

BACKGROUND

The increase in the number of individuals diagnosed with ASD over the past ten years has been substantial. In 2000, the rate was **1 in 150 people**. It is now 1 in 68. (Centers for Disease Control and Prevention, 2014). will likely lead to an eventual increase in the number of postsecondary students with ASD. (See figure 1).

College campuses are increasing in their awareness of ASD (Gardiner and Iarocci 2013; Neville and White 2011; Tipton and Blacher 2013), which is a major feat as historical descriptions of ASD did not indicate whether higher education would be an option (Kanner, 1943; Schopler & Mesibov; 1983). Given this progress, individuals with ASD have troubling transition outcomes (Billstedt et al, 2005; Henniger and Taylor 2013). Specifically, individuals with ASD are the least likely to attend postsecondary education (Shattuck et al., 2012), to achieve independent employment (Shattuck et al., 2012), and to live independently (Howlin et al, 2004). A recent systematic review (Gelbar, Smith, & Reichow, 2014) found only 20 studies met inclusion criteria. Of these, eighteen were “case studies” and two were experimental studies. Clearly, research on college students with ASD is essential as more of these students will go to college and/or participate in postsecondary opportunities on college campuses.

The goal of this study was to systematically investigate the experiences of college students with ASD. The research questions follow:

1. What are the reported academic experiences of individuals with ASD who have experience seeking college degrees?
2. What are the reported social experiences of individuals with ASD who have experience seeking college degrees?
3. What are the reported housing experiences of individuals with ASD who have experience seeking college degrees?

PROCEDURE

Survey Development

To answer our research questions, an online survey was developed. The survey was informed by a comprehensive review of the literature (Gelbar et al., 2014). The three authors and an expert in the field of postsecondary disability reviewed the survey.

Recruitment

After receiving Human Subjects Institutional Review Board approval to conduct this study, self-advocacy groups, parent organizations, and postsecondary disability coordinator listservs were contacted and asked to forward the study's recruitment materials to potential participants. These recruitment materials included the link to the online survey. Participants began by indicating their agreement with three screening statements:

1. I have been diagnosed with an Autism Spectrum Disorder
2. I have attended a college or university in pursuit of a 2 year or 4 year degree for at least one semester
3. I certify that I am at least 18 years old.

RESULTS

Sample

Our study population was **49% male, and 80% Caucasian**, including Middle Eastern ancestry. Their average age was 26, but a plurality reported being aged between 18-22 (40%). A majority of participants reported Aspergers Syndrome as their primary diagnosis (54%). Their majors were as follows:

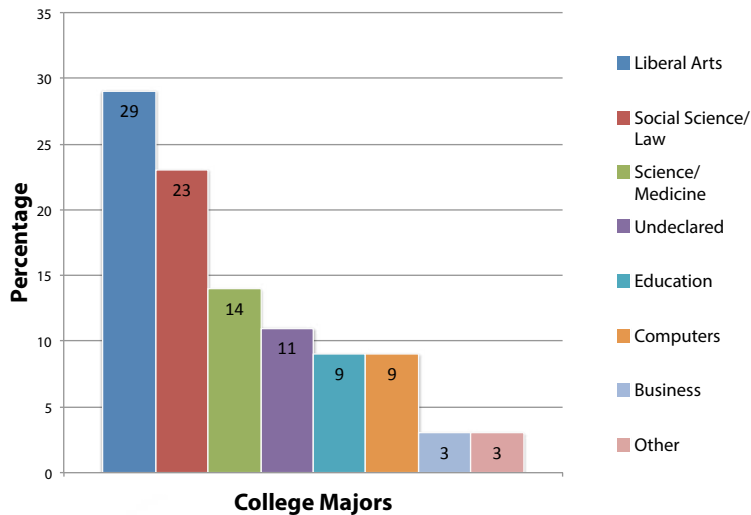


Figure 1: Percentage of Sample by Major. The **average GPA of the sample was 3.27**, with 80% of individuals reporting a GPA over 3.0.

Disclosure and Accommodations

The majority of participants (64%) disclosed their diagnosis by their first semester, and 80% of these disclosures were to campus disability service officers. Our participants were less likely to disclose to faculty (66%), staff (11%) and peers (43%).

Participants were able to utilize a wide variety of accommodations, with the most popular being listed below:

Accommodation Type	n	%
Extended time for tests	22	63
Meetings with Disability Counselor	17	49
Distraction free or reduced distraction testing environment	15	43
Notetaker or photocopy of another's notes	15	43
Housing accommodations	11	31
Priority registration	9	26
Preferential seating	9	26

EXPERIENCES

Selected Likert Item	% Agree
I prefer to spend time in quiet places on campus.	94%
I have the academic skills to succeed in college.	83%
I get good grades.	80%
I can advocate for myself.	79%
The disability service coordinator at my college is knowledgeable about individuals with Autism Spectrum Disorders.	71%
I have made new friends in college.	62%
I eat alone in the cafeteria.	58%
I feel lonely.	56%
I find it easy to participate in group work during class.	37%
There are internships through my college that are tailored to meet my needs.	37%
I manage my time effectively.	34%
I can cope effectively with stress and anxiety.	31%
I have find it easy to focus when I am studying.	31%
The career counselors are knowledgeable about individuals with Autism Spectrum Disorders.	21%
The study abroad office is knowledgeable about individuals with Autism Spectrum Disorders.	5%

Selected Participant Quotes

Academics

"Sometimes I'm surprised I've made it this far and other times I feel like it's for nothing because I'm not sure that college is helping me learn enough social skills to get a job."

