHAPTER IV: METHODOLOGY

Positionality Statement

In the past, I had little to no familiarity with complexities prominent within autism. Upon having close ties to the autism community, I started to observe the behaviors of some individuals that I became close with. I noticed that they lacked socialization and academic progress even when receiving supports like IEPs. Eventually some of these individuals started homeschooling and various therapies such as Applied Behavior Analysis (ABA) therapy and speech therapy to ensure that they had the appropriate supports and interventions needed. Please note that certain details have been altered to protect the confidentiality of these individuals.

I switched my major to Liberal Studies because I wanted to make a difference in the education system for autistic individuals. I then carried forward my studies in pursuing my teaching credential and master's in education. I started a position as an Applied Behavior Analysis Therapist where I worked with children on the spectrum. I found that my goal was to support autistic youth as I saw the great potential they had.

Continuing my education into my PhD program, I was able to focus my research on the autistic population. While in my program, I also worked as a substitute teacher in special education and inclusion classrooms where I was exposed to the ways in which the education system often formed barriers for students and their families. As I considered research topics for my dissertation, I reflected on the vast amount of literature focused on the autistic population in early childhood while lacking focus on late adolescence where youth start to enter college. Thinking about the autistic children I worked with, I wanted to explore experiences of autistic college students to also understand possible barriers they may have to eventually face when going into post-secondary education. I wanted to contribute to the growing literature to potentially lead to practice and policy changes that would benefit future autistic college students.

Having a different lens that I could bring into the qualitative portion of this study allowed me to set up the interviews by informing participants of my own background and experiences with the autism community. The interviews included many sensitive questions so having this layer of vulnerability allowed for a possibly more open dialogue between participants and myself.

Recruitment

Screening criteria for this study included a self-reported diagnosis of autism. This study did not have an age requirement for when the diagnosis occurred. This study also had no age restrictions as long as the individual was enrolled in a community college or university. Furthermore, participants could be undergraduate or graduate students to encompass the varying experiences of all autistic college students. Additionally, participants were required to attend school within the United States to ensure that there were similar school policies and regulations regarding students with disabilities. Any participants on leave of absence were not included in the sample. They had to be fully enrolled students. A stable internet connection, microphone, and speaker was also a requirement because all interviews occurred over a video conferencing platform. Auto captions were incorporated in all virtual interviews and additional accommodations were provided if requested by the participant.

To recruit participants, I reached out to an autism network group. This group allows individuals globally, who conduct research on and/or work with autistic postsecondary students, to communicate and collaborate with one another. It welcomes faculty, researchers, student affairs practitioners, students, and others to utilize their talents and work toward making college more accessible, inclusive, and rewarding for autistic students. I recruited seven participants from this source by sending out an email with detailed information about the study and linking the screener (Appendix D) as well as study information sheet (Appendix A). I then utilized

snowball sampling where a participant enrolled in the study helped me recruit more participants by reaching out to their social media network and sharing my virtual flier (Appendix E) and an overview of the study information (Appendix A). I recruited the rest of my participants via a parent involved group from another social media platform with a virtual flier. See Table 1 for additional demographic information about each participant.

Participants

A total of 17 participants filled out the screening form and 12 were chosen from this sample. In order to reach saturation in results, a sample of 10 participants was initially recruited, however upon noticing a lack of diversity in the sample set, I resumed recruited to be more inclusive of participants that were non-speaking and that encompassed more racial diversity. The final participant pool included six females, three males, and three non-binary/gender queer individuals. The sample included both undergraduate (N=6) and graduate students (N=6). Ten participants identified as White, one as Hispanic or Latin American, and one as Black or African American. Additionally, one participant identified as non-speaking. Pseudonyms were used for the purpose of maintaining anonymity. Pseudonyms and additional demographic information such as current occupation are included in Table 5 below.

Table 5: Demographics of Twelve Autistic College Students

Participant	Gender	Race	Class Standing	Major	Current Occupation
Jenny	Female	White	Graduate School (PhD)	Educational Leadership	Teacher
Sheryl	Female	White	Graduate School (PhD)	Higher education	Research assistant
Ben	Male	White	Junior	Construction Science and Management	N/A
Becca	Female	White	Graduate School (EdD)	Education	Faculty development facilitator, DEI SME
Vanessa	Female	White	Junior	Psychology, Mathematics	Substitute teacher/classroom aide (during university breaks)
Stacy	Female	White	Graduate School (Masters)	Neuroscience	N/A
Kelly	Gender Queer	White	Graduate School (PhD)	Disability Studies	Teaching Assistant
Lizzy	Female	White	Junior	Physics and Earth Science	Not working/Student
Nick	Male	Hispanic or Latin American	Freshman	Political science	Student
Josh	Male	Black or African American	Sophomore	Nursing	Part Time Store Attendant
Molly	Non-binary	White	Senior	German and EEB (Evolution, Ecology, & Biodiversity)	Undergraduate Research Assistant
Mia*	Non-binary	White	Graduate School (Masters)	Geology	Teaching Assistant

Note: an asterisk indicates that the student is non-speaking

Interview Protocol

These interviews consisted of questions that stemmed from the Diverse Learning Environments (DLE) survey, administered by the Higher Education Research Institute (HERI). The DLE survey was formed in order to obtain student perception of institutional climate; student learning outcomes (e.g., sense of belonging); and campus practices as experienced with faculty and staff (McLennan, 2019). The DLE survey has been conducted by the Cooperative Institutional Research Program every year since 2011 (McLennan, 2019). It is a web-based survey that is administered every year to students at 2- and 4-year institutions who have

experienced the campus climate (HERI, 2021). Some factors (Appendix C) from the DLE survey that utilized factors from Critical Consciousness and Action (CIRP) (Fregoso, 2020) were used to inform which survey questions would inspire my potential interview questions. I chose these factors based on related areas to my study (i.e., student academic self-concept and faculty relations). Additional questions that sought to understand general academic experiences (Appendix B) were also incorporated to gain a broader understanding. This led to data that explored how autistic college students viewed themselves academically, what their relations were like with faculty, and how these relations either promoted or hindered their academic success. Each interview followed a similar pattern. It is important to disclose the researcher's involvement, particularly "the researchers' personal commitment to the examined population," as qualitative researchers propose (Karnieli-Miller et al., 2008). Therefore, I started each interview by discussing what the study was about and explaining my own personal background with the autism community. Probing was slightly modified depending on individual student responses to elicit detailed perspectives (e.g., "Can you expand upon that?"). To answer the first research question, I asked open-ended questions like “Can you tell me about how you feel you are doing academically in school?” and “Can you tell me about what your drive is to achieve academically?” Most of these questions were derived from the DLE survey and I also incorporated follow-up questions to broaden my understanding of each students’ experience. To answer the next research question, I asked questions like “Can you tell me about how you got to this current point with your grades?” and to answer the third research question I asked questions like “Can you tell me about your experiences with faculty at your university/college taking an interest in your development?” This type of question stemmed from the academic validation and general interpersonal validation factors from the DLE survey. Questions about accommodations were not included in the original protocol because this was not an area of focus in the DLE

survey. I incorporated these questions after the first interview since this was something the first participant had discussed. Accommodations ended up being a vital part of all the interviews.

Data Collection

I conducted interviews between early February and early to mid-March 2022. Participants were contacted at least one week before their confirmed study date via email with the time, date, and video conferencing link for the study. They were able to adjust the date and time if needed. I requested a confirmation email response to ensure participation in the interview. All participants completed the interviews without the presence of a parent or caretaker. The length of the interviews varied with some participants taking the entire 60 minutes and others taking around 30-45 minutes. Due to the limited time and length of responses from some respondents, an additional interview was conducted with one of the participants to complete questions from the interview protocol. The interviews were all conducted via the Zoom video conferencing platform and recorded with verbal permission from participants. One nonspeaking participant used the chat feature in zoom to communicate during the interview. I asked all the questions verbally and the participant listened and responded via chat. This study was self-funded; I compensated all 12 participants with a $25 e-gift card for their time.

Data Analysis

Procedure

All procedures were approved through the Institutional Research Board of both primary universities. Creswell & Poth (2018) explain that a heterogenous group should have a sample size of about ten to fifteen in a phenomenological study, therefore I conducted single interviews (view Appendix B) with 12 participants (view Table 5) over the zoom video conferencing platform. Each interview was around 30 to 60 minutes in length and was recorded with transcriptions via Otter.ai with consent from each of the participants.

