

Research Article

Characteristics of Two-Year College Students on the Autism Spectrum and their Support Services Experiences

Anne M. Roux,¹ Paul T. Shattuck,¹ Jessica E. Rast,¹ Julianna A. Rava,¹ Amy D. Edwards,¹ Xin Wei,² Mary McCracken,² and Jennifer W. Yu²

¹ A.J. Drexel Autism Institute, Drexel University, 3020 Market St., Suite 560, Philadelphia, PA 19104-3734, USA

² SRI International, 333 Ravenswood Ave., BS 162, Menlo Park, CA 94025-3493, USA

Correspondence should be addressed to Anne M. Roux, anne.m.roux@drexel.edu

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Abstract

Approximately 80% of youth on the autism spectrum in the U.S. who attend college will attend a 2-year college at some point in their postsecondary education. These community-based colleges are universally-accessible educational institutions which offer both academic and vocational courses and are experienced in teaching diverse learners who may require developmental academic support. This study used nationally-representative survey data from the National Longitudinal Transition Study-2 to describe the characteristics and services experiences of young adults on the autism spectrum who attended postsecondary education within eight years after high school, focusing on those who attended a 2-year college only. Significantly more (61.5%) who attended 2-year colleges had little to no trouble conversing or performing functional skills like counting change (64.6%) compared to 36.6% and 36.8%, respectively, of those who had no postsecondary education. Significantly more (85.7%) 2-year college attenders were able to navigate to places outside the home, while 43.9% of those with no postsecondary education were able to navigate. High school extracurricular participation was common (93.8%) among 2-year college attenders compared to 74.4% of youth who attended vocational/technical education and 58.5% of those who had no postsecondary education. Over half took vocational courses at 2-year colleges, while one-quarter pursued academic study. Half attended full-time. Less than half (48.6%) of those who disclosed their disability to the school reported receiving services, accommodations, or other help. Most (87.3%) felt they received enough help, but fewer (68.0%) felt the services they received were useful. Future research should delineate specific needs of students with autism in 2-year college settings and identify what supports are needed to improve persistence and completion rates as well as rates of transition into 4-year college programs.

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Introduction

The reported prevalence of autism has been increasing for over a decade. Most of the increasing prevalence is among children with average to above-average intelligence [1]. Approximately one-third of youth on the autism spectrum in the United States go to college within eight years of exiting high school [2, 3], and college attendance is projected to increase in this population [4]. Yet, very few population-based studies are available that describe the experiences of young adults on the autism spectrum who attend college.

Two-year colleges are a primary gateway to postsecondary education for youth on the autism spectrum in the U.S. The term “2-year colleges” primarily refers to over 1100 locally-funded community colleges throughout the U.S. [6], which are attended by about 40% of undergraduate students [7]. These universally-accessible, open-admission educational institutions offer both academic and vocational courses and are experienced in teaching diverse learners who may require developmental academic support.

Of youth on the autism spectrum in the U.S. who attend college, the vast majority (81%) attend a 2-year college either solely or as a stepping stone to a 4-year college [5]. Approximately 70% of 2-year public institutions in the U.S. report enrolling students with autism spectrum disorders [8]. However, little research has specifically examined the characteristics of 2-year college students on the autism spectrum as a whole, their educational experiences, and whether they receive the help they may need to complete a degree or certificate or to advance to a 4-year college. Understanding who these youth are and maximizing their potential for college attendance is important for those who advise them.

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Like all colleges, 2-year colleges in the U.S. are required to offer reasonable accommodations to students with self-disclosed disabilities. Some interpret these accommodations to include help aimed at organizational and social skills needed for academic success [9, 10]. Two-year college support programs for students on the autism spectrum vary widely – from non-credit college experience programs with a residential component and classroom-based supports, to center-based disability support services delivered to degree-seeking students, to off-campus supports provided by outside agencies or family members [9]. Dual-enrollment transition programs allow some high school students to take classes at the community college while continuing to receive academic and social skills supports through an Individualized Education Program until the age of 21. The prevalence and need for various types of support is currently unknown.

College students on the autism spectrum may require services and accommodations due to impairments in executive functioning (such as inattentiveness and poor organizational skills), communication (such as maintaining the topic of conversation and comprehending abstract language), social interactions and social relationships [11–13]. Additionally, psychiatric comorbidities are known to affect about 70% of children and adolescents on the autism spectrum [14, 15]. Challenges associated with psychiatric comorbidities can impact a student's ability to succeed in college and navigate the dynamics of the social environment [13, 16–18]. Still other students may have significant functional skills deficits that necessitate more intensive services to support the student on campus. Such students might attend non-degree granting programs that focus on vocational preparation and opportunities for social inclusion. Yet, to date, there is almost no research that elucidates the characteristics of which students on the autism spectrum typically attend different types of college settings and what supports they might require.