"My professors have been very good; they appreciate my diligence and are willing to spend time outside of class discussing course content or expectations."

Housing

"I have a single but have been living in a housing group with friends for the last two years. I like that I simultaneously have space to be alone if I need to but also am in a supportive environment of friends."

"There are “quiet floors” at my college, and you can request to be put on one of these floors. This has helped me be able to avoid noise that affects my sensory processing issues for the most part."

Social

"In retrospect, I used my isolation to justify taking academics more seriously, but this didn't help me achieve more academically. My social life was non-existent."

"My psychology test literally had “autistics don't use words like think or feel” as a “correct answer” on the test... Even when I emailed my professor research showing this isn't in fact true, she ignored me..."

DISCUSSION

Themes

1. This sample reported academic success while struggling with the non-cognitive aspects of college, such as navigating the social environment and difficulties with executive function skills (e.g. study skills and time management).

2. These individuals reported emotional difficulties related to anxiety and depression that have been documented in other samples of adults and adolescents with ASD (Gillott & Standen, 2007; Ghaziuddin et al, 2002).

3. This sample did report being comfortable with their instructors as evidenced by having a greater likelihood to disclose their disability. This disclosure led to academic accommodations, which indicates the importance of self-advocacy.

4. While our sample received academic supports, they did not receive as much support from ancillary service providers on campuses.

5. Individuals with ASD do not necessarily fulfill common stereotypes (e.g. the range of majors reported, not only STEM majors).

Suggestions for Secondary Transition

1. The development of self-advocacy and self-determination are essential for post-secondary success.
2. Individuals with ASD should be taught stress-reduction and other coping strategies.
3. The importance of working on social skills and learning strategies cannot be overstated.

Limitations

The recruitment strategy for this survey targeted self-advocates, which may not be typical of all college students with ASD. Their success may be attributable to a selection bias as individuals who identify as self-advocates may receive greater supports and may be more likely to develop relationships with instructors. In addition, successful college students may have been more likely to participate in this study. Future studies should utilize stronger sampling procedures and seek out individuals who are not alumni or on the path to successfully complete college such as individuals with ASD who have dropped out of college.

BIBLIOGRAPHY

- Billstedt, E., Gillberg, C., & Gillberg, C. (2005). Autism after adolescence: Population-based 13- to 22-year follow-up study of 120 individuals with autism diagnosed in childhood. *Journal of Autism and Developmental Disorders*, 35, 351–360.
- CDC. (2014) Prevalence of autism spectrum disorders among children aged 8 years: autism and developmental disabilities monitoring network, 11 sites, United States, 2010. *MMWR Surveillance Summaries*, 63(2), 1–22.
- Gardiner, E., & Iarocci, G. (2013). Students with autism spectrum disorder in the university context: Peer acceptance predicts intention to volunteer. *Journal of Autism and Developmental Disorders*, doi: 10.1007/s10803-013-1950-4
- Gelbar, N. W., Smith, I., & Reichow, B. (2014). Systematic review of articles describing experience and supports of individuals with Autism enrolled in college and university programs. *Journal of Autism and Developmental Disorders*, 44, 2593–2601. doi: 10.1007/s10803-014-2135-5
- Ghaziuddin, M., Ghaziuddin, N., & Greden, J. (2002). Depression in Persons with Autism: Implications for Research and Clinical Care. *Journal of Autism and Developmental Disorders*, 32(4), 299–306. doi: 10.1023/A:1016330802348
- Gillott, A., & Standen, P.J. (2007). Levels of anxiety and sources of stress in adults with autism. *Journal of Intellectual Disabilities*, 11(4), 359–370. doi: 10.1177/1744629507083585
- Henninger, N. A., & Taylor, J. L. (2013). Outcomes in adults with autism spectrum disorders: A historical perspective. *Autism*, 17, 103–116.
- Howlin, P., Goode, S., Hutton, J., & Rutter, M. (2004). Adult outcome for children with autism. *Journal of Child Psychology and Psychiatry*, 45(2), 212–229. doi: 10.1111/j.1469-7610.2004.00215.x
- Kanner, L. (1943). *Autistic Disturbances of Affective Contact*. *Nervous Child*, 2, 217–245.
- Neville, R. E. A., & White, S. W. (2011). College students' openness toward autism spectrum disorders: Improving peer acceptance. *Journal of Autism and Developmental Disorders*, 41, 1619–1628.
- Schopler, E., & Mesibov, G.B. (1983). *Autism in Adolescents and Adults*. New York: Plenum Press.
- Shattuck, P.T., Narendorf, S.C., Cooper, B., Sterzing, P.R., Wagner, M., & Taylor, J.L. (2012). Postsecondary Education and Employment Among Youth With an Autism Spectrum Disorder. *Pediatrics*, 129(6), 1042–1049. doi: 10.1542/peds.2011-2864
- Tipton, L. A., & Blacher, J. (2013). Brief report: Autism awareness: Views from a campus community. *Journal of Autism and Developmental Disorders*. doi: 10.1007/s10803-013-1893-9