

**ADVANCING OPPORTUNITIES FOR EMPLOYMENT OF YOUNG ADULTS ON THE AUTISM SPECTRUM**

**Spotlight Summary**

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# What Vocational Rehabilitation Services Do Young Adults on the Autism Spectrum Engage with, and What Are Their Outcomes?

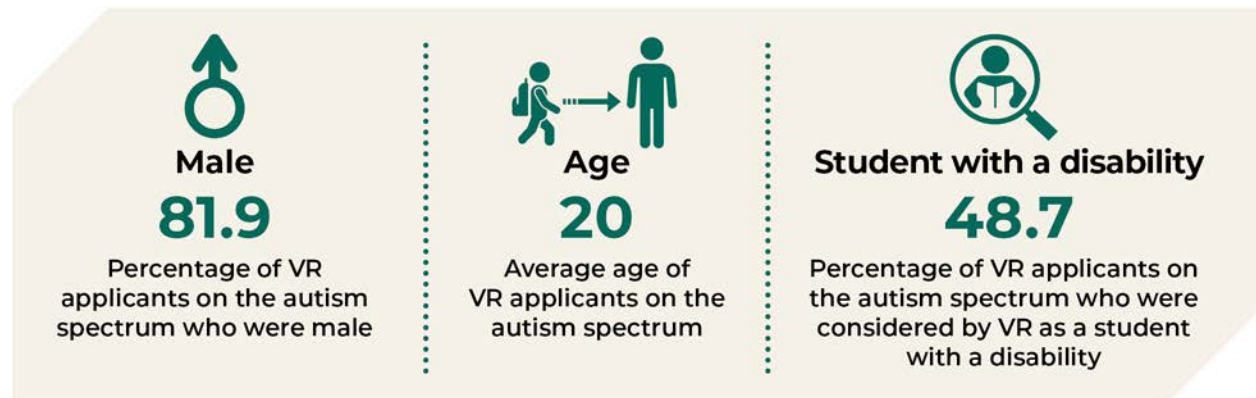
Young adults on the autism spectrum can face unique challenges when transitioning from school to employment. Past research suggests that their participation rates in vocational or technical education and employment are lower than for young adults with other disabilities, and they also experience worse employment outcomes in the years after leaving high school.<sup>1</sup> As the largest publicly funded program dedicated to supporting people with disabilities to prepare for and engage in competitive integrated employment, the Vocational Rehabilitation (VR) system has the potential to play an important role in facilitating successful transitions for autistic young adults. This spotlight summary highlights the way young adults on the autism spectrum ages 16 to 28 engaged with state VR agencies' services. It also summarizes their characteristics and employment outcomes.

**The characteristics and referral sources of autistic young adult VR applicants during 2017–2019 underscore their need for supportive and collaborative service delivery.**

### Characteristics

A total of 81,616 autistic young adults (ages 16 to 28) applied for VR services during 2017–2019, the majority of whom were male (82 percent). This is consistent with documented differences in autism identification by sex, with boys being substantially more likely to be identified as being on the autism spectrum than girls.<sup>2,3</sup> The average age at VR application for young adults on the autism spectrum was 20. About 47 percent of autistic young adult VR applicants were ages 16 to 18,

**Characteristics of autistic young adult VR applicants**



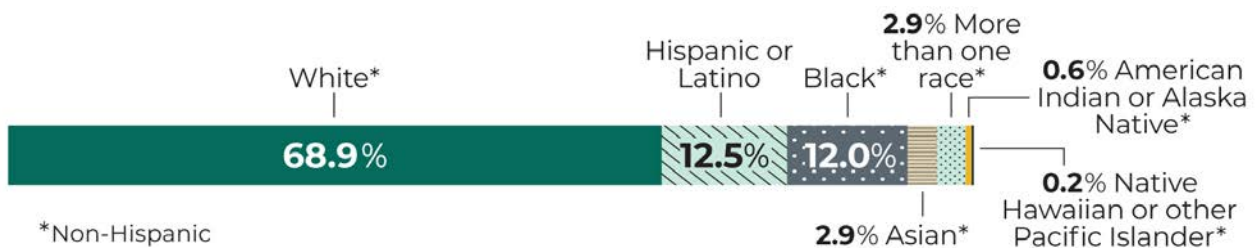
28 percent were ages 19 to 21, 14 percent ages 22 to 24, and the remaining 11 percent were ages 25 to 28. VR considered almost half of all applicants as a student with a disability (49 percent). These applicants were enrolled in education programs and eligible for and receiving services under the Individuals with Disabilities Education Act (IDEA) at the time of application or when they began receiving pre-employment transition services (ETS).

