

# Young Adult Survey

### **Technical Report**

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# 1. Executive Summary of Key Findings

This report presents results from the Young Adult Survey administered between January 2024 and May 2024 to a national sample of young adults ages 18–24 who self-report a learning disability (LD). The survey was administered online from January 2024 to May 2024; participants were recruited through social media. The final sample included 1,283 survey respondents and was weighted by gender, race/ethnicity, and geographic division to approximate a nationally representative sample of young adults ages 18–24 with LD. Survey results provide a detailed picture of (1) high school experiences; (2) enrollment in postsecondary education; (3) employment; (4) adaptive and daily living skills; (5) community, social, and financial supports; (6) mental health; and (7) well-being.

We used structural equation modeling (SEM) and subgroup analyses to examine (1) to what extent high school climate (e.g., educator acceptance, social inclusion, connectedness and support) and family support are related to whether an individual with LD graduates from high school, enrolls at a postsecondary institution, and is employed or seeking employment; (2) to what extent confidence with daily living skills, societal view of disability, LD identity and acceptance, and awareness of disability rights are related to well-being; and (3) whether model results and outcomes of interest varied by subgroups of interest. Below, we summarize key findings.

# Key Finding #1: Current perceptions of high school climate and family support are significantly related to whether a young adult ages 18–24 with LD graduates from high school and whether a young adult ages 18–24 with LD enrolls at a postsecondary institution.

WestEd utilized SEM to model the extent to which four latent factors—High School Climate: Social Inclusion, High School Climate: Educator Acceptance, High School Climate: Connectedness and Support, Family Support—were related to whether young adults ages 18– 24 with LD (1) graduated from high school, (2) enrolled at a postsecondary institution, and (3) are currently employed or seeking employment.

Sub-finding #1A: Young adults ages 18–24 with LD who graduated from high school experienced significantly more social inclusion during high school compared to young adults ages 18–24 with LD who left high school before graduating. Results from the SEM suggest



current perceptions of social inclusion during high school are significantly related to graduating from high school. Subgroup analyses for the High School Climate: Social Inclusion latent factor suggest differences based on type of LD and whether an individual self-reports a diagnosis of attention deficit hyperactivity disorder (ADHD).

Sub-finding #1B: Young adults ages 18–24 with LD who ever enrolled at a postsecondary institution (i.e., currently enrolled, enrolled but left, or graduated from a postsecondary institution) experienced significantly more educator acceptance in high school compared to young adults ages 18–24 with LD who have never attended a postsecondary institution. Results from the SEM suggest current perceptions of educator acceptance during high school are significantly related to enrolling at a postsecondary institution. Subgroup analyses for the High School Climate: Educator Acceptance latent factor suggest differences based on type of LD and race/ethnicity.

Sub-finding #1C: Young adults ages 18–24 with LD who are currently employed or seeking employment held similar perceptions of their high school climate and family support compared to young adults ages 18–24 with LD who are currently unemployed and not seeking a job. Results from the SEM suggest current perceptions of high school climate (High School Climate: Social Inclusion, High School Climate: Educator Acceptance, High School Climate: Connectedness and Support) and family support are not significantly related to current employment status. No subgroup analyses were conducted on this model.

# Key Finding #2: Well-being of young adults ages 18–24 with LD is significantly related to their (1) confidence with daily living skills, (2) societal view of disability, (3) LD identity and acceptance, and (4) awareness of disability rights.

WestEd utilized SEM to model the extent to which four latent factors—Confidence with Daily Living Skills, Societal View of Disability, LD Identity and Acceptance, and Awareness of Disability Rights—were related to the well-being of young adults ages 18–24 with LD. The outcome, wellbeing, was a latent factor comprised of seven items that addressed satisfaction with their mental health, confidence in their abilities to care for their mental health, feeling good about their lives, satisfaction with their personal independence, satisfaction with who they are, and excitement about their future and careers. Results suggest all four latent factors are significantly related to well-being. Subgroup analyses for the latent predictors suggest group differences on the basis of LD type and co-occurrence of mental health symptoms.



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## 2. Introduction

The National Center for Learning Disabilities partners with educators, students, families, and young adults to advance innovative research and advocate for equitable policies that address systemic barriers in schools, workplaces, and communities.

NCLD's research focuses on understanding best practices for bridging service gap barriers for individuals with LD. As research and innovative practices continue to evolve, it is imperative to bridge the gap between what is known and what is done to improve the identification and support of individuals with LD in schools and beyond. To begin to address these gaps, NCLD has commissioned WestEd to conduct a survey study of young adults with LD and educators who teach students with LD.

The survey data and results will ultimately drive NCLD's policy and advocacy work. Specifically, findings from the Young Adult Survey will allow us to better understand the experiences and involvement of individuals with learning disabilities in high school, factors during high school (e.g., school climate, educator acceptance) that impact enrollment in a postsecondary institution or employment status, and current trends and issues in attaining and maintaining employment among young adults with LD. Findings from the Educator Survey will allow for increased understanding of current trends in educator preparedness for teaching students with LD, educator resources to teach diverse students, teacher access to collaborative decision-making to improve school-level experiences for students with LD, and the ways schools operationalize and utilize a comprehensive system of support designed to target marginalized students.

This report focuses on the young adult sample and includes descriptions of the survey design and review, sampling, recruitment, management of participants and respondents, data analysis, and results.



## 3. Survey Design

This section describes the design used to create, test, and administer the Young Adult Survey online and analyze its data.

#### 3.1 Sample

The sample of interest is young adults with LD. To be included in this sample, young adults must

- **1.** be ages 18 to 24;
- **2.** self-report formal identification of LD or struggle in reading, writing, or math in ways that affect their daily life;
- 3. currently reside in the United States; and
- 4. have received most or all of their K–12 education in the United States.

We note here as a limitation that we cannot definitively say those who self-report they have LD officially have LD. Additionally, it is impossible to determine whether some respondents who reported they had LD instead have attention deficit hyperactivity disorder (ADHD).

Through the recruitment and sampling methods described in this report, WestEd aimed to include a minimum of 1,000 participants who met inclusion criteria and approximated a nationally representative sample of young adults ages 18–24 with LD based on race/ethnicity, gender, and geographic location. We first describe how we approximated a national representative sample, then describe the power analysis.