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each wave of data, and bias analysis was conducted at each wave as well [27, 28]. Results can be generalized to youth who were ages 13-17 and receiving special education services for autism at the start of the study in December 2000. More extensive discussion of NLTS2 methodology and questionnaire design is available [29].

Data analysis included students who received special education services under the special education categorical qualification of autism. At Wave 5, responses from 620 young adults who received special education services for autism during high school were available for analysis, yielding a retention rate of 67% at Wave 5 based on number of participants at Wave 1. For data presented in Table 1, rates of missing per covariate ranged from 0% to 17%. The highest rates of missing data were these variables: how well youth gets to places outside the home (17.4%), role of youth in the IEP setting (16.3%), household income (6%) and how well youth converses (6%). Given the branching logic of questioning in the survey, the number of possible participants who were asked to respond to questions regarding services and accommodations was relatively small. Therefore, results for Table 2 should be treated as exploratory findings. Missing data were not imputed for this descriptive study.

Individual school districts determined whether students qualified for special education under the category of autism in accordance with federal law [30]. We could not clinically verify autism diagnosis because these are secondary data. However, virtually all students who meet eligibility criteria for special education under the category of autism also meet DSM-IV-TR criteria for autism, using the diagnostic guidelines in use during the period of NLTS2 administration [31, 32].

Procedures

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attend college in the U.S. will enroll in a 2-year college at some point during the early years after high school. Well over half of these students solely attend a 2-year college.

It is critical for guidance counselors and transition planners to have useful predictors of which students might be candidates for 2-year college attendance. Overall, high school students who later attended a 2-year college could be characterized as having mid-range functional and communication abilities during high school relative to their peers on the autism spectrum with other types of postsecondary education outcomes. The conversational skills of young adults who attended 2-year college were generally higher-level than students who had no postsecondary education; although, students who attended 2-year college generally had greater levels of conversational impairment than their peers who had experiences at 4-year college. Similarly, they were able to navigate their community on their own and perform daily living skills more frequently than their peers in vocational/technical settings or those who had no postsecondary education, but were not as adept as those who were able to attend 4-year college settings. However, while the overall skills of these 2-year college students could be described as mid-range ability levels, this study also established that even students within the lowest conversational ability levels are accessing 2-year colleges.

Frequency of extracurricular participation and active participation in IEP transition-planning activities was significantly higher in young adults who attended 2-year college compared to their peers in vocational education and those who did not attend postsecondary education. These indicators may be predictors of students who are candidates for 2-year college participation or may be viewed as transition experiences that could prepare a student for higher education settings.

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Despite the finding that students with a wide range of abilities attended 2-year colleges, and the fact that all of these young adults required special education supports during high school, less than half of those who disclosed their disability to the 2-year college reported receiving any services, accommodations, or help. While the doors to 2-year colleges are open to students on the autism spectrum, gaps in supports may hinder their opportunities to succeed in this setting. Other studies have found lower rates of persistence and completion for students on the autism spectrum in 2-year settings [5], similar to students with other types of disabilities [38]. These issues must be addressed as more programs emerge that are designed to support these students in 2-year college programs.

Two-year college students on the autism spectrum in the U.S. do face significant gaps in access to supports for postsecondary education. Specialized college programs and supports offered for students with disabilities have increased in recent years due to federal support for comprehensive Transition and Postsecondary Programs for Students with Intellectual Disabilities (TPSIDs) authorized under the Higher Education Opportunity Act (HEOA) of 2008. However, these programs only serve students on the autism spectrum who have co-occurring intellectual disability – leaving students who are capable of accessing degree-seeking programs to pursue campus-based disability support services which are typically not tailored to the unique needs of students on the autism spectrum. Further, most TPSID programs are located on 4-year college campuses – not the 2-year/ community college campuses which students on the autism spectrum frequently attend.

Issues of disability identity present another unique challenge in this population. College students must acknowledge and disclose a disability as a first step toward receiving disability support services in a college setting. Yet, one-third of college students on the autism spectrum

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[47] C. Gomez, "Students on the autism spectrum make up small but growing campus population" *Disability Compliance for Higher Education*, vol. 20, no. 6, pp. 1, 4–5, 2015.

48. A.M. Roux, P.T. Shattuck, J.E. Rast, J.A. Rava, and K.A. Anderson, "National Autism Indicators Report: Transition into Young Adulthood" 2015.

49. M.A. McEathron, T. Beuhring, A. Maynard, and A. Mavis, "Understanding the Diversity: A Taxonomy for Postsecondary Education Programs and Services for Students with Intellectual and Developmental Disabilities" *Journal of Postsecondary Education and Disability*, vol. 26, no. 4, pp. 303–320, 2013.