The majority (69 percent) of young adults on the autism spectrum who applied for VR were non-Hispanic White, followed by Hispanic or Latino (13 percent), and non-Hispanic Black (12 percent). This is consistent with historical differences in autism identification rates by race and ethnicity, although these no longer exist in recent years.<sup>3</sup>

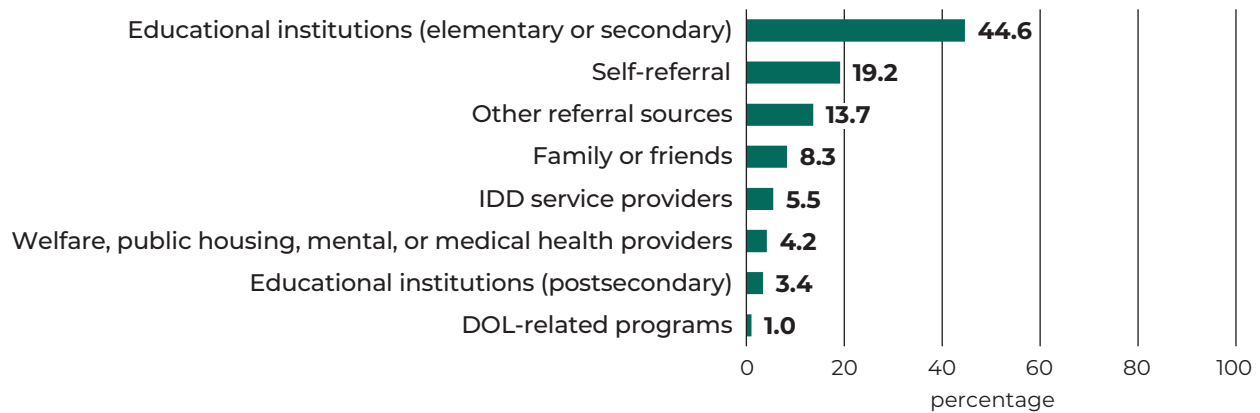
### Referral sources

Data on the sources of referral to VR point to the importance of schools as a crucial pipeline for autistic young adults to become engaged with VR. Educational institutions (elementary, secondary, or postsecondary) were the most common source of referral among autistic young adult VR applicants (48 percent). However, nearly 20 percent of autistic young adult applicants applied by themselves or relied on family or friends for referrals, and this share was even higher among autistic applicants older than 22.

### Race and ethnicity of autistic young adults applying for VR



### Referral sources of autistic young adult VR applicants



DOL = U.S. Department of Labor; IDD = intellectual and developmental disabilities.

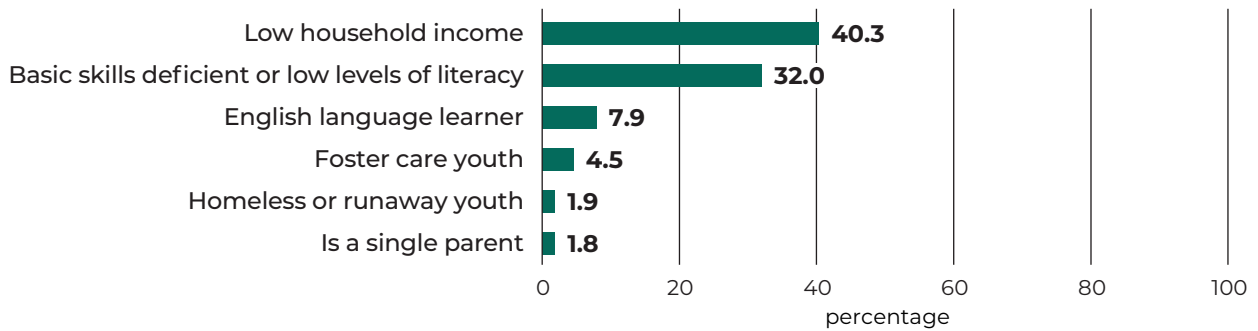
### Barriers

For young adults with a signed individualized plan for employment (IPE), VR counselors identified barriers to employment. Among autistic young adults, VR counselors identified having low household incomes as the most common barrier to obtaining employment (40 percent). This is consistent with recent estimates that suggest that a little more than half of all children on the autism spectrum live in lower-income households.<sup>4</sup>