To approximate a nationally representative sample, WestEd first examined existing national datasets to determine which would provide the most recent and accurate information concerning our sample of interest. We aimed to locate a source or source(s) that would allow us to estimate national percentages of young adults ages 18–24 with LD based on race/ethnicity, gender, and geographic location. Our review of data sources included the U.S. Census, American Community Survey (ACS), Current Population Survey (CPS), High School Longitudinal Study (HSLS), National Postsecondary Student Aid Study (NPSAS), National Longitudinal Transition Study (NLTS), state department of education websites, and the Individuals with Disabilities Education Act (IDEA) Section 618 data. We provide a brief description of each source along with identified issues in Table 1.



#### Table 1. Survey Design: Summary of Reviewed Data Sources

| Data Source  | Description   | Identified Issues  |
|--|---|--|
| U.S. Census  | The U.S. Census counts every resident in<br>the United States and collects<br>information on demographics such as<br>gender and race/ethnicity (U.S. Bureau,<br>2023). The U.S. Census is conducted<br>every 10 years and affects how much<br>federal funding a community receives as<br>well as the number of representatives in<br>the U.S. House of Representatives.         | <ul> <li>The definition of "disability" is not specific to LD and is typically defined as severe hearing or vision impairment; significant ambulatory issues; or severe difficulties with learning, remembering, concentrating, dressing, bathing, or going outside the home (U.S. Census Bureau, 2021b) and would not provide accurate estimates of individuals with LD.</li> <li>Data on disability includes individuals ages 18–64 (U.S. Census Bureau, 2022).</li> </ul> |
| American<br>Community Survey                           | The ACS is an ongoing survey that collects<br>information on demographics, jobs,<br>occupations, and educational attainment<br>(U.S. Census Bureau, 2024). Data from<br>the ACS are often used by local, state,<br>and federal agencies to assess needs,<br>evaluate existing programs, and identify<br>areas for future planning or development<br>(U.S. Census Bureau, 2017). | The ACS uses the same definition of "disability" as the U.S. Census.   |
| Current Population<br>Survey                           | The CPS is an ongoing survey that collects<br>information on work, earnings, and<br>education (U.S. Census Bureau, 2021a).<br>Data from the CPS is the primary source<br>of monthly labor force statistics.   | The CPS uses the same definition of "disability" as the U.S. Census.   |
| High School<br>Longitudinal Study                      | The HSLS is a study that began in 2009<br>and examined a nationally representative<br>sample of high schoolers from 2009 to<br>2016 (Institute of Education Sciences<br>[IES], National Center for Education<br>Statistics [NCES], 2009). Extant data<br>collection included high school transcripts<br>and postsecondary transcripts.  | <ul> <li>Data are only nationally representative for 9<sup>th</sup> graders in 2009.</li> <li>Data are outdated.</li> <li>Data are not disaggregated by disability type (e.g., Ingles et al., 2013).</li> </ul>  |
| National<br>Longitudinal<br>Transition Study<br>(NLTS) | The NLTS (and its subsequent studies,<br>including NLTS-2 and NLTS 2012) provides<br>a national picture of the experiences and<br>achievements of students in special   | • The sample of individuals across all NLTS studies includes students ages 13–21 (IES, 2012) and does not align with our sample of interest.   |



| Data Source   | Description   | Identified Issues   |
|---|---|---|
|   | education during high school and into<br>adulthood, including postsecondary and<br>employment (IES, n.d.).  | • Data are outdated. The most recent wave of data collected occurred in spring 2014 (IES, n.d.).  |
| National<br>Postsecondary<br>Student Aid Study<br>(NPSAS)                       | The NPSAS is a current study conducted<br>every three to four years to provide a<br>nationally representative cross-section of<br>undergraduate and graduate students<br>enrolled in postsecondary education (IES,<br>NCES, n.d.).  | <ul> <li>Data only includes individuals that are enrolled at a postsecondary institution and does not include individuals enrolled at vocational, business, or technical schools (e.g., USDOE, IES, 2024).</li> <li>Data on specific disability categories are collected (e.g., IES, 2024), but results are not disaggregated by disability type (e.g., Cameron et al., 2023).</li> </ul> |
| State Department<br>of Education<br>Websites                                    | We selected seven states (Alabama,<br>Arizona, California, Florida, Illinois, New<br>York, and Texas) to examine publicly<br>available information related to IDEA Part<br>B Indicator 14. Indicator 14 captures the<br>percent of youth with an individual<br>education program (IEP) who are no<br>longer in secondary school and who have<br>been competitively employed, enrolled in<br>some type of postsecondary school, or<br>both, within one year of leaving high<br>school (USDOE, IDEA, n.d.). | <ul> <li>Publicly available data on the state department of education websites was inconsistent.</li> <li>Some states disaggregated Indicator 14 by disability categories and others did not.</li> <li>Some states did not have Indicator 14 information publicly available on their website.</li> </ul>  |
| Individuals with<br>Disabilities<br>Education Act<br>(IDEA) Section 618<br>data | The IDEA Section 618 data provides state-<br>level counts of students with disabilities<br>delineated by each of the 13 federal<br>disability categories for each state<br>(including Washington, D.C.), school year,<br>and selected student demographics.   | • Data represent students in K–12 (ages 6–21) that are served under IDEA and do not necessarily align with the age group of our sample.   |

Across the data sources we reviewed, some provided detailed counts and information about individuals with disabilities, but the definition of disability was not specific to LD (i.e., U.S. Census, ACS, CPS; U.S. Census Bureau, 2021b), while others provided detailed information on high school students with disabilities (HSLS, NLTS) or postsecondary students with disabilities (NPSAS) but data are either outdated or not delineated for individuals ages 18–24 with LD. Further, information from state department of education websites was often inconsistently available. Lastly, the IDEA Section 618 data delineates demographics for K–12 students with LD but does not align with the age group of our sample (i.e., only provides data for ages 6–21).



Given the benefits and drawbacks of the data sources we reviewed, we ultimately utilized the IDEA Section 618 data (U.S. Department of Education, 2023) to approximate a nationally representative sample of young adults with LD. More specifically, we used data from Part B of IDEA as well as the most recent IDEA Report to Congress (U.S. Department of Education [USDOE], Office of Special Education and Rehabilitative Services [OSERS], Office of Special Education Programs [OSEP], 2023) to estimate the potential total population size for young adults with LD.