Coding

I started by listening to recordings and re-reading transcripts and post-interview notes to get a comprehensive view of the data. This process took place in the midst of continuing data collection. “Pre-coding” (Saldaña, 2013) was also done by highlighting, bolding, and commenting on participant remarks and quotes that seemed particularly pertinent, informative, or insightful. After reading and managing the data, detailed descriptions were formed where I provided a comprehensive account of what I had observed throughout the interviews. Then I wrote a short list of tentative codes also known as lean coding (Creswell & Poth, 2018). I utilized a modified grounded theory approach which consisted of two phases: initial and focused coding (Charmaz, 2006). Initial line-by-line coding allowed me to make judgments about the data in which focused coding followed afterwards. I sorted, synthesized, and conceptualized vast amounts of data using the most frequently appearing initial codes (Charmaz and Belgrave, 2012). Following this process, another graduate student researcher and I completed focused coding. To sift through all the data, we used focused coding to bring up the most significant and/or frequent earlier codes. We had to make decisions about which initial codes made the most analytic sense to accurately categorize and organize the data (Charmaz, 2006). All coding was done by hand via the Otter.ai platform where text was highlighted and commented on. Otter.ai also allowed for collaboration with the graduate researcher where the text files were exported after each of us completed coding. The graduate researcher and I began developing an initial codebook of the major codes. It contained a definition of each code and text segments assigned to each code. We then independently applied the shared codebook to additional transcripts and then compared to maintain consistency. Figure 3 below provides an example of an excerpt from the transcript with initial and focused codes.

Figure 3.

Initial coding of a transcript excerpt

Coded Notes	**Transcription**
Professor in a prior semester Uncertainty in completion of project Stress of project Professor willing to be flexible Adjustment of project requirements Change resulted in positive experience Ability to complete assignment Formal accommodations not always needed Implementing changes Positive experiences with professors	I had a professor last semester, and I went to her and I was like, 'Hey, I'm not sure if I'm going to be able to do this specific project like it's stressing me out way too much.' And we ended up having a conversation, she actually explained, 'I'm going to change the project and this way and this way, do you think you'll be able to do it now?' and it worked out fine. You know, I got a good grade on it, I was able to get through it. So sometimes professors even without, like, needing the official accommodations, will sometimes just make sure to implement certain changes. So, I've definitely had positive experiences in that sense.

Focused coding of the same transcript excerpt

Coded Notes	**Transcription**
Necessity of accommodations for assignment Discussion with professor Flexibility in adjusting requirements Informal accommodations Positive professor experiences	I had a professor last semester, and I went to her and I was like, 'Hey, I'm not sure if I'm going to be able to do this specific project like it's stressing me out way too much.' And we ended up having a conversation, she actually explained, 'I'm going to change the project and this way and this way, do you think you'll be able to do it now?' and it worked out fine. You know, I got a good grade on it, I was able to get through it. So sometimes professors even without, like, needing the official accommodations, will sometimes just make sure to implement certain changes. So, I've definitely had positive experiences in that sense.

For the analysis, I followed a phenomenological approach in which the goal was to understand several individuals' common or shared experiences of relations to faculty and academic self-beliefs (Creswell & Poth, 2018). Interviews were transcribed, coded, and analyzed for emerging themes. I classified codes into themes by relating the material to aspects about the phenomenon of interest (Creswell & Poth, 2018). The graduate researcher and I grouped the focused codes into themes. We discussed new and divergent themes until consensus was obtained. Transcriptions were carefully examined by hand, and we utilized thematic analysis by identifying salient themes and patterns within this dataset (Aronson, 1994). Voices from the participants were accentuated and the findings relied on raw responses for higher accuracy. In

order to reliably code themes derived from the interviews, interrater reliability was used to conduct a thematic analysis. I calculated the percentage of interrater reliability using 25% of the qualitative data from the interviews. The Miles and Huberman (1994) equation was utilized for calculating interrater reliability, reliability = number of agreements/number of agreements + disagreements, there was an 85% of interrater reliability for qualitative data from the interviews. According to Bengtsson (2016) a latent level analysis is described as a way in which the researcher seeks to investigate the underlying meaning of qualitative data. The same was used for this study where a bottom-up approach through inductive coding was used to note emerging themes that develop.

Quotes from the interviews are highlighted in the results by using the following conventions: 1) For the sake of brevity, certain non-essential terms were deleted.; 2) Additional explanations were provided: [text]; 3) Fillers used in everyday speech (e.g., “um”, “like”, “you know”) were omitted to improve readability; and 4) For the sake of privacy, identifying information had also been removed.

Trustworthiness & Credibility

To ensure trustworthiness and credibility of the findings, I utilized different methods of validation. Patton (1990) describes maximum variation sampling in which including participants with varied experiences, can more thoroughly describe the variation in the group and allow the researcher to understand the wide array of experiences whilst looking at key elements and shared outcomes. The same was employed for this study where the sample included a heterogenous group of students that differed in (gender, race, class standing, major and occupation) to capture the various experiences of autistic college students. Meticulous considerations were implemented to ensure that the results appropriately reflected the participant’s perspectives. To do so, I intentionally used quotes from participants throughout the study to avoid misinterpretation of

their words. I also applied neutrality in the study by writing memos about my reflexivity throughout data collection and analysis to process and explore my own personal biases. I thought about my own identity having close relations to individuals within the autism community and my role as an academic researcher. The memos allowed me to describe, analyze, and critique my own beliefs and biases to understand each participant's experiences in their own contexts (Noble and Smith, 2015). The graduate researcher that assisted with coding had no close ties to individuals within the autism community, therefore our discussion of coding and themes attributed to higher neutrality in interpretations of the data. Semi-structured interviewing was carried out for all participants which allowed for reliability in data analysis.

CHAPTER V: RESULTS

The findings from this study are presented in three sections of this chapter. In the first section I discuss how participants viewed themselves academically. Participants reported generally positive academic self-perceptions while simultaneously demonstrating a willingness to improve, and this was attributed to high drive to achieve academically and high GPA.

In the second section, I discuss the factors that contribute to students' positive self-perceptions of how they view themselves academically. This includes walking in family's footsteps or following family values, personal motivation to do well, proving someone wrong, and striving for high academic achievement. For impact on academic self-concept in general, factors like the pandemic, accommodations, and learned self-awareness were discussed. In the interviews, accommodations were a significant factor in how students navigated the school environment. Because of this, accommodations are separated into three sub sections 1) disclosing based on necessity 2) difficulties arising when the DSO doesn't provide necessary accommodations, and 3) community colleges providing better supports.

In the final section, I discuss experiences autistic college students have with their faculty. This section is separated into the mixed positive and negative experiences that autistic college students have with their faculty and the significant role that faculty play in providing/accepting student accommodations.

Autistic College Students' Academic Self-Concept

My first research question looked at how autistic college students viewed themselves academically. My goal was also to identify overarching ways that self-perceptions academically were shown. Besides looking at students' direct responses to the question of "Can you tell me about how you feel you are doing academically in school?" I also looked at questions related to student GPA and feelings about current GPA. Furthermore, I investigated whether students had a

high drive to achieve academically. Drive to achieve academically was a variable that made up the academic self-concept factor. For that reason, I attempted to understand students' responses to the question "Can you tell me about what your drive is to achieve academically?" so as to form a holistic picture of autistic college students' views of their own academic abilities.

Positive Academic Self-Concept with Openness to Improve: A theme that arose amongst participants was their general feeling that they perform well academically. Some showed confidence in their high marks. Others still had generally high marks but expressed beliefs that they had room for improvement and were willing to try and raise their grades. The majority of participants had very positive words to describe their overall feelings in regard to their academics. When asked how they were doing academically, some participants like Jenny explained that they were doing phenomenally. Jenny, a graduate student, answered with

> Knocking it out of the park. I'm not just making As; my professors are telling me I'm the best student in the class.

Several other participants also expressed their confidence in performing strongly in their courses. On the contrary, some participants explained that their grades weren't exactly where they wanted them to be, but they acknowledged this and expressed a desire to improve and do better. Josh, an undergraduate student, explained this sentiment by saying:

> For me, right now, I can't say I'm doing really great. But in the future, I will do better. So for now I'm…trying. I'm…struggling a bit, but I know, I have invested a lot…and very soon, I might pick up and everything will be fine.

It is important to note that while this participant had grades in the low-grade range, some other participants were doing fairly well and still felt a desire to improve. Participants also expressed the difficulties that come with transitioning into college and how that can impact their grades and how they feel they are doing academically. Ben, an undergraduate student, explained:

> I go through phases of where I do well very academically and don't do well academically, depending on how much motivation I have just because of things in life. And for the first few kind of semesters, just…figuring out how to navigate college and everything…But overall, I believe I'm doing well. Most of my grades are As except for the class I just took [class he had difficulties in] …but yeah, I'm trying.

Motivation was described as very important in order to succeed and do well. Participant responses showed that most graduate students chose an area of study that they were passionate about and interested in, which drove their motivation and helped them succeed in their courses. Becca stated:

> I also really like what I'm studying. So, I think that that also makes a difference. If I was still studying engineering, I would not be as motivated. I would quit. I'm sure.

Interest in area of study also impacted students' perceptions of how their academics were.

Higher GPAs: Most participants had a grade point average above a 3.0 in the B to A range while one of the participants struggled a bit more. Participants in graduate school had generally higher marks than undergraduate students. For some students, high marks were always part of how they did in school. Becca answered:

> I probably have a 3.9. But I've always been like that. I've always been a very good student. I'm good at school because I follow directions very well. And so that's basically my strategy is I read the directions, I read the rubric, and I ask for help when I need it.

Another participant also described the nature of following directions thoroughly and feeling like the key to doing well was there as long as she did her best. Jenny expressed this by stating:

> I'm also that student in the class that is saying: 'when you say you want at least does that mean 'you know'? Then how far can I go. So, I try and get the professors to give me

> boundaries. And then I absolutely all the time hit the boundaries, it's just very simple. They will tell you what they want and then you do it.