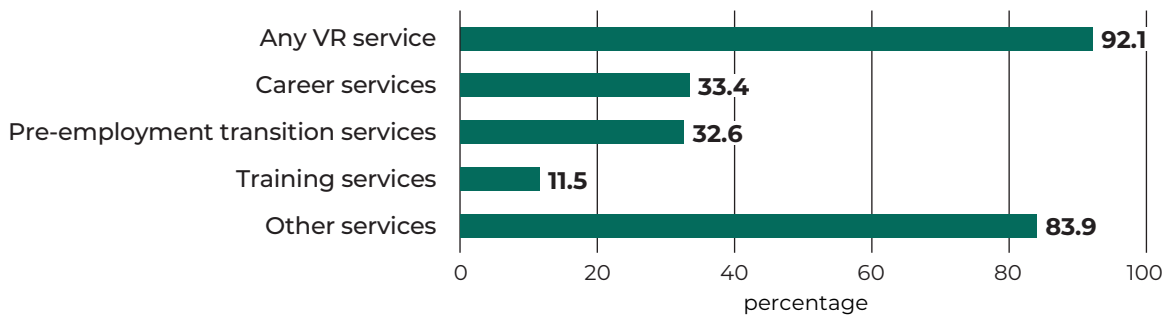
### Service use

About two-thirds of young adult applicants on the autism spectrum were deemed eligible for services and signed an IPE during the program year that they applied for VR (66 percent). Of autistic young adults with a signed IPE, nearly all (92 percent) used some VR services during their application year. About one third of autistic young adults received career services (33 percent) and pre-employment transition services (33 percent), 12 percent received training services, and 84 percent received other services.

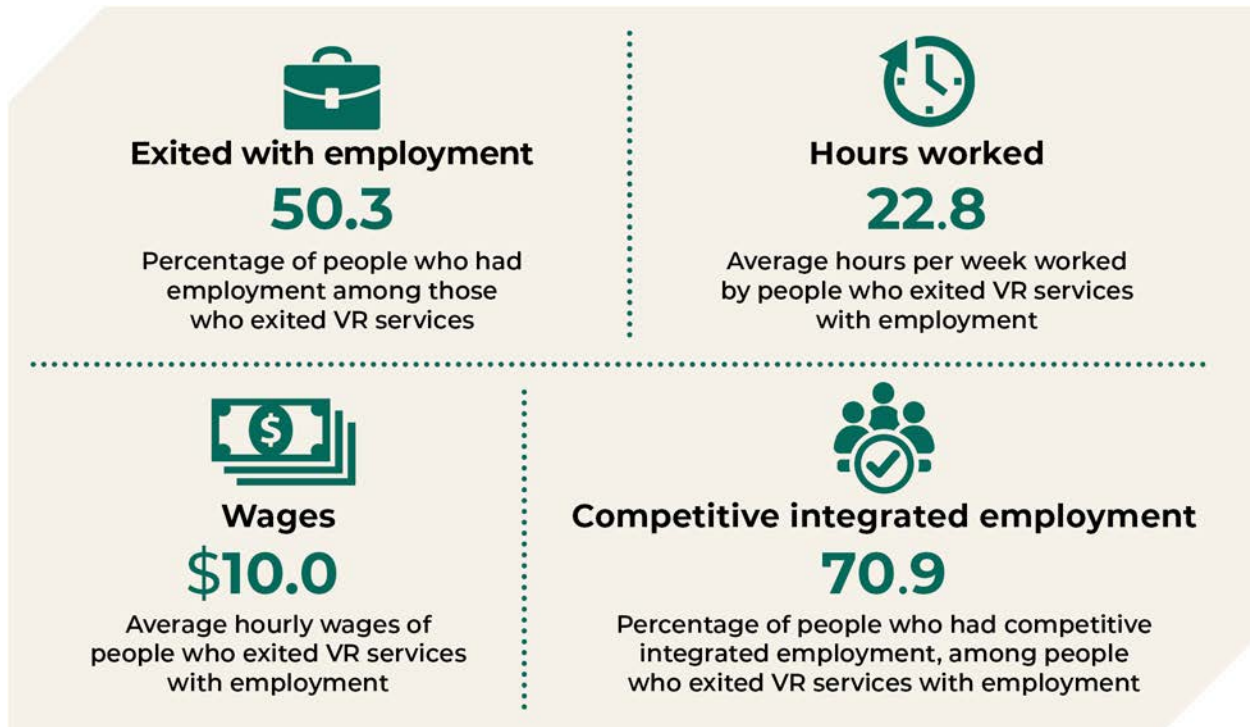
#### Assessed barriers to employment of autistic young adult VR applicants