The IDEA Section 618 data was used for several reasons. First, the IDEA Section 618 data reports a comprehensive count of the number of students served under the Specific Learning Disability category by state, student age, student gender, and student race/ethnicity for each school year. Each IDEA Section 618 data file provides state-level counts for each of the 13 federal disability categories, including Specific Learning Disability (SLD). Within the IDEA Section 618 data, state-level counts are delineated by disability category, student gender, student race/ethnicity, and student age, where (1) genders included male and female; (2) race/ethnicity included American Indian/Alaska Native, Asian, Black, Hispanic or Latino, Native Hawaiian or Pacific Islander, White, two or more, and other; and (3) student ages included counts for each age between age 3–21 as well as for school–age (i.e., 6–21).

Second, the disability categories reported in the IDEA Section 618 data align with those in IDEA, and the federal classification for SLD is used across states receiving IDEA funding. While the IDEA Section 618 data report information on students ages 6–21, it is reasonable to assume a high percentage of students who are identified with LD in ages 6–21 continue to have LD into adulthood. In other words, the state estimates of students with LD in K–12 provide a practical estimate of young adults ages 18–24 with LD.

We used IDEA Section 618 data from 2014–2022 to estimate national rates of LD by gender, race/ethnicity, and geographic division (see Table 2). Percentages were calculated for each school year from 2014–2022, state, and demographic, where the total number of students ages 6–21 with SLD was used as the denominator. We averaged 10 years of data to account for disruptions due to the COVID-19 pandemic and speculation that students with LD were under-identified during the 2019–2020 and 2020–2021 school years (Blad, 2021; Hunt et al., 2023; USDOE, OSERS, 2021). When managing survey responses during the survey window, we used the average of estimates in Table 2 to (1) compare our survey sample with national estimates and (2) direct further site and participant recruitment efforts. These national estimates were also used to weight the final young adult sample prior to data analysis.



| Demographic                               | Year <sup>a</sup><br>(%) |       |                    |                    |                    | Avg.<br>(%) |       |       |
|---|--------------------------|-------|--------------------|--------------------|--------------------|-------------|-------|-------|
|   | 2014                     | 2015  | 2016               | 2017               | 2018               | 2020        | 2021  |       |
| Gender                                    |                          |       |                    |                    |                    |             |       |       |
| Female                                    | 38.10                    | 38.59 | 39.06              | 39.63              | 40.27              | 41.50       | 42.07 | 39.13 |
| Male                                      | 61.90                    | 61.41 | 60.94              | 60.37              | 59.73              | 58.50       | 57.91 | 60.87 |
| Race/Ethnicity                            |                          |       |                    |                    |                    |             |       |       |
| American Indian<br>or Alaska Native       | 1.66                     | 1.66  | 1.63               | 1.61               | 1.60               | 1.48        | 1.35  | 1.63  |
| Asian                                     | 1.52                     | 1.52  | 1.52               | 1.54               | 1.55               | 1.55        | 1.52  | 1.53  |
| Black                                     | 19.68                    | 19.47 | 19.35              | 19.27              | 18.97              | 17.91       | 18.19 | 19.35 |
| Hispanic                                  | 30.40                    | 31.02 | 32.00              | 32.64              | 33.09              | 34.20       | 33.08 | 31.83 |
| Two or more                               | 2.68                     | 2.89  | 3.15               | 3.39               | 3.60               | 4.01        | 4.28  | 3.14  |
| Native Hawaiian<br>or Pacific<br>Islander | 0.50                     | 0.52  | 0.52               | 0.50               | 0.49               | 0.48        | 0.33  | 0.51  |
| White                                     | 45.13                    | 44.49 | 43.43              | 42.64              | 42.32              | 40.38       | 41.23 | 43.60 |
| Division <sup>b</sup>                     |                          |       |                    |                    |                    |             |       |       |
| New England                               | 4.26                     | 4.22  | 4.28               | 3.71 <sup>c</sup>  | 4.32               | 4.38        | 4.47  | 4.23  |
| Middle Atlantic                           | 15.71                    | 15.70 | 15.77              | 15.77              | 15.51              | 15.54       | 15.05 | 15.58 |
| East North<br>Central                     | 15.31                    | 15.05 | 13.79 <sup>c</sup> | 13.68 <sup>c</sup> | 13.37 <sup>c</sup> | 14.27       | 13.95 | 14.20 |

#### Table 2. Survey Design: National Percentages of LD by Demographics and School Year



| Demographic           | Year <sup>a</sup><br>(%) |       |       |       | Avg.<br>(%) |                   |                   |       |
|-----------------------|--------------------------|-------|-------|-------|-------------|-------------------|-------------------|-------|
|                       | 2014                     | 2015  | 2016  | 2017  | 2018        | 2020              | 2021              |       |
| West North<br>Central | 6.37                     | 6.36  | 6.49  | 6.58  | 6.62        | 5.20 <sup>c</sup> | 5.27 <sup>c</sup> | 6.13  |
| South Atlantic        | 18.70                    | 18.97 | 19.44 | 19.67 | 19.67       | 20.00             | 19.88             | 19.48 |
| East South<br>Central | 4.81                     | 4.67  | 4.71  | 4.71  | 4.65        | 4.63              | 4.57              | 4.68  |
| West South<br>Central | 10.68                    | 10.56 | 10.52 | 10.54 | 10.66       | 10.89°            | 12.47             | 10.90 |
| Mountain              | 7.86 <sup>c</sup>        | 8.14  | 8.38  | 8.60  | 8.60        | 8.71              | 8.67              | 8.42  |
| Pacific               | 16.31                    | 16.32 | 16.63 | 16.74 | 16.61       | 16.37             | 15.66             | 16.38 |

*Note*. Not all variables may total to 100% due to rounding.

<sup>a</sup>USDOE, 2023. <sup>b</sup>Regions are based on the nine divisions from the U.S. Census Bureau (U.S. Census Bureau, n.d.-b). <sup>c</sup>Data from at least one state was not available, suppressed due to small sample size, or flagged due to questionable data quality.