Adhering to directions and instructions for these students were part of how they did well and viewed themselves as doing well. For other students like Ben, realizing his current major wasn't working for him academically and being proactive in transitioning into a new major impacted his grades. Ben started off in a major that didn't meet his needs and lowered his GPA, so he worked hard to move into a new major and was able to bring up his GPA to around a B range. When asked if he was happy with his current grades he responded with:

> The thing is I don't want to get like too happy to where I start not caring. I don't want to remain complacent. Essentially, I want to keep pushing myself to do better because I know I can do better.

Ben wasn't the only student who believed in his potential to grow. Although Josh had grades in the D range and felt like he could be doing better, he remained optimistic and understood his goals and what he needed to do to achieve them. He expressed this positive mindset by stating:

> I'm still optimistic. And soon I'm sure I will make it because I want to be a great musician or maybe performer. I want to be great and I will.

Motivation to do well stemmed from passion in a certain subject area or choosing a subject area that success was attainable in. In most cases, participants exuded this level of self-awareness and displayed a growth mindset if their grades weren't in the ideal range that they would have liked. Overall, all participants answered the question regarding GPA quickly showing consciousness around their academics.

The Many Factors that Contribute to Autistic College Students' Academic Self-Concept/Academic Drive to Achieve

After answering my first research question, I wanted to dive deeper into the factors that contributed to the academic self-concept that students had. Essentially, understanding what led to the majority of participants having a more positive academic self-concept. Most participants also had higher GPAs therefore with this sub question I ideally wanted to uncover what brought participants to this point. What factors led them to receiving higher marks? Did higher marks come at a cost? Was there a support system either from family or school? These questions were considered when answering the main sub question of "What are the main factors that contribute to this [autistic students view of themselves academically]?"

Many external factors contributed to high academic performance which in turn impacted academic self-concept in a positive way. Some of these external factors included walking in family's footsteps/following family values and proving someone wrong. Striving for high academic achievement was an internal factor that was most common amongst older female participants. While there were external and internal factors that contributed to positive academic self-concept, there were also other factors that impacted how students performed. Factors like the pandemic caused some difficulties for participants with their grades and mental state. Accommodations were another factor that impacted academic success and given the complex nature of accommodations, this was separated into three sections 1) disclosing based on necessity 2) difficulties arising when the DSO doesn't provide necessary accommodations and 3) community colleges providing better supports for students. Two participants also displayed learned self-awareness of their behaviors showing their general recognition of their actions within a college setting. In general, I found that although there were external factors that led to academic success, much of this drive to perform well came from within. Students had an inner drive to do well in their courses.

Walking in Family's Footsteps/Following Family Values: For some participants, their family's values or how their family achieved their own success, motivated students as well. Ben explained:

> My parents have a nice standard of living and I want to try and do the exact same. And my parents also know that there's something in being self-made and not just being handed everything to yourself. So, I also think that's very important because my parents are self-made. I want to be self-made. That's a very important thing to me: to not just to be handed success on a silver platter. So that kind of drives me to succeed.

Ben expressed his observation of his family's way of living was a way to drive his own motivation. Ben also explained that his family valued higher education and agreed to support him if he moved forward in his studies. Parent involvement also seems to play a role in doing well academically. For another student, Lizzy, she discusses encouragement from her mother contributing to her own strive to do well: "My mom's pretty academic. So, she would always encourage me to get higher grades…and that eventually turned into me wanting to get higher grades." In Lizzy's case she did not only attribute her drive to her mother but also to herself. So, although drive to achieve can be influenced by family, it seems that it always goes back to the student themselves. In sum, the student is the one who takes actions that drive their own success academically.

Personal Motivation to do Well: Another theme from the findings was how most participants attributed their motivation to do well stemming from within. Some participants explained that they had a high drive to achieve academically and when following up with the question of what caused this drive, some participants felt like this was more due to an intrinsic strive to do well. In Nick's case, he explained that internally he has a drive to achieve because he wants to at least be competent and be satisfied with his good grades. He also had knowledge of

systems and understood that doing well academically would mean more opportunities to possibly go to graduate school, receive scholarship money, and financial aid. Furthermore, he recognized that good marks would mean that he wouldn't have to worry about getting dropped out of school and dealing with any penalties as a result. Another participant Molly also expressed their strong drive to achieve academically.

> I think the majority of my interest is just wanting to learn the material and learn all of it and learn it well. And then the grades kind of come with that, I guess. I just get really excited about all my classes.

Once again, this drive to achieve came from themselves but they also attributed this to their personal interest in engagement with the course material they were learning.

Proving Someone Wrong: There were instances where some participants described the need to "prove someone wrong". A negative past experience may have made an impact on how/why the student pursued their degree or navigated the academic space. For Sheryl, she described how an occurrence like this happened in early elementary and how it had an impact on the way she dealt with such situations moving forward.

> I was told in…third or fourth grade that I wouldn't graduate high school. And so, there was kind of a big push to prove that teacher wrong. Like 'yes I can' and that somehow by reading books or anything, it was just like, 'Haha!' I feel like since then, that's kind of been how it is anytime anyone says you can't. It's just like trying to prove someone wrong.

Sheryl explained that in her current master's program her drive has stemmed from wanting to answer a research question that "kept [her] up at night" and for being more competitive in the job market. However, in earlier years [elementary through undergraduate] she contributed her drive to proving another person wrong. Another participant, Kelly expressed somewhat similar

sentiments, but these experiences had a negative effect on their mental health. Kelly reflected on K-12 experiences as well:

> In K through 12, I was kind of put in the circumstances where I was compared sometimes to the higher achieving students, the gifted students, because I didn't learn that I was autistic until I was 16.

They then go on to describe the consequences of being compared to students who could work at a much quicker pace than they were capable of doing.

> I was constantly in this like, 'you're smart, but you're slow', like 'you're not quite there.' And…that's why… I have a lot of anxiety about academics and that's what sometimes might drive me but it's not quite healthy in like a mental health aspect.

Kelly's experiences of comparison and late diagnosis influenced how others evaluated them academically and the kind of expectations they held. This resulted in a drive to achieve for Kelly that rooted in academic anxiety.

Striving for High Academic Achievement: For two of the female participants that were diagnosed at an older age, getting high marks was deemed as very important to them. For Becca, she stated "I'm a big nerd and a perfectionist, and so I'd make very high marks." Jenny also had similar values when it came to her academics. She explained:

> I have this weird thing…I don't just have to make an A; I have to make the highest grade. And I don't know where that messaging comes from, but it's in my head really strong.

Receiving high grades was of high value to both of these students.

Difficulty with Change: With the recent pandemic, participants expressed how their academic environment, grades, and mental state had shifted. The pandemic had an impact on participants' college experiences which in turn affected their overall academic performance. Sheryl described how the pandemic made it difficult for her to find the right environment to

study. She had a really difficult time studying in her apartment but there was not much she could do as there were few options of places to go because of the state the world was in.

> I would say the pandemic really affected my timing. So that really slowed me down... I've always said I'm someone who can't study in my apartment. Having to study in my apartment was by far the worst part. Like that made me really slow. And that's not really something you can accommodate for during a pandemic.

In relation to timelines shifting, other factors besides environment also affected student performance. For example, the mental state participants were in impacted the pacing they had when completing their work for school. Kelly describes this by stating:

> Something about the pandemic just really slowed my executive functioning skills. And, and by that, I literally mean just thinking through things slower. I know a lot of times people equate executive function with time management, and it's not that I didn't have good time management, it was just that the process of reading and putting the pieces together, and then writing and all that was just taking me a lot longer. Like my brain was just running slower.

In this case, Kelly compared their prior academic experiences to their experiences during the pandemic and saw the difference in their ability to get through assignments. For another participant, Nick, he explained that the pandemic was something that altered his grades and it had to be considered when thinking about overall academics. He stated:

> The thing is that unfortunately I have to at least account the pandemic and the problem is that because you have the pandemic in the equation, everything is left up in the air. So, you have one possibility that you think that you're on but then all of a sudden you just have like a pandemic come over and just derail everything.

Nick also shed a light on the fact that this was something that all students were dealing with. This situation impacted not only him but also his fellow classmates where everyone was "adjusting and adapting."

Accommodations Impacting Student Academic Perceptions and Success:

Disclosing Based on Necessity: Some participants explained that certain situations caused them to consider whether disclosing their disability was necessary, describing feelings of hesitation due to fear of being treated differently. When asked if Lizzy discloses her disability in her courses, she explained:

> I preferably don't. I don't like disclosing it…due to misconceptions that might happen. So, unless I know a person very well, I won't disclose my disability.

Misconceptions from others was described as a reason for choosing not to disclose by several other participants as well. Another participant, Nick, brought up awareness that there are stigmatized attitudes towards disabled individuals. When asked about experiences with faculty in relation to accommodations, he explained that he does not disclose to faculty unless the context arises in which he must do so. He described wanting to be treated like a "normal student."

> There's a bit of certain stigma towards people with disabilities that have unfortunate implications if you were identified. I just want to be treated normally to at least live a normal life. If word gets out, then let's just say I am not prepared to deal with the consequences…. best to cover up.

There is a fear of how others may respond when participants disclose their disability. To safeguard themselves from any negative repercussions that can come as a result of this, they tend to disclose only when needed. For Vanessa, she discussed how she observed material being taught in her lectures on autistic people that weren't brought about in the right manner. For example, one of her courses showed a video indicating that autistic people can actually have

empathy, and people in the course seemed in awe by this. She explained that it felt discouraging even though she knew that it wasn't necessarily the professor's fault or intention to teach in this manner where it put her in an uncomfortable place. A situation like this is what prevented her from disclosing to her professor. She stated:

> If I told them, they might assume those things about me. And it kind of puts you in this awkward situation of 'well, maybe I'll be able to do something really cool like for a project and have a really cool conversation with them'. But I don't want to risk them putting these assumptions on me.

The way material was being taught in the course made her realize that the professor may make certain assumptions about her that she didn't feel were true. Instead of engaging in a project for the course, she chose to not disclose her disability to avoid any risk of feeling uncomfortable or having her professor view her differently. Other situations were due to avoidance in dealing with distrust from peers/professors when disclosing. In Becca's case, she explained that being able to blend in as best as possible without having to reveal her disability seemed better than dealing with doubt from others about her diagnosis.

> I think it's [disclosing] something that a lot of us don't do. Especially those of us who can pass. Like, we'd much rather just pass than deal with people saying, 'Oh, you don't seem autistic?' …or… 'You don't look autistic' and I want to answer like, 'Well, do I smell autistic?'…I think that...disclosure is a really hard thing…. I'm somebody who's really open. But I still don't disclose it to everybody, because ... it's hard. People don't understand it at all.

Becca was diagnosed at the age of 46 so her ability to mask during the past years in her life contributed to the doubts people around her had regarding her diagnosis. Reluctance of disclosing isn't exclusive to classmates or professors. Participants described these feelings

towards both faculty and students. On the other hand, most participants disclosed to the DSO primarily because they were able to receive formal accommodations through this campus resource. When formal accommodations weren't enough to meet the needs of participants, they considered disclosing to professors for obtaining informal accommodations that could fill in those gaps.

Difficulties Arise When the DSO doesn't Provide Necessary Accommodations: From participant responses it was apparent that the DSO was more accommodating to undergraduate students than graduate students, however some cases showed that undergraduate students also had struggles communicating with the DSO. Sheryl, a doctoral student, explained that for her preliminary exam, her professors and disability services kept going back-and-forth when trying to make a consensus on whether she should be provided with accommodations for this exam. It took an entire year before she was able to receive the decision of a 'yes'. Sheryl stated:

> Disability Services had no idea about what a prelim was or what it might look like. At one point during this time, I was told I was the first person with a disability to ask for accommodations from the school for prelims …which doesn't make you feel warm and fuzzy.

She said the disability services didn't know what a preliminary exam was and so she really had to be adamant in making sure that she got the accommodations that she needed. She explained that one positive out of this situation was that she had another autistic friend who also needed accommodations for her preliminary exam and didn't have to go through the same struggle that she did. She felt better knowing that she went through the fight and now others don't have to. For Stacy, she struggled with the DSO understanding how to provide her with accommodations as a graduate student learning in what she called "nontraditional environments." As a student studying with the sciences, she did her research in lab settings and felt like her needs were not

being understood by the DSO since this was something they weren't familiar with accommodating for.

> A lot of times with disability services office, I have a lot of gripes with them about different environments. They traditionally only accommodate really traditional environments. So, like traditional classrooms and traditional lecture halls. When I start talking to them about being in a research lab or being in a lab related class where we're doing experiments, (and I'm sure that this can go into other environments as well: these more nontraditional environments) they don't know what they're looking at, they really don't. Because it's more specialized so they just don't know how to evaluate the needs of these students. And I think that's a big roadblock.

Stacy explains how the DSO may label certain accommodations "unreasonable" and this causes difficulties in getting the supports/adjustments that she needs. Stacy uses informal accommodations to make up for any accommodations that the DSO won't provide her with. For Kelly, their undergraduate disability services sometimes wouldn't make adjustments to accommodations depending on certain situations. For example, there was a hurricane where they had lost two days of school and everything on the academic calendar shifted. The original extended time accommodations that were marked on the calendar did not shift over as well. This meant that they had to go into the program set up for accommodations and update everything as well as email their professor themselves which caused them a lot of stress and anxiety. They expressed their feelings by saying:

> Why are they making the students with the anxiety have to go through all this and like why couldn't they, this program, have just emailed the instructor?

They feel like if they're the one that has a disability then why do they have to take care of it? Why doesn't the DSO make adjustments themselves based on this type of situation and contact

the professor or have a system that updates if the academic calendar shifts so that they don't have to deal with the stress.

Community Colleges Providing Better Supports: Some participants explained that in most cases the community college they attended had a great range of access to disability resources that were beneficial. Their DSO had creative solutions to various accommodations and understood how to best support participants' needs. On the other hand, universities didn't always have these types of supports. In Lizzy's case, she attended a community college for her associate degree before attending her university. She expressed that her current university has the wrong perception of what autistic students are really like:

> It [her university] is in a place that…doesn't really understand disabilities or understands that autistic kids like me can have like a drive for academics. I think they're having a hard time understanding that as well as like misconceptions about what autistic people really are and what they act like…like we should be treated like children and softly with kids' gloves. I don't enjoy that. Also, that we're not driven academically, we don't have the ambitions to work academically.

But when thinking about her community college, Lizzy used more positive words to describe her experience in receiving accommodations.

> My community college was really great with disability services. The extra time they gave me as well as extended time for work and attendance really helped me out a lot in doing this [receiving high marks], and it helped me out to focus more on my work and taking care of myself as well.

While her current university still provided her with accommodations, she felt like her community college had a better understanding of autistic college students due to the more proactive approaches in reaching out to her. Another participant, Molly, had comparable experiences

where they attended a community college and transferred to their current university. They had similar sentiments where they described the understanding their community college had regarding their disability versus the lack of direction their university had.

> My community college was very flexible and easy to work with. And they were helpful in saying 'Other students that have had similar diagnoses or expressed similar struggles with things in academia in academics have benefited from these do you think this would work for you?' and that was really helpful. At my current school, it's been a lot harder. When I first showed up, and they matched me with a specialist; they actually matched me with two because they said I was complicated.

Molly's experience in this case also overlaps with Becca where they received some reservations about the truthfulness of their diagnosis.

> He [her specialist] has this weird thing, every time I try to talk to him and say, like, 'I'm struggling with this thing, can we adjust my accommodations?' Or 'Can I add this thing or change this thing?' He'll make some comment along the lines of 'But you're so smart,' or 'But your grades are so high, how can you be struggling?' And I feel like my grades are not entirely reflective of my experience in achieving those grades. And so that's been a challenge in the accommodations process, just trying to communicate that to the Disability Center here.

Because of the 'invisible' nature of autism, it can often be difficult for others to believe the diagnosis another individual has. Molly and Becca's experience show how these types of interactions can cause frustrations and have negative consequences. While not all participants attended a community college before attending their university, it was clear that for those who did, the disability services at their community college surpassed in quality compared to their university.

Learned Self Awareness: When asking participants about their comfort level when asking questions in class, many stated that they would ask questions but sometimes limit themselves because they didn't want to upset or aggravate other classmates. Jenny explained how she simply wanted answers to her questions. Her past experiences made her realize that some other students may view this negatively. Jenny stated:

> I have to remind myself to shut up. And that's a new skill. That is like (in the past 15 years) skill. So, all throughout my first two master's degrees my theory was: I'm paying for this class to I'm going to get all my questions answered. If you want to ask a question, jump right on in. But I'm asking all the questions until I don't have any more questions. And apparently people thought that was rude.

Jenny framed her new mindset as a skillset where she would refrain from asking too many questions to avoid upsetting anyone in her courses. Other participants had similar mindsets; however, they had no way of confirming whether they were upsetting those around them. Vanessa explained:

> Sometimes I can actually be annoying I think with the amount of questions I asked depending on the class. Like the abnormal child psychology class, I work a lot with kids. So, I would ask a lot of questions about anecdotes or personal experiences to the point where I think people are a little irritated with me, but I have no way of knowing that or proving that. I just know people get irritated when I asked a lot of questions sometimes. So, I was worried about that. No idea if it's true.

In this case, Vanessa used her own judgment to determine if her questioning was exceeding the average amount of questions, one would typically ask in a course. Using feedback from the professor is also another way that some participants would gauge whether their responses were

valued. Participants evaluated their participation themselves based on external comments being made. This was the case with Molly, and they expanded on this by stating:

> It might just be my perception of it, versus how much something is actually valued. But in a few classes, I've had professors that very explicitly will say, like, 'Oh, this is a good question', or 'this is a thought-provoking thing', or make a qualitative comment. And that kind of helps me gauge if it's a useful way of participating.

Similar to Molly's experience, other participants also assessed the feedback they received after participation to determine how much more or less they should contribute.

Experiences Autistic College Students have with Their Faculty

To answer the second research question, I took a more holistic approach at looking through all questions asked regarding faculty relations. In the interviews, I asked a more general question of "What has been your experience with faculty at your college/university? Good? Bad? Why?" and then followed up with more detailed questions which were similar to the questions asked in the DLE survey. As an example, one follow up question was "What has been your experience with faculty's beliefs about your academic success?" The findings showed that there weren't solely positive or negative experiences with faculty. For most participants it was a mix of both. While there were participants that did have only positive comments about their faculty relations, it was clear that this was not always the case for most others. In sum, there are aspects of the way professors set up their class or interact with their students which set the tone for how participants viewed their experiences. A large part of this was how professors communicated their tolerance for accommodations. It was found that in some cases participants had professors that were very accommodating and even provided informal accommodations when formal accommodations weren't sufficient. In other cases, professors were not accepting of accommodations being used and bringing the DSO into this type of situation resulted in a very

long process that took away from the participants' ability to keep up with the course work and exams. Overall, faculty did not fit into one box when it came to all participant's experiences.

Varied Experiences with Faculty: In general, participants in this sample had positive experiences with their faculty, however there were some circumstances that elicited difficulties in interactions with professors. Participants explained the nature of large class sizes playing a role in how close they were with certain faculty members. Vanessa explained "I definitely like the smaller class sizes and also just kind of a friendlier relationship with a professor." She felt like the barriers to interaction were removed and this allowed her to further engage in her courses. The larger the class size, the less close participants felt with their professors and the smaller the class size, the higher likelihood of connecting one to one with the professor in the course. It is also important to note that graduate and undergraduate students did have some differences in their experiences with faculty. Mia reflected on their experiences in both undergraduate and graduate studies. They expressed a mix of positive and negative interactions:

> I've had professors who I get on with better than others, but everyone has always been super supportive and accommodating. In the Geology department it's been really good for both. Outside of the department for undergrad was a bit of a mixed experience. Some professors were really good, others were terrible.

To expand upon moments where experiences can be described as 'terrible', another undergraduate student participant, Vanessa, explained two instances that made her feel unwelcome by her professor. One case included a blanket statement made by the professor to an entire class in which he stated that students should re-evaluate whether they should be in the course or not. Vanessa explained that situations like these made her feel like the statement was drawn towards her. Vanessa further explains how some professors in her Psychology courses

teach subject matter about ADHD and autism where their approach to teaching the content, makes her realize that if she were to ever disclose to them then "they would think less" of her. Similarly, another undergraduate student, Molly, described a professor that spoke in negative ways about intellectual disabilities and disabilities in general during class discussion. They said that it was frustrating to interact with this professor and as a result, they dropped the course. On the other hand, Molly also described an experience with a professor that they opened up to regarding their difficulties and areas of struggle with a certain assignment in the course. This professor ended up thanking them for teaching her about neurodiversity and giving her a first-hand perspective on autism from a college students' experience. These two contrasting examples show the wide range of experiences that can come with faculty teaching autistic college students.

Another shared occurrence is faculty's reluctance to provide accommodations due to concerns regarding fairness to other students. Accommodations for these professors are seen as 'advantages.' Stacy explained her experience navigating these situations.

> There are faculty that put up… especially in the beginning, a sense of skepticism and a sense of like, disbelief. Sometimes when I list these things [accommodations], and they have these initial emails or meetings, they can be very skeptical and be like, 'well, you're taking advantage'… I've done crazy things to prove that it's not an advantage to them.

In situations like these, Stacy feeels the need to defend her request and allow the professor to see how an accommodation can seem like an advantage but how it also has some disadvantages. Extending time on an assignment can overlap into other coursework and expectations that need to be met for those courses as well. In many ways a student has to overwork themselves to keep up with pace of all of their coursework where they manage current work and prior work that has been assigned. She has even had professors who let her use accommodations in the first half of the semester and then remove her ability to use the accommodations afterwards claiming that she

has had enough time to “adjust to the course level.” She explained that their beliefs about whether disabled people exist in academia and what that looks like plays into how they approach providing students with accommodations.

Why Faculty Play an Important Role in Student Accommodations: While formal accommodations can be obtained from the DSO, informal accommodations can be provided by professors. Molly explained that when she had barriers in receiving the accommodations that she needed from the DSO, she relied on professors to accommodate her needs. She stated:

> I do have accommodations, and I've made them work. But I've also had to rely on professors being accommodating without official documentation in certain respects.

Another participant, Vanessa, explained how professors have even altered assignments to fit her needs. The expectations still being the same, but in a different format or style. She elaborated on this by saying:

> I had a professor last semester, and I went to her, and I was like, ‘Hey, I'm not sure if I'm going to be able to do this specific project. It's stressing me out way too much.’ And we ended up having a conversation. She actually explained, ‘I'm going to change the project and this way, and this way, do you think you'll be able to do it now?’ and it worked out fine. You know, I got a good grade on it, I was able to get through it. So sometimes professors even without using the official accommodations, will sometimes just make sure to implement certain changes.

Vanessa described how informal accommodations were useful in a time when formal accommodations were not used. Vanessa further explained the benefit of this by stating:

> The waitlist [for receiving accommodations] is like a year long. And they won't give you the accommodations until you have the diagnosis or the documentation. And you know, professors matter a lot.

She highlighted the importance of professors being flexible in providing students with certain accommodations since receiving a diagnosis and submitting documents to the school can take up a great deal of time. Other participants also touched upon this point by stating that accommodations were easier to obtain in college since much of their diagnostic paperwork transferred from high school. They explained that receiving an accommodation later in college would make it much more difficult to obtain accommodations in a timely manner. Another participant, Stacy, brought up her mixed experiences in obtaining accommodations from professors.

> In terms of like getting the accommodations to be used by faculty and to be initiated and accepted by faculty- mixed bag. I've had faculty that went above and beyond from day one and be like, okay, whatever you need, email me, no worries, I got you… I've had faculty that were in the middle… you had to remind them and fine. And then I had faculty who refuse…to use these accommodations. Claiming it was an advantage to the other students. Claiming that they've never had a disabled student, that if you're going to be in the field of whatever you're going into then you can't use these accommodations.

While Stacy has had mixed experiences, she also brought up how vital professors' openness and understanding to accommodations can be. She explained that many times the DSO does nothing to back her up if the professor does reject her accommodations. She stated that often times these situations don't depend on the DSO but instead on what the professor wants/is willing to accept. Even with something like extended time, professors can refuse to provide students with this type of accommodation. She expressed her difficulty in navigating these situations since there is no process in mediating these types of challenges between students and faculty. She stated that if you bring up a problem like this during week three in a semester and the semester is ten weeks long, then initiating the process of finding a way to convince the professor to accommodate your

needs can result in falling behind in coursework since courses tend to move quickly. She discussed how these types of processes often take weeks which can be tiring.

Many participants described how they utilized both formal and informal accommodations. They stated that there were mixed experiences in terms of how professors allowed or rejected accommodations in their course. In general, most participants expressed the importance that faculty play when receiving these types of supports.

CHAPTER VI: DISCUSSION & IMPLICATIONS

The current study aimed to evaluate autistic college students' experiences at the university, their academic self-concept, and how faculty have played a role in their academic journey. While the number of research papers on autistic college students is growing (Anderson et al., 2017; Gelbar et al., 2014; Highlen, 2017; Jackson et al., 2018; Kuder & Accardo, 2018; Zeedyk et al., 2016), there is still a lack of information about the postsecondary experience for autistic youth. Furthermore, past studies have looked at academic self-concept for TD students (Bjorklund et al., 2002; Komarraju et al., 2010; Kim and Sax, 2014), however few to none have looked at academic self-concept for autistic college students. The research questions set forth in this study were broad and exploratory in nature to encapsulate the deeper lived experiences of autistic college students.

Autistic College Students' Academic Self-Concept

Based on the findings, most participants had a fairly positive academic self-concept. Undergraduate students in some cases tended to have lower academic self-concept, however they expressed a desire to improve. This may be the case since graduate students typically go to school because they are enthralled by a topic and want to learn everything there is to know about it or they may enjoy solving problems (Fischer & Zigmond, 2004). As was found by Kim and Sax (2014), academic self-concept is also impacted by the academic major. Graduate students mostly take classes related to their major while undergraduate students tend to take a vast number of required and elective courses unrelated to their major of interest which could possibly lead to lower course grades and reduced engagement with course content. The findings from this study showed that passion for a topic area or choosing a subject area in which success was feasible, provided motivation to do well. Because I set up the study in the form of interview questions, I asked students to verbally tell me their approximate overall GPA. It was found that most interview participants had higher grade point averages within the B to A range. Based on

the PPCT model, these participants' higher intellectual capacity may be a trait that affects their growth and development (Bronfenbrenner, 2005). A past study conducted by McLeod et al. (2019) compared academic, social, and health experiences of autistic college students and TD peers. They found that autistic students had much lower GPAs, more remedial courses and course failures, and more academic difficulties than TD students. Although the current study did not compare academics of autistic and TD college students, it is clear that there is no one size fits all when it comes to the way autistic college students perform in school. Furthermore, McLeod et al. (2019) had a sample of solely graduate students while this sample included a mix of both undergraduate and graduate students. This study did find that undergraduate students tended to have lower GPAs than graduate students, however most were still in the B to A range. A point to highlight is that all participants answered the question regarding GPA quickly showing consciousness around their academics.

The Many Factors that Contribute to Autistic College Students' Academic Self-Concept/Academic Drive to Achieve

The next finding encompasses the factors that impacted the way students viewed themselves academically. Although most participants showed high academic self-concept, I wanted to understand if this came at a cost or if there were possible social or health experiences, as found in the McLeod et al. (2019) study, that had an effect on autistic college students. It was discovered that there were many factors that had to be taken into account when looking at autistic college students' experiences that may contribute to their overall academics and perception of their academics.

First were external factors such as walking in family's footsteps or following family values. Family values can be seen as the inputs in Astin's IEO model (Astin, 1991). These beliefs that students hold before entering college can impact their overall experiences. Findings

from this study support past literature from Accardo (2017) that indicate parent expectations and parent successes may be part of students' motivation to continue forth with their education. A review completed by Dallas et al. (2015) found that even though some studies have emphasized the importance of family engagement, the literature still doesn't have clarity in family roles, or the depth of family members' involvement and the impact on students' autonomy. Although this study doesn't find family involvement as a large theme, it was found that family values were of importance to some participants, and this affected their own academic practices, habits, and views.

While family was a factor in the way some students navigated their academics, it was mostly found that drive to do well derived intrinsically. Accardo (2017) looked at open-ended responses from college-bound autistic students and found that these students viewed self-efficacy as a way to measure their academic success. While this is different from drive to achieve, this shows how it's important to consider the values that students bring forth themselves when looking at academics. The findings from this study show that many factors contribute to academic self-concept, but the self-motivation from students is also a vital aspect to take into account.

Proving another individual wrong was another factor that came from the findings. This often took root from negative past experiences that impacted the way students handled moving forward with their academics. Past studies like Francis et al. (2019) have found that disabled college students deal with repeated cycles of disempowerment. They found that negative experiences like experiencing low expectations from peers impacted the way they feel in the college setting. From the findings of this study, it seems that instances like these may in some cases encourage a student to work harder to attain a certain goal or 'prove another person wrong' however, this may come at a cost to mental health.

When it came to academic performance, a few students had a mindset of being perfect and always receiving high marks. It was found that these students were all older females who received a diagnosis at a later age. This supports past literature that has found that females are often diagnosed later (Rutherford et al., 2016) and tend to have higher IQs in comparison to males (Duvekot et al., 2017). Having a 'perfectionist' nature for older autistic female college students specifically has yet to be explored further.

While the factors discussed thus far have contributed to positive academic self-concept, other factors were ways that impacted students' general academic self-concept. One of these factors included difficulty with change (i.e., the pandemic). The CDC defines the pandemic as a global outbreak of a new virus. According to the CDC, COVID-19 was the third leading cause of death in the U.S. in 2021 after heart disease and cancer. The pandemic was a difficult time for students as many had to resort to online courses and wearing masks when going outdoors. Although a situation like the pandemic did not occur prior to 2020, new variants like the Delta variant signal the possibility of this continuing in the foreseeable future. Considering world catastrophes like this is a new avenue that past studies have not evaluated when it comes to autistic college students' academic self-concept. It was found that the pandemic meant that students had to adjust and adapt to new ways the world was shifting both academically and in their own personal lives outside of school. Past studies have found that autistic individuals have hardships when it comes to changes in routine and greater independence in a college setting (Van Hees et al., 2015). As shown in this study, participants explained difficulties with executive functioning, pacing with completing work, and grades dropping.

Accommodations Impacting Student Academic Perceptions and Success

Another factor that contributed to how students viewed themselves academically was accommodations. This study found that most students disclosed based on necessity. Much of the

time this was due to the desire to fit in with peers or avoid complications in assumptions/disbelief coming from professors/peers. Prior studies have found that autistic college students dealt with faculty who thought they weren't being truthful about their diagnosis which led to frustrations when these students were seeking help (Zeedyk et al., 2019; Bolourian et al., 2018). This shows that doubt from others about diagnosis is not uncommon. Another finding was the DSO making certain situations difficult for students. While the DSO is meant to ensure that students are able to ask for academic accommodations (US Department of Education, 2015), this study sheds light on the flaws from the DSO when providing accommodations to autistic students. It was found that the DSO can sometimes have trouble understanding how to accommodate graduate students with disabilities as situations like this may not arise as frequently in the space of graduate studies. Other scenarios that students dealt with were the DSO failing to take a proactive approach in adjusting accommodations when unforeseen circumstances took place like a natural disaster that shifted the academic calendar and altered dates originally requested for accommodations. This shows the necessity for autistic students to be self-advocates and ensure they are receiving the appropriate supports necessary for their success. Instead of taking care of these situations to lessen the anxiety felt by students, the DSO can exacerbate these feelings. In a more positive regard, the findings uncovered better supports from the DSO in community colleges. Community colleges are often smaller in size (Cox et al., 2021), which may contribute to the better treatment and flexibility of the DSO coming from these types of institutions. However, this is not always the case as in the Cox et al. (2021) study, where students expressed roadblocks to accommodations coming from community colleges. Institution type may play a role in student experiences with accommodations, but there are always exceptions meaning that each institution is unique in how it navigates services to support autistic youth. The type of institution being a community college or university is part of the

environment in Astin's IEO model which shows the important role the environment plays in student's overall academic experiences (Astin, 1991). As shown in the PPCT model, change over time such as transitioning from community college to a university can impact an individual and their development (Bronfenbrenner, 2005). In this case, the changes with how the DSO treated students in community colleges versus universities may have influenced the progress of these students as they began to enter universities.

Two participants showed self-awareness of their behaviors in the academic setting which implied their ability to self-evaluate and understand when and how to restrict certain behaviors. Although this was difficult to do, these participants took feedback from past situations to approach new situations differently. This shows the open mindset and willingness to adapt from autistic college students. This also connects to the first component of process within the PPCT model (Bronfenbrenner, 2005). Participants deciphered the perspective of others by observation and used this to interact with others. When relating self-awareness back to academics, studies like Accardo et al. (2019) showed that self-awareness of disability, diagnosis and identify formation were all indicative of college success. Past literature has found that autistic individuals may have limited theory of mind ability (Baron-Cohen et al., 1985). These students were able to assess patterns in reactions from others and use this to structure the way they approached classroom participation. This aligns with findings from Livingston and Happé (2017), that autistic females tend to compensate for theory of mind difficulties by learning to recognize various facial expressions and mimicking what they notice. These difficulties tie back to academic self-concept because having these hesitations or consistent need to evaluate one's actions can impact the way one views themselves academically.

Experiences Autistic College Students have with Their Faculty

When looking at the second research question of experiences autistic college students have with their faculty, findings reflected both positive and negative experiences implying that while there are faculty that may be accommodating to the needs of autistic students, there are still faculty that provide hardships for these students as well. The PPCT model shows that the microsystem includes professors, therefore relations with professors are an important part of student development (Bronfenbrenner, 2005). Participants in this study had both positive and negative feelings when reflecting on their experiences with faculty which would fall into the category of the output in Astin's IEO model (Astin, 1991). The output in this case, played a role in students experiences within their institutions. The varied experiences from participants may indicate that universities are considered loosely-coupled organizations where faculty are flexible in their approach to accommodations, regardless of policy structure (Mitra, 2018).

It seemed that in some courses where disabilities and autism were discussed, faculty may have approached the topic in a manner that made some of the participants uncomfortable. This shows the importance for faculty to frame lectures inclusive of all students and various types of learners. Some of these situations caused students to withhold revealing their disability for fear of being looked at in a negative light. It was also found that professors are integral to students' accommodations. Faculty not only approve the accommodations being used in their courses, but they may also choose to provide informal accommodations to students when the DSO does not provide them with the proper tools to succeed. Gobbo et al. (2018) discusses faculty being clear with instructions, tailoring assignments to meet student needs, and incorporating different modes of learning aligning with UDL as helpful to student success. It is apparent that faculty must be flexible in this regard. The current study found that sometimes professor may not be willing to provide accommodations or let their students use their accommodations from the DSO. There were also situations where professors felt that accommodations could only be used the first few

weeks to allow the student time to adjust. As discussed in Rao & Gartin (2003), faculty in university settings can be hesitant to accept accommodations because they do not believe in these types of accommodations transferring over to the 'real world.' In this study, it seemed that this was also due to faculty's beliefs in these students taking advantage and their own possible lack of knowledge about implementation of providing accommodations. Mitra (2018) explains that will and capacity are vital parts of policy implementation. Faculty must have the will to implement accommodations for their students, but they must also have the capacity by which they would receive the appropriate training and resources to understand when and how to implement accommodations effectively. Professors can be seen as street-level bureaucrats who interpret policies with insufficient guidance (Mitra, 2018). Faculty make on-the-spot decisions about when they need to provide accommodations and in which situations it would be the most appropriate to do so. Section 504 of the Rehabilitation Act and the ADA are mandated therefore there can be consequences for institutions if they are not followed; however, this would require a complaint to the U.S. Office for Civil Rights (OCR). Without consistent rules and consequences (Mitra, 2018), some faculty may not feel the need to implement accommodations which affects the interactions autistic college students have with their professors.

Limitations

Autism is heterogeneous in nature therefore the findings presented in this study may not pertain to all autistic college students. Additionally, although this sample included a variety of genders and both graduate and undergraduate students, this study did not have a diverse sample when it came to race. The sample of white students was much larger in the sample compared to other races. Additionally, the sample was limited to students who chose to participate. The title of the study indicating students would have to reflect on their own academic perceptions may

have affected participation where students with higher grades were more willing to participate because they were satisfied with their grades and academic experiences.

Implications

Implications for Policy and Practice

As the number of neurodiverse students enrolling in higher education institutions grows, it's important to focus on creating more accessible and universally designed post-secondary experiences. In terms of implications for practice, faculty should provide a positive learning environment where autistic students can feel comfortable approaching professors regarding their diagnosis and asking for approval of their current or additional accommodations. Accardo et al. (2019) discusses prioritization of support programs/services that emphasize positive identity formation and self-advocacy for autistic students. Although this study did not explore students' requests for supports in the university, it was clear from their responses that services like these may be valuable.

As previously discussed, Austin and Peña (2017) found that faculty either reached out to the DSO on their own or connected with other experienced faculty members to understand how they could better support autistic students. Given that not all faculty may pro-actively seek guidance, post-secondary institutions should consider how they can provide faculty training and professional development about supporting autistic students and managing accommodations. Moreover, institutions should invest time and money in ensuring that the DSO is providing appropriate supports for students regardless of classroom environment or class standing. Based on participant responses from this study, it seems that postsecondary institutions can be considered loosely-coupled organizations when it comes to disability resources and supports (Mitra, 2018). Thus, these institutions may consider a more tightly-coupled system in which faculty must follow the same rules and regulations when interacting with students who need

accommodations. Furthermore, although there are laws and policies in place such as the ADA and Section 504, students still have more responsibility in their postsecondary education to request for accommodations. While self-advocacy skills are vital, not every student may seek to do so because they would "much rather just pass" and hide their diagnosis. Providing students with the appropriate resources so they understand their rights and how to advocate for themselves may be beneficial for their academic experiences in postsecondary institutions.

Implications for Future Research

Future research can extend the findings from this study by looking at post-college outcomes for autistic students to see how academic self-concept might shift or stay the same. Academic self-concept for post-college outcomes may need to be defined accordingly with the job market instead of academics in a school environment. Future studies may also seek to expand upon how faculty and the DSO may work together to ensure students have ease with communication in receiving accommodations.

When considering the sample of participants, next steps for research may be to focus on a population of autistic women diagnosed at a later age. The current study had two such participants and found that they had similar traits such as higher GPAs and striving for higher academic achievement. While past studies have found that autistic females tend to have higher IQs than autistic males (Duvekot et al., 2017), understanding why they have a strong drive to go above and beyond with receiving high marks needs further exploration. Additionally, while this study had one non-speaking autistic participant, future research should include more non-speaking students to amplify their voices and see if they have different perspectives or experiences to take into consideration. Lebenhagen (2019) discusses the responsibility of researchers to take into consideration the diverse perspectives of non- and minimally speaking autistic individuals. Moreover, there is a lack of studies including non-speaking autistic college

students, thus this is an area that needs further attention. Future studies can also look at a participant pool of faculty instead of students to understand the "why" behind findings like certain faculty being hesitant to provide students with accommodations.

The current study also found differences in autistic college student experiences with the DSO in community colleges versus universities. In the future, researchers may seek to clarify whether community colleges do in fact provide better supports and how universities can follow similar approaches to ensure higher quality resources for their students. Additionally, it was found that there was discrepancy between the way that graduate students and undergraduate students were treated by the DSO and faculty. Enhanced data collection focusing on these two specific populations and their varied experiences may be needed to further validate these findings.

Appendix

A- Study Information Sheet

Study Information Sheet

'Experiences and Perceptions of Autistic Students towards Faculty in Higher Education': A study of student perspectives on faculty roles as well as student self-perceptions of their own academic abilities.

Jessica J. Johnson, from the Graduate School of Education and Information Studies at the University of California, Los Angeles (UCLA) is conducting a research study.

You were selected as a possible participant in this study because of your experience as an undergraduate or graduate student with autism at a university or college. Your participation in this research study is voluntary and your confidentiality will be guaranteed if you choose to participate.

Why is this study being done?

This study seeks to investigate the beliefs that undergraduate and graduate students have about their academic abilities as well as the relations they have with faculty at the university.

What will happen if I take part in this research study?

If you volunteer to participate in this study, the researcher will ask you to do the following:
• Interview participants will first be contacted to set up a time to meet or speak by email with the researcher, have an opportunity to ask any questions or concerns, and provide voluntary written consent.
• Possibly, ask/share my study with other community members who you may believe fit my research criteria.
• The study will begin in 2022 and data collection will take place during 2022. I will conduct 45-60-minute one-on-one interviews online via the Zoom Video Conferencing platform.
• The types of questions being asked will entail questions related to your experiences with the faculty at your university, your GPA, personal drive to achieve academically, attendance in courses, and your overall feelings about academic support from faculty.

How long will I be in the research study?

Participants will spend approximately 45-60 minutes in an individual interview.

Are there any potential risks or discomforts that I can expect from this study?

A discussion of your experience with faculty at the university could potentially be uncomfortable if these experiences are negative. Your participation in this study will only require

you to think about and discuss aspects of your lived experiences and as such poses minimal risk to you.

Are there any potential benefits if I participate?

You may benefit from the study by thoughtfully reflecting upon your experiences. The results of this research study may inform areas of improvement in college/university experiences for autistic students.

Will I be paid for participating?

Yes, you will receive a $25 Amazon gift card for participating in this study.

Will information about me and my participation be kept confidential?

Any information that is obtained in connection with this study and that can identify you will remain confidential. It will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of recording interviews via the Zoom recording software integrated in the Video Conferencing platform then immediately uploading these recordings to my private computer and deleting the recorder file. The electronic recording will be stored on a password protected computer/OneDrive and only I will have access to the recording, during transcription and after. If you complete the interview, your name and contact information will be scrubbed from the data before analysis and a pseudonym will be created so that your identifying information is not linked to your responses.

What are my rights if I take part in this study?

• You can choose whether or not you want to be in this study, and you may withdraw your consent and discontinue participation at any time.
• Whatever decision you make, there will be no penalty to you, and no loss of benefits to which you were otherwise entitled.
• You may refuse to answer any questions that you do not want to answer and still remain in the study.

Who can I contact if I have questions about this study?

The research team:

If you have any questions, comments or concerns about the research, you can talk to the primary researcher. Please contact:

Jessica J. Johnson
(650)-302-4716
jessicajohnson@g.ucla.edu

UCLA Office of the Human Research Protection Program (OHRPP):

If you have questions about your rights as a research subject, or you have concerns or suggestions and you want to talk to someone other than the researcher, you may contact the

UCLA OHRPP by phone: (310) 206-2040; by email: participants@research.ucla.edu or by mail: Box 951406, Los Angeles, CA 90095-1406.

B- Interview Protocol

Interview Questions

Interview Questions

Thank you very much for joining me today. My name is Jessica.

For the interview today, we'll be discussing your experiences and interactions you have had with faculty at your university/college as well as your own academic beliefs about yourself. There is no right or wrong answer- I just want your honest opinion. The good and the bad are equally important so please tell me everything you would like to share. If you need a break at any point or would like to withdraw from the interview, then please let me know.

Just to give you some background about myself [Discuss younger brother with autism and why I am conducting this study].

To remember what I discussed with you today, I'll be taking notes and video recording the session. Videos will only be shared with myself and the people who are directly involved with this study. Do I have your consent to record the interview? [Turn on recording]. If there is anything you do not want me to record, just let me know, that's perfectly fine.

Do you have any questions before we begin? Great, let's get started.

[Intro]

To start off, why don't you tell me a little bit about yourself.

- Tell me about what you like to do in your free time?
- Tell me about what you study in school right now? How has your experience been in school with this area of study?

● How long have you been in college/university for? (Year in school)

- Public or private school?

[Academics]

I'm going to start off by asking you a few questions about your academics.

● Can you tell me about how you feel you are doing academically in school?

● If you had to approximate your GPA as an overall grade, which category would your current GPA fall under?

○ C or less

○ B/B-

○ A/A-/A+

○ C or less

○ B/B-

○ A/A-/A+

● How do you feel about your current grade? Are you happy with it?

[if happy] Can you tell me about how you got to this current point with your grades? What has your experience in school been with this? What has your experience been with any resources that have supported you in school?

[if not happy] What are your thoughts about being able to improve your grade?

○ Has your GPA improved from the past?

■ What do you think contributed to that?

● Can you tell me about what your drive is to achieve academically?

- What has your experience been with any resources that have made you feel this way?

  Accommodations:

- Tell me about your experience with any accommodations that you have received (if any)?
- I'd like to know about your experience with faculty in relation to accommodations?
  - Any communication?
  - Positive and/or negative experiences?

Course Attendance. Note: I have done the quantitative analysis and "missing class" was an unexpected finding in my linear regression that predicted student academic self-concept so I decided to add this question in the interview as well.

● Tell me about your overall attendance for your courses?

- Do you attend all of your classes?
- Have you missed any classes?
- What were the reasons for missing the classes?

[Faculty and Courses]

Now, I'm going to move to questions about faculty and courses.

● What has been your experience with faculty at your college/university? Good? Bad? Why?

● What has been your experience with faculty ever reaching out to you themselves? Can you tell me more about the specific situation it was for? Can you share any experiences where faculty have reached out to you before beginning a class?

● Can you tell me about your experiences with faculty at your university/college taking an interest in your development?

● What has been your experience with faculty's beliefs about your academic success?

● Can you tell me about your perceptions about being empowered to learn by faculty at your school? Why or why not?

● What are your experiences with faculty encouraging you to get involved in campus activities? What do you think about this benefitting your personal or academic growth?

● Can you tell me more about your comfort level when it comes to asking questions in your courses?

● Can you tell me about your contributions in your courses and whether you feel they are valued? Why or why not?

● Can you tell me about your classroom environments in relation to asking questions and participating in class? Can you also tell me about how faculty play a role in this environment?

● Can you tell me about your experience in receiving feedback from faculty on your work?

- What has your experience been with using that feedback to assess your progress in class?

● Can you explain your experience with faculty determining your level of understanding of course material?

- What have they done to support your understanding (if anything)?
- Why do you think they are able to determine your understanding of the course material successfully or unsuccessfully?

[Closing]

This concludes the interview for today. Before we completely wrap up, I would like to ask you a last follow-up question.

- Was there anything else that you would like to share with me that you haven't mentioned so far or that you wanted to discuss?

You will be contacted shortly about processing your incentive.

Thank you so much for taking the time to speak with me today. I really appreciate it.

C- DLE Factors (Pre-determined factors from the HERI data set)

1.) General Interpersonal Validation- a unified measure of students' view of faculty and staff's attention to their development

Variables that make up this factor:

Opinion: At least one faculty member has taken an interest in my development

Opinion: Faculty believe in my potential to succeed academically

Opinion: Faculty empower me to learn here

Opinion: Staff encourage me to get involved in campus activities

2.) Academic Validation in the Classroom- Measures the extent to which students' view of faculty actions in class reflect concern for their academic success.

Variables that make up this factor:

Validation: Felt that my contributions were valued

Validation: Felt that faculty provided me with feedback that helped me assess my progress in class

Validation: Felt that faculty encouraged me to ask questions and participate in discussions

Validation: Faculty were able to determine my level of understanding of course material

3.) Habits of Mind- A unified measure of the behaviors and traits associated with academic success. These behaviors are seen as the foundation for lifelong learning.

Variables that make up this factor:

Habits of Mind: Seek solutions to problems and explain them to others

Habits of Mind: Evaluate the quality or reliability of information you received

Habits of Mind: Support your opinions with a logical argument

Habits of Mind: Seek alternative solutions to a problem

Habits of Mind: Take a risk because you feel you have more to gain

Habits of Mind: Ask questions in class

Habits of Mind: Explore topics on your own, even though it was not required for a class

Habits of Mind: Accept mistakes as part of the learning process

Habits of Mind: Look up scientific research articles and resources

4.) Academic Self-Concept- A unified measure of students' beliefs about their abilities and confidence in academic environments.

Variables that make up this factor:

Self-Rating: Academic ability

Self-Rating: Self-confidence (intellectual)

Self-Rating: Drive to achieve

Self-Rating: Mathematical ability

D- Participant Screener

Hello,

I'm contacting you with a short questionnaire to verify your eligibility for an upcoming research study. This study is an opportunity to provide feedback on your college experiences. This study will help inform future literature and practice around how to better support autistic college students.

I am currently scheduling participants for a study that takes place on TBD via Zoom. If these dates do not work for you and another date in March works better for you then please add it to the "other" section within the time slots question.

If you're interested in participating, please complete the questionnaire below. If you're selected to participate, we'll then be in touch directly via email to discuss details and set your interview time.

Details of the study:
-The duration of the study is 45-60 minutes.
-You'll receive a $25 Amazon gift card via email as a token of my appreciation.

To participate you will need to:
-Have a diagnosis of Autism
-Be enrolled in a community college or university program (both graduate and undergraduate are fine).
-Allow me to video record the session.
-Both non-speakers and speakers are welcome to participate.

Please note that you won't be compensated for responding to this questionnaire; you'll receive a gratuity only if you actually attend the interview.

Thank you for your time.

Jessica Johnson
—-
Do you have a stable internet connection, microphone, and speaker?

- Yes
- No

Which U.S. time zone will you be in while participating?

- US Eastern
- US Central
- US Mountain
- US Mountain-Arizona
- US Pacific
- US Hawaii-Aleutian
- Other ____

Year in school?

- Freshman
- Sophomore
- Junior
- Senior
- Graduate School (Masters)
- Graduate School (PhD)

Availability
Mark ALL time slots during which we could schedule an interview with you. ALL times are listed in Pacific Standard Time.

- TBD

Best email address to reach you:

_____

Best phone number to reach you:

_____

What is your gender?

- Woman
- Man
- Non-binary
- Prefer to self-describe
- Prefer not to say
- Other

If you would prefer to self-describe your gender, please do so here:

____

What is your race or ethnicity? Please select all that apply to you:

- African
- American Indian or Alaskan Native
- Asian
- Black of African American
- Hispanic or Latin American
- Middle Eastern or North African
- Native Hawaiian or other Pacific Islander
- White
- I prefer not to answer
- Other race, ethnicity, or origin, please specify:

What is your current major?

____

If you're currently working, what is your occupation?

____

Best email address to reach you:

____

Best phone number to reach you:

____

Is there any other information you would like to let me know about before participating in this study or accommodation requests?

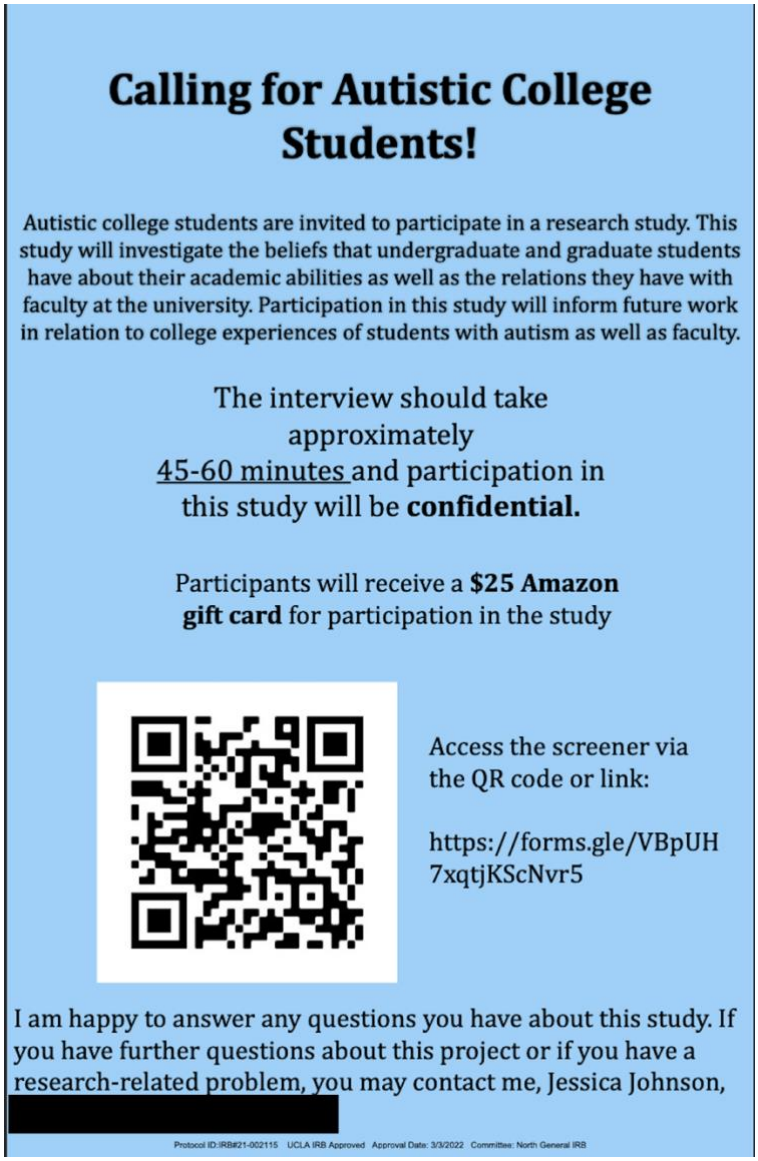
____

E- Recruitment Flier

Calling Autistic College Students to participate in a research study!

Please fill out the screener questionnaire below if you are interested.

For more information, please go to this study link:
https://docs.google.com/document/d/1X9C6_9OC5tHdcKOAvZETaeOnRVCiyT2nFJYH6SYyqfA/edit



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