#### Services young autistic VR clients received



**Employment outcomes among autistic youth who exited VR after signing an IPE**



Aside from those who exited with competitive integrated employment, almost all of the remaining people who exited with employment held supported employment in competitive integrated employment, which means they were employed in competitive integrated jobs while receiving ongoing support services from VR.

**Employment outcomes**

Half (50 percent) of all young adults on the autism spectrum who exited VR services were employed. Of those employed, about 71 percent held competitive integrated employment, and nearly all others held supported employment, which means they received ongoing VR support services to obtain and maintain employment in a competitive integrated job. On average, autistic young adults who exited with employment worked about 23 hours per week and earned about \$10 per hour.

**Referral sources, service use, and employment outcomes of autistic young adults engaged with VR varied widely across states, and differed slightly by individuals' characteristics.**

**Differences by state**

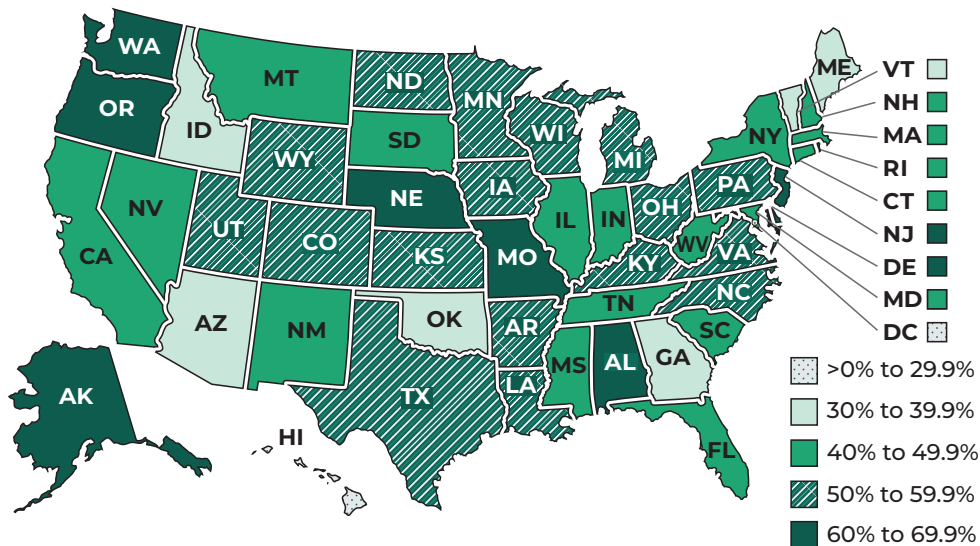
Although elementary and secondary educational institutions were the most common sources of

referral for young adult VR applicants on the autism spectrum in most states, there were some geographic differences. In four states and one U.S. territory (Connecticut, Indiana, North Carolina, Northern Mariana Islands, Wyoming), young adults on the autism spectrum were more likely to refer themselves (ranging from 22 to 73 percent of applicants) than have an elementary or secondary educational institution refer them.

In most states, the share of autistic young adult VR clients with a signed IPE who used any VR services in the year they applied for VR was above 80 percent; however, in a small number of states and territories, it was substantially lower (for example, 24 percent in Puerto Rico, 54 percent in Kentucky, and 55 percent in the District of Columbia).

The share of autistic young adult VR clients with a signed IPE who exited VR with employment varied substantially across states, from 27 percent in the District of Columbia to 68 percent in Delaware.