Next, we conducted a power analysis to estimate power given the minimum sample size of 1,000 participants. We used the samplesize4surveys package (Rojas, 2020) in R (R Core Team, 2024) and based the analysis on the following assumptions: alpha level of .05, the design effect (DEFF) of the sample design at 3 (DEFF = 1 corresponds to a simple random sampling design), and a standardized mean difference of .20. The standardized mean difference would correspond to mean and standard deviation as follows: if we assume a mean of 100 and standard deviation of 15, our power estimate assumes a difference of + or -3.

We used the most recent IDEA Report to Congress (USDOE, OSERS, OSEP, 2023) that uses IDEA Section 618 data, among other data sources, to report on the implementation of IDEA to the federal government. As of fall 2019, there were 2,401,135 children and youth with LD between the ages of 6 and 21 years (USDOE, OSERS, OSEP, 2023). We used this number as the population estimate for the power analysis. Under these assumptions, we found power to be at 97.8% for the young adult sample. We estimated power under three additional scenarios: smaller effect size (.13), larger design effect, and smaller sample size. Only the smaller sample size reduced power below acceptable levels (i.e., 80%). A summary is provided in Table 3.



| Power | п     | Difference Between<br>Groups | DEFF |
|-------|-------|------------------------------|------|
| 97.8  | 1,000 | 3                            | 3    |
| 78.5  | 1,000 | 2                            | 3    |
| 88.2  | 1,000 | 3                            | 5    |
| 82.6  | 1,000 | 3                            | 3    |

Table 3. Survey Design: Power Analysis

Based on the review of extant data sources and the power analysis, we believe a minimum sample size of 1,000 survey respondents weighted according to IDEA Section 618 data will provide a nationally representative sample of young adults ages 18–24 with LD.

#### **3.2 Survey Development and Testing**

This section describes the processes used to design and develop the Young Adult Survey. We aimed to develop an online survey that would be administered via Qualtrics, an online survey platform. We selected Qualtrics instead of other survey platforms (e.g., SurveyMonkey) due to its ability to (1) build, distribute, and collect data from online surveys; (2) detect and screen out survey bots; and (3) implement and collect embedded data. These features are described in greater detail below.

Initial development of survey items was based on the following topics that were collaboratively developed between NCLD and WestEd (see Table 4).

| Торіс        | Description   |
|--------------|---|
| Demographics | These items asked questions about where respondents live (U.S. state, urbanicity) and respondents' gender, race/ethnicity, highest level of education obtained, and any disabilities in addition to LD. |

#### Table 4. Survey Design: Summary of Survey Topics



| Торіс  | Description   |
|--|---|
| Experiences in High School                   | These items asked questions about grade retention, transition opportunities, involvement in the juvenile justice system, high school completion, and school support and safety.   |
| Postsecondary Education                      | These items asked questions about respondents' experiences in<br>postsecondary education, including major/course of study, the disability<br>disclosure process, and accommodations provided by the school or<br>instructors. Branch logic was used to ask respondents who left<br>postsecondary education questions about why they left. |
| Current Employment                           | These items asked questions about respondents' current employment,<br>including number of jobs, wages, disclosure of disability, and<br>accommodations. Branch logic was used to ask about unemployment.  |
| Adaptive and Daily Living<br>Skills          | These items asked questions about respondents' current lives, including marriage, parenthood, homelessness, and confidence doing specific activities of daily living.   |
| Community, Social, and<br>Financial Supports | These items asked questions about federal, state, and community aid (e.g., Supplemental Nutrition Assistance Program [SNAP], financial aid from religious organizations) and connection to peers and family.  |
| Mental Health                                | These items asked questions about mental health disorders, substance use, and agency over one's life.   |
| Thriving/Surviving                           | These items asked questions about respondents' satisfaction with their lives, factors respondents perceive as leading to a successful life, discrimination, and involvement in the criminal justice system.   |

#### **3.2.1 Initial Development of Survey Items**

Prior to initial development of survey items, WestEd reviewed multiple surveys to existing items related to our topics of interest. Table 5 provides a brief description of each source we reviewed.



#### Table 5. Survey Design: Review of Existing Surveys

| Survey  | Description and Purpose  |
|---|--|
| California Healthy Kids<br>Survey (CHKS)                        | CHKS is a survey administered to a randomly selected, representative sample<br>of students in 5th, 7th, 9th, and 11th grades in California every other year<br>(CalSCHLS, 2023). Topics include school climate, behavioral health, substance<br>use, community health, gang awareness, gender identity and sexual<br>orientation, mental health, and trauma.   |
| National Center for Learning<br>Disabilities Survey             | This survey was administered by NCLD in previous years and included topics<br>such as access to transition employment and opportunities, mental health<br>and well-being, and experiences in postsecondary education.  |
| National Longitudinal<br>Transition Study-2 (NLTS-2)            | NLTS-2 is a nationally representative, longitudinal study of students in special education during high school as they transition into adulthood (Institute of Education Sciences, National Center for Special Education Research, n.d.). NLTS-2 followed students from 2000 to 2010. We utilized items from the Youth Surveys administered in Waves 2–5 (SRI International, 2003, 2005, 2007, 2009). |
| World Health Organization<br>Quality of Life Survey<br>(WHOQOL) | WHOQOL is a survey developed by the World Health Organization intended<br>to assess perceptions of individuals' position in life in relation to broader<br>culture and value systems and personal goals and expectations (World<br>Health Organization, 1998).   |

Next, WestEd drafted a comprehensive bank of items for each topic of interest. Using best practices for survey design for surveys administered digitally, we prioritized items that were Likert-type, multiple-choice, and select-all-that-apply. These item types typically have shorter response times, which will increase not only the likelihood that respondents will complete the survey but also the likelihood that we will collect accurate data (Krosnick, 2018) and can inquire about a variety of topics (Kost & de Rosa, 2018).

Additionally, we included open-response items to further explore topics or subtopics where we would like more information, where we expected variability, or where an open-response item would lessen the cognitive load to answer the item. Because open-ended questions often have higher rates of nonresponse simply due to the item type (Regional Educational Laboratory West, 2021), we placed these items toward the end of survey blocks, limited how many we included, and tested the use of accessibility tools (e.g., speech-to-text) to reduce burden on survey respondents.



#### **3.2.2 Iterative Development**

The Young Adult Survey was then iteratively developed with NCLD, with a focus on content, clarity, ordering of the items, and survey fatigue.