Share of young adults on the autism spectrum with IPEs who exited with employment, by state (2019)

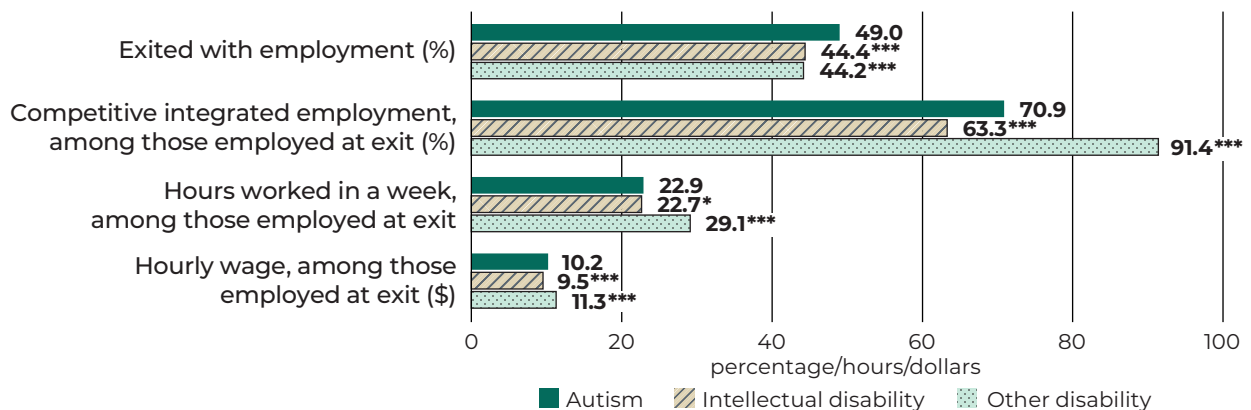


Differences by disability type

To compare service use and employment outcomes by disability type, we present regression-adjusted means to control for other differences between subgroups. Among young VR clients, similar shares of autistic clients and clients with an intellectual disability or other disability who did not have autism received VR training services, career services, pre-ETS, or other VR services.

Almost half (49 percent) of all young adults on the autism spectrum who exited VR services were employed. In comparison, 44 percent of young adults with an intellectual disability or any other kind of disability exited with employment. Among young adults who exited VR with employment, clients with disabilities other than autism or an intellectual disability were more often employed than clients on the autism spectrum or with intellectual disability. On average, they also worked more hours and earned a higher hourly wage.

Employment outcomes among young adults who exited VR after signing an IPE



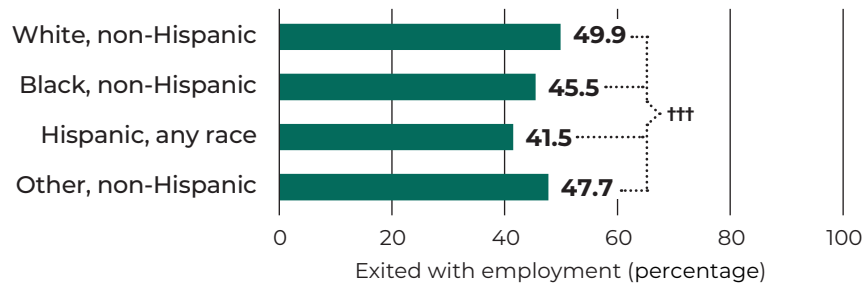
\*/\*\*/\*\* indicates the difference between the comparison group and young adults on the autism spectrum is statistically significant (p-value less than .10/.05/.01).

### Differences by race and ethnicity and biological sex

A smaller share of autistic Hispanic and non-Hispanic Black young adults used any VR services in their application year (86 and 88 percent, respectively), compared with non-Hispanic White or other clients (91 and 92 percent, respectively).

When looking at differences by sex, few differences existed in the referral sources and service use of autistic young adult VR clients, but male clients were slightly more likely to exit with employment (49 percent) than female clients (46 percent).

### Employment outcomes of autistic young adults who exited VR, by race and ethnicity



†/††/††† indicates that the means for the groups are statistically significantly different from each other (p-value less than .10/.05/.01).

### Research Support Services for Employment of Young Adults on the Autism Spectrum (REYAAS) Project.

This spotlight summary is part of the Research Support Services for Employment of Young Adults on the Autism Spectrum (REYAAS) Project. REYAAS is identifying promising practices and policies to support employment of young adults (ages 16 to 28) on the autism spectrum. The project is funded by the Office of Disability Employment Policy (ODEP) within the U.S. Department of Labor. Mathematica leads the project in partnership with ODEP. More information is available on the [project's web page](#). ▲

## Methods

The statistics in this document are based on an analysis of VR case records for young adults ages 16 to 28 on the autism spectrum during 2017–2019. During this time, 566,367 young adults with disabilities applied for VR services. Of these, 14 percent (81,616) were on the autism spectrum. We identified young adults on the autism spectrum as VR applicants who had autism recorded as the source of either their primary (69,818 people, or 86 percent) or secondary impairment (9,046 people, or 11 percent) or both (2,752 people, or 3 percent). However, only a small share of all autistic young adults ever applies to VR agencies, so these estimates do not represent the characteristics or employment outcomes of the whole population. We used descriptive analysis to examine the referral sources and characteristics of autistic young adult VR applicants, their use of VR services and employment outcomes when they exited VR, and variation in these measures by state. We used regression-based models to examine how referral sources, service use, and employment outcomes might differ across (1) young adults with different types of disabilities and (2) groups of young adults on the autism spectrum. For more information about the data, methods, definitions, and additional statistics, please see our report on these analyses ([Shenk, Harnack-Eber and Patnaik 2023](#)).

## Endnotes

<sup>1</sup> Roux, A. M., J. E. Rast, K.A. Anderson, T. Garfield, and P. T. Shattuck. "Vocational Rehabilitation Service Utilization and Employment Outcomes Among Secondary Students on the Autism Spectrum." *Journal of Autism and Developmental Disorders*, vol. 51, 2021, pp. 212–226.

<sup>2</sup> Maenner, M. J., K. A. Shaw, and J. Baio. "Prevalence of Autism Spectrum Disorder Among Children Aged 8 Years—Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2016." *Morbidity and Mortality Weekly Report: Surveillance Summaries*, vol. 69, no. 4. 2020, pp. 1–12.

<sup>3</sup> Maenner, M. J., K. A. Shaw, A. V. Bakian, D. A. Bilder, M. S. Durkin, A. Esler, S. M. Furnier, et al. "Prevalence and Characteristics of Autism Spectrum Disorder Among Children Aged 8 Years—Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2018." *Morbidity and Mortality Weekly Report: Surveillance Summaries*, vol. 70, no. 11, 2021, pp. 1–16. <https://www.cdc.gov/mmwr/volumes/70/ss/ss7011a1.htm>

<sup>4</sup> Anderson, K. A., J. E. Rast, A. M. Roux, T. Garfield, and P. T. Shattuck. "National Autism Indicators Report: Children on the Autism Spectrum and Family Financial Hardship." Life Course Outcomes Program, A.J. Drexel Autism Institute, Drexel University, May 2020.

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More information about the REYAAS project, including the data analysis, is available on the [project's web page](#).

## Appendix A. Detailed descriptions of complex figures

### Description of state map displaying share of young adults on the autism spectrum with IPEs who exited with employment

Two states with 0 to 29.9% who exited with employment include District of Columbia and Hawaii. The six states with 30 to 39.9% include Arizona, Georgia, Idaho, Maine, Oklahoma, and Vermont. The 18 states with 40 to 49.9% include California, Connecticut, Florida, Illinois, Indiana, Maryland, Massachusetts, Mississippi, Montana, Nevada, New Hampshire, New Mexico, New York, Rhode Island, South Carolina, South Dakota, Tennessee, and West Virginia. The 17 states with 50 to 59.9% include Arkansas, Colorado, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, North Carolina, North Dakota, Ohio, Pennsylvania, Texas, Utah, Virginia, Wisconsin, and Wyoming. The eight states with 60 to 69.9% include Alabama, Alaska, Delaware, Missouri, Nebraska, New Jersey, Oregon, and Washington.

### Description of bar chart comparing employment outcomes among young adults who exited VR after signing an IPE

Exited with employment: 49% autism, 44.4% intellectual disability, 44.2% other disability. Differences between autism and intellectual disability and between autism and other disability are statistically significant at the 0.01 level.

Competitive integrated employment, among those employed at exit: 70.9% autism, 63.3% intellectual disability, 91.4% other disability. Differences between autism and intellectual disability and between autism and other disability are statistically significant at the 0.01 level.

Hours worked in a week, among those employed at exit: 22.9 autism, 22.7 intellectual disability, 29.1 other disability. Difference between autism and intellectual disability is statistically significant at the 0.10 level, and the difference between autism and other disability is statistically significant at the 0.01 level.

Hourly wage, among those employed at exit: \$10.2 autism, \$9.5 intellectual disability, \$11.3 other disability. Differences between autism and intellectual disability and between autism and other disability are statistically significant at the 0.01 level.