Content review involved a cyclical process between WestEd and NCLD where we examined whether the drafted items addressed the appropriate topics and subtopics of interest. Clarity review focused on likelihood of respondent error (e.g., respondents responding in a manner inconsistent with the item intent) based on use of language in the survey items (Vannette & Krosnick, 2018). Because we adapted items from existing surveys, we were particularly mindful about consistency in language across items and the Likert scales used. Lastly, we examined the ordering of the items and blocks to consider whether and how block ordering might affect fatigue and nonresponse (Cobern & Adams, 2020).

In this iterative process and in concert with high-quality survey design for web-based surveys, we aimed for a maximum survey length of 20 minutes (Revilla & Ochoa, 2017).

#### 3.2.3 Inclusion of Bot Prevention and Identification Techniques

While online surveys can reach a broader range of individuals, are cost-effective, and can be administered through a variety of channels (e.g., social media, email; Lehdonvirta et al., 2020; Saleh & Bista, 2017), there are also concerns about the guality of data due to human and nonhuman bots (Teitcher et al., 2015). Bots, or computer programs that complete online forms automatically and often faster than possible for a person (Al-Fannah, 2017), and human bots, or individuals who take surveys usually with the purpose of receiving an incentive (Yarrish et al., 2019), are participating in online surveys at increasing rates (Griffin et al., 2022; Xu et al., 2022). Both human and nonhuman bots pose threats to the integrity of online survey data. Data from bots is completely invalid, as bots are programmed to simply fill out forms (Dupuis et al., 2019). Data from human bots may come from individuals who may not meet the inclusion criteria for the survey sample of interest, may not pay attention when answering survey items, and may have ulterior motives for completing the survey (e.g., to receive a stipend; Chandler & Paolacci, 2017). Without bot prevention strategies, online surveys can often be overrun with bot responses within hours of opening an online survey (e.g., 470 responses within 24 hours of opening a survey; Pozzar et al., 2020). Online surveys run the risk of biased research findings if bots are retained in the sample (Simone et al., 2023). To combat challenges posed by human and nonhuman bots, we included CAPTCHAs and hidden items as part of the survey design, and we utilized settings in Qualtrics to prevent and identify bots. Additionally, the study consent form informed respondents that inclusion in the study was dependent on meeting measures of data quality (see below) and that remuneration was limited to one gift card per participant.



#### 3.2.3.A CAPTCHAs

A CAPTCHA, or Completely Automated Public Turing Test to Tell Computers and Humans Apart, is typically included as a short item that asks the survey respondent to complete a brief task that is easy for humans but difficult for computers (e.g., check the box; identify all squares that contain a car; Prince et al., 2012; Yarrish et al., 2019). CAPTCHAs are commonly included in online environments, and surveys in particular, to reduce the likelihood of bots (Prince et al., 2012). In Qualtrics, CAPTCHAs require respondents to check a box indicating they are not a robot. We included CAPTCHAs in (1) the first block of the survey where respondents indicate they have consented to take the survey and (2) on the contact information form for the participation stipend (described below).

#### 3.2.3.B Hidden Items

Hidden items are items that are visible to bots but not human respondents. In Qualtrics, hidden items are displayed using custom Java code for a specific item. Hidden items are displayed only to bots, so inclusion of hidden items can more readily identify bots since answering the hidden items exposes the respondent as a bot (Pozzar et al., 2020). While hidden items do not necessarily "catch" all bots, best practice for online surveys recommends the inclusion of hidden items as it involves almost no additional work and has the advantage of potentially removing bot data from survey responses (Pozzar et al., 2020; Storozuk et al., 2020). In Figure 1, we provide a screenshot of what a bot would see (i.e., Q8.5, the hidden item, and Q8.7) where the hidden item was coded as hidden using the following custom Java code:

```
Qualtrics.SurveyEngine.addOnload(function()
{
jQuery("#"+this.questionId).hide();
});
Qualtrics.SurveyEngine.addOnReady(function()
{
/*Place your JavaScript here to run when the page is fully displayed*/
});
Qualtrics.SurveyEngine.addOnUnload(function()
{
/*Place your JavaScript here to run when the page is unloaded*/
});
```

In Figure 2, we provide a screenshot of what a human respondent would see (i.e., only Q8.5 and Q8.6).



#### Figure 1. Survey Design: Screenshot of Hidden Item in Young Adult Survey (Development Side)

| Q8.5                                    | * |
|---|---|
| Do you have any children?               |   |
| ⊖ Yes                                   |   |
| O No                                    |   |
| Q8.6                                    | * |
| Have you ever experienced homelessness? |   |
| ○ Yes                                   |   |
| O No                                    |   |
| 08.7                                    |   |
| I was born in the 1700s.                |   |
| ○ Yes                                   |   |
| O No                                    |   |

#### Figure 2. Survey Design: Screenshot of Hidden Item in Young Adult Survey (User Side)

| Do you have any children?                      |
|--|
| Yes  |
| No   |
| Have you <u>ever</u> experienced homelessness? |
| Yes  |
| No   |

#### 3.2.3.C Qualtrics Settings

Additionally, Qualtrics has a "bot detection" feature that, when activated, uses Google's invisible reCAPTCHA technology to provide a score based on a user's interactions with the site (Qualtrics, 2024a). The score ranges from 0.0 (very likely a bot) to 1.0 (very likely a human; Google for Developers, n.d.). According to Qualtrics guidelines, a reCAPTCHA score greater than or equal to 0.5 indicates the respondent is likely human, while a score less than 0.5 suggests the



respondent is likely a bot (Qualtrics, 2024a). Furthermore, we utilized the "Prevent multiple submissions" feature in Qualtrics and also collected respondents' Internet protocol (IP) addresses and location information. Below we describe how respondents' IP addresses and location information were used to identify and remove human and nonhuman bots.

#### **3.2.4 Testing on Qualtrics Platform**

We also extensively reviewed and tested the survey in Qualtrics for duration, format, and accessibility. First, we tested the survey using various digital devices (e.g., computer, laptop, phone, tablet) to ensure the survey items appeared similarly (Dillman et al., 2014) and to examine how device type might impact survey response and duration. We also tested a variety of features (e.g., text-to-speech to read items and response categories, speech-to-text to record open-response answers) to ensure the survey would be accessible.

#### **3.3 Cognitive Interviews**

Once the Young Adult Survey items were fully drafted, WestEd conducted cognitive interviews to test the reliability and validity of the proposed survey items prior to survey administration. In addition to syntax and word choice to elicit the most candid responses, we were particularly interested in perceptions of the items relating to mental health and terms used to describe postsecondary enrollment and education.

In survey methodology research, cognitive interviews are a common evidence-based method utilized to assess the reliability and validity of survey items and response options (Messick, 1995; Padilla & Leighton, 2017; Willis & Artino, 2013) during survey development, piloting, and refinement. This method is recommended as best practice by the American Educational Research Association (AERA), the American Psychological Association (APA), and the American Association for Public Opinion Research).

During a cognitive interview for survey development, the interviewer asks respondents structured questions about their interpretation of questions as well as their reactions, thoughts, and experiences as they answer the survey questions (Messick, 1995; Ryan et al., 2012). In general, respondents move through a four-component cognitive process when reading and answering survey questions: understanding the question (comprehension), retrieving relevant information (retrieval), preparing one's answer (judgment), and formatting and editing an answer (response) (Bradburn, 2004; Ryan et al., 2012; Schwartz, 2007). Cognitive interviews support a more robust understanding of these components and the respondents' process in taking the survey than would be possible based on the results of the survey alone. Put simply, cognitive interviews allow researchers to assess whether the survey measures what they intend it to measure and whether questions are interpreted by respondents as expected. Questions and response items are then revised based on respondent feedback.



#### 3.3.1 Methods

We used two approaches to cognitive interviewing, a think-aloud approach and verbal probing, with half of the participants in each sample completing one, while the other half completed the other. In both procedures, participants were first introduced to the purpose of the project and the survey. Participants were then instructed on how to engage in thinking aloud through modeling by the interviewer with sample questions. Participants then practiced until they felt comfortable with the process.

We developed two protocols, one using a think-aloud process and one using verbal probing (see Appendices A and B). Both protocols were developed after a review of relevant literature regarding cognitive interviewing (Ryan et al., 2012; Tourangeau et al., 2000; Willis, 2004; Willis & Artino, 2013). In addition to the general questions in each protocol, verbal probes were included to focus on survey questions previously identified by WestEd and NCLD that needed additional clarity. For example, in the Young Adult Survey, probing questions were included related to questions about mental health and use of particular terms related to postsecondary enrollment. Across both protocols, probing questions were used regarding syntax and word choice to elicit the most candid responses.

In the think-aloud condition, participants were asked to read each question and answer aloud as well as actively narrate their thinking while selecting an answer (Ryan et al., 2012; Tourangeau et al., 2000; Willis & Artino, 2013). We provided instructions on thinking aloud throughout the interview and provided prompts to "keep talking" or "keep going." In addition to recording notes on how participants responded and questions that required clarity or rephrasing, we also recorded when participants engaged in informal communication such as sighing, pausing, or hesitating. Notes and initial impressions were recorded in a copy of the survey protocol during the interview for later analysis.

In the verbal probing condition, in addition to asking respondents to think aloud, we asked specific questions such as how questions made participants feel and how they would rephrase the question (Ryan et al., 2012). These questions were designed to elicit details regarding the four principal cognitive processes (i.e., comprehension, retrieval, judgment, response) involved in reading and answering the survey items.

Each interview lasted between one hour and one and a half hours and was conducted via Zoom. After each cognitive interview, participants were thanked for their time and asked to complete a brief email feedback form the following day. Follow-up questions included:

- How did it feel taking the survey?
- What did you think about the length?
- Are you more likely to respond to a survey you get an email about, see on social media, etc.?
- Are there things you think are missing?



• We want to understand the beliefs and experiences of educators who teach students with LD. Do you think we capture that?

Each participant received a \$25.00 Amazon.com Gift Card for participating in the cognitive interviews.

#### 3.3.2 Sample and Recruitment

Cognitive interview participants were sampled in alignment with the larger study's inclusion criteria.

In conjunction with NCLD, WestEd recruited five young adults to participate in cognitive interviews via email. The young adults were recruited through NCLD's Young Adult Advisory Board. To be eligible, the young adult participants needed to (1) be 18–24 years of age, (2) have a self-reported formal identification of a Specific Learning Disability and/or self-reported difficulties with reading, writing, and/or mathematics that affect their daily life, and (3) have been educated in the United States during their K–12 educational years. We recruited participants across any gender and race/ethnicity. All recruited young adults were currently in postsecondary educational institutions or had graduated from one.

#### 3.3.3 Data Analysis

Data was collected during the course of each interview via tracked changes and comment boxes in a copy of the survey in Google Docs, and interviews were rewatched for additional reflective analysis. Notes were recorded regarding how respondents interpreted and answered questions, their mental and emotional reactions to items, and areas that needed additional clarification. Notes from each set of survey interviews were aggregated into one version of the survey in Google Docs for analysis. We then used thematic analysis (Braun & Clarke, 2006) to analyze the notes and tracked changes in each survey to elucidate common themes and areas for revision.

#### 3.3.4 Findings

The cognitive interviews generated several key areas of revision. In general, we edited survey items and response options for refinement related to syntax and semantics, and to increase clarity. Table 6 provides examples of how the survey was altered based on feedback.

Additionally, we made structural changes to the survey by adding directions for each main block of questions, moving block descriptors to separate pages to ensure they would not be overlooked by respondents, breaking question blocks into smaller sets of questions to reduce cognitive load and fatigue, and adding "Other" with a fillable textbox to allow for additional nuance. Finally, based on participant recommendations, we included an open-ended question at the conclusion of the survey reading "Is there anything else about your experiences with your learning disability that you think we should know?"



#### Table 6. Survey Design: Example Changes Following Cognitive Interviews

| Revision Type           | Original Item   | Revised Item   |
|-------------------------|---|--|
| Syntax and<br>Semantics | The level of academic support I received<br>in high school prepared me for life after<br>high school.     | The level of academic support I received from my high school prepared me for life after high school. |
|                         | I am attending a postsecondary school or<br>program (e.g., vocational, business, or<br>technical school). | I am attending a college, university, or vocational, business, or technical school.                  |
| Editing for clarity     | Caregivers  | Caregivers, parents, or family members   |
|                         | What is your highest level of education?  | What is the highest level of education that you have completed?                                      |

When discussing the survey as a whole, participants across both conditions reflected on several constructs they believed were missing or inadequately represented in the survey items and response options. In the young adult cognitive interviews, participants highlighted the need for additional survey items related to self-advocacy, mental health, disability pride and identity, and relationships. The following items were added to the survey based on feedback from the cognitive interview participants.

#### Self-advocacy

- I feel comfortable asking my instructors for the supports I need.
- My high school classes prepared me to advocate for my needs after high school.
- I had to fight for my disability rights at my high school.
- I feel comfortable asking my employer for the supports I need.
- I am aware that I have certain legal rights and protections because I am a person with a disability.
- I know where to access information about disability rights.
- I have talked to someone about my legal rights and protections about my disability.
- I am comfortable advocating for my rights under disability laws.
- I get the supports I need without feeling that I am different or a burden.



#### Mental health

- I didn't feel supported by my high school.
- My learning disability negatively affects my mental health.
- My learning disability positively affects my mental health.
- My learning disability does not have an effect on my mental health.
- My school was a supporting and inviting place for students to learn.

#### Disability pride and identity

- Disability is a natural part of life.
- Disability has a huge impact on a person's life.
- People without disabilities ignore people with disabilities.
- People become impatient with people with disabilities.
- Our society fails to accommodate people with disabilities.
- People with disabilities are discriminated against.
- My learning disability has a positive impact on me.
- My learning disability is a part of who I am.
- I am proud to have a learning disability.
- I feel comfortable telling friends or romantic partners I have a learning disability.

#### Relationships

- I was bullied by my peers because of my learning disability.
- I was bullied by my teachers because of my learning disability.
- I felt like my teachers wanted me in their classes.
- Growing up, I saw that a person with a disability could be successful in life.
- Growing up, my family understood how my disability impacted me.
- My family currently understands how my disability impacted me.
- My friends understand how my disability impacts me.

In addition to the above changes, the cognitive interview participants also provided feedback on a few items that, based on consensus between WestEd and NCLD, we elected to retain in their original form or chose not to include. For example, within the demographics section, participants questioned the options provided for the race/ethnicity question and wanted the



ability to choose more than one option. However, we elected to keep the question as a forced choice to one response to retain alignment with IDEA Section 618 data.

#### **3.4 Final Young Adult Survey**

The final Young Adult Survey incorporated feedback from the cognitive interviews and testing on the Qualtrics platform and totaled a maximum of 85 total items (83 closed and two openended items; see Appendix C). Due to concerns about survey length and respondent fatigue, we prioritized blocks based on postsecondary enrollment and current employment. In other words, all survey respondents indicated whether they (1) were currently enrolled at a postsecondary institution, (2) attended a postsecondary institution but did not finish, (3) graduated from a postsecondary institution, or (4) have never gone to a postsecondary institution. Individuals who are currently attending a postsecondary institution received additional items about postsecondary enrollment and did not receive any items about employment status. All other types of postsecondary enrollment (i.e., attended but did not finish, graduated, never attended) were asked about their current employment status. Furthermore, the block focused on Thriving/Surviving was placed near the end of the survey to account for level of comfort in answering personal and sensitive topics. Additionally, to account for survey fatigue, the Adaptive and Daily Living Skills; Community, Social, and Financial Supports; and Mental Health blocks were randomized. Lastly, respondents were able to leave the survey and reenter the survey where they left off to complete the survey later. Survey respondents were marked incomplete if a week had passed between the last time a survey response was edited and the present date.

Figure 3 below shows the survey block flow. Based on this flow, all survey respondents received the Inclusion Criteria; Demographics; High School; Adaptive and Daily Living; Community, Financial, and Social Supports; Mental Health; and Thriving/Surviving blocks for a total of 65 items (63 closed and two open-ended items). Survey length would then vary based on whether the young adult was currently attending a postsecondary institution, currently employed, or currently unemployed. Thus, the minimum survey length would be 68 items (66 closed and two open-ended items) for young adults who are currently unemployed, while the maximum survey length would be 84 items (81 closed and three open-ended items) for young adults who are currently enrolled at a postsecondary institution.



#### Figure 3. Survey Design: Survey Block Flow





## 4. Methods

Below we describe our process for recruitment of participants, construction of the analytic sample, and data analyses.

#### 4.1 Recruitment and Sampling Procedure

Because we aimed to achieve a nationally representative sample while balancing costs, we planned to recruit participants primarily through digital methods and the Internet. First, the Internet is increasingly used as a low-cost tool for data collection (Storozuk et al., 2020) due, in part, to increased use of the Internet. Approximately 93% of U.S. adults used the Internet in 2021, compared to only 52% in 2000 (Pew Research Center, 2021a). Subsequently, the number of online surveys in published research has grown from 40 in 2007 to 255 in 2014 (Wu et al., 2022). Second, surveys administered online can access hard-to-reach populations (Storozuk et al., 2020): 80% of adults (and at least 60% of adults in every sociodemographic category) in the United States use social media (Pew Research Center, 2019) and, most important, 70% of 18- to 29-year-olds use Facebook (Pew Research Center, 2021b).

Our design aimed to combat issues noted when using social media for survey recruitment such as responses overrun by bots and responses submitted by individuals who do not actually meet the eligibility criteria (Chandler & Paolacci, 2017; Yarrish et al., 2019)—by using river sampling, a type of nonprobability sampling common in online survey research. River sampling, or intercept or real-time sampling (Yun & Trumbo, 2000), involves attracting participants by posting a survey link on a website, in an email, or in another prominent location to capture the attention of the sample of interest (Lehdonvirta et al., 2020). In river sampling, researchers reach into a site's user stream, much like dipping into a river, to gather a portion of the passing users for the study.

By using social media and river sampling, we leveraged the reach of existing organizations that communicate with our sample of interest to disseminate information about our survey. In this way, we did not use targeted ad campaigns on social media or existing panels or pools of individuals willing to take a survey (e.g., Amazon Mechanical Turk)—methods often fraught with low data quality and multiple responses by bots or the same individual (Aruguete et al., 2019; Chandler et al., 2014)—but instead asked specific organizations to disseminate our survey. For example, instead of creating a project page and using a Facebook ad campaign targeted to social media users who meet our sample of interest, we reached out to Facebook page administrators of groups that interact with our sample of interest to post about our survey within their page or group.



Our recruitment procedure consisted of five steps (Figure 4) that will be explained in greater detail below:

- **1.** Initial site recruitment
- 2. Survey dissemination via organizations
- 3. Inclusion criteria screening and survey administration
- 4. Monitoring of respondents and additional site recruitment
- 5. Disbursement of stipend

#### Figure 4. Survey Methods: Procedure for Participant Recruitment and Enrollment



#### 4.1.1 Initial Site Recruitment

Initial site recruitment involved a multipronged approach to identify individuals who meet inclusion criteria for our sample. The first step was to collaboratively develop a list of organizations, community-service providers (e.g., parent advocacy groups, teachers' unions), and additional projects NCLD and/or WestEd have existing partnerships with that communicate with our samples of interest. Next, we contacted these organizations to determine whether they would be interested in sending out our survey. The list of organizations from this initial wave of recruitment is provided in Table 7. This list represents organizations that were directly contacted by either WestEd or NCLD and does not necessarily represent all organizations contacted about the survey, as word-of-mouth may have snowballed into additional


organizations sharing information about the survey. For example, WestEd posted about the survey on Twitter/X, and individuals seeing the post may have passed along the information to additional individuals or organizations.

Because river sampling can be negatively impacted by coverage bias stemming from the digital divide (e.g., unequal access to the Internet; Lythreatis et al., 2022), our initial site recruitment list was intentionally broad to cast a wide net through diverse avenues to reach potential participants. For example, we included Facebook groups that are primarily for parents of children with disabilities in an effort to leverage parent networks to reach young adults.

## Table 7. Survey Methods: Site Recruitment—First Wave

| Organization   | Description  |
|--|--|
| NCLD Young Adult Email List                              | Email listserv housed by NCLD  |
| NCLD social media  | Social media (i.e., Twitter/X, LinkedIn, Facebook) pages run by NCLD   |
| WestEd social media                                      | Social media (i.e., Twitter/X, LinkedIn, Facebook) pages run by WestEd   |
| SPED Pro   | Social media site primarily for special education researchers  |
| University of Florida Disability<br>Resource Center      | Disability resource center at the University of Florida  |
| Salt Center  | Disability resource center at the University of Arizona  |
| STEPP Program  | Disability resource center at East Carolina University   |
| Facebook Group—Alachua County<br>Kids with Special Needs | Facebook group primarily for parents or caregivers of children with special needs in Alachua County, Florida   |
| Facebook Group—Spina Bifida Fetal<br>Surgery Group       | Facebook group primarily for parents or caregivers of children with<br>spina bifida. Children with spina bifida often have learning disabilities<br>and other learning difficulties associated with hydrocephalus and<br>unique brain development. |
| College STAR   | Network of professionals who support students who have learning and attention differences  |



| Organization                | Description  |
|-----------------------------|--|
| Eye to Eye                  | Organization whose mission is to improve the educational experience<br>and outcomes of neurodiverse young adults |
| Rural Schools Collaborative | Organization whose mission is to build sustainable rural communities   |

## 4.1.2 Survey Dissemination via Organizations

Organizations that agreed to send out the survey were then provided with a Social Media Toolkit to communicate our survey to their audiences. The Social Media Toolkit (see Appendix D) contained flyers created in collaboration between NCLD and WestEd, a drafted email to be sent directly to potential participants, a drafted blurb as part of an email or newsletter to be sent directly to potential participants, and drafted social media posts for Facebook, Twitter/X, and LinkedIn, as well as social media cards/images. Each included a brief description of our study and a link to take the survey. However, to better protect the survey from bot responses, only the drafted email and blurb sent as part of an email or newsletter included additional information about the survey, as these recruitment methods involved direct communication with potential participants. Based on prior survey studies utilizing similar methods of recruitment (e.g., Arigo et al., 2018; Carter-Harris, 2016), we intentionally excluded specific eligibility criteria in the social media posts to reduce the likelihood of fraudulent or suspicious participants who did not fit our inclusion criteria.

Additionally, to track our recruitment efforts, we used unique survey links for email outreach and each social media outlet. In this way, we could examine patterns and quality of response (e.g., whether we received increased response from email or a particular social media platform, whether respondents recruited from Facebook contained more bot responses than from Twitter/X).

## 4.1.3 Inclusion Criteria Screening and Survey Administration

Once survey respondents consented to participate in the study (see consent form in Appendix E), they were presented with our inclusion criteria screening block to determine whether they were eligible. Individuals who met criteria could immediately continue to the survey, while those that did not were thanked for their time and routed to the end of the survey.

We deviated from this process after two months of survey administration. Survey responses collected from January 8, 2024, 12 a.m., to February 22, 2024, 12 a.m., exhibited (1) a high volume of responses for the length of collection (e.g., hundreds of responses in a few hours; Pozzar et al., 2020) and (2) responses fraught with fraudulent and suspicious indicators (described below). To discourage and potentially limit bot or bad actor access to the survey, we



began utilizing a delayed access or two-stage access. Thus, we divided the survey into two separate surveys: (1) interest survey and (2) survey. The interest survey provided a brief description of the survey and asked those interested in taking the survey to provide their email address. A link to the survey was then emailed to the provided email address after one hour. While wait times for survey access are typically longer (e.g., 24 hours), we did not want to discourage legitimate participants. We used the delayed access survey structure from February 22, 2024, 12 a.m., until the survey closed on May 3, 2024, 12 a.m.

Additionally, surveys administered from April 22, 2024, 9:30 a.m., to May 3, 2024, 12 a.m., required participants to be Hispanic or Latino to continue to the survey. This was done due to the low recruitment of survey respondents from these backgrounds.

## 4.1.4 Monitoring of Responses and Additional Site Recruitment

Management of survey respondents involved periodic review of survey responses as they were recorded and collected through Qualtrics. These reviews (1) monitored the progress of data collection (e.g., number of respondents by target group), (2) allowed us to examine data quality (e.g., fraudulent or suspicious survey responses), and (3) allowed us to identify any problems with survey administration (e.g., whether respondents could adequately access and respond to open-response items) and survey items (e.g., whether a high proportion of respondents dropped out of the survey at a specific item, topic, or subtopic; Dillman et al., 2014). Because nonresponse can lead to responses that are systematically different or biased (Dillman et al., 2014), these nonresponse rates were used to examine potential patterns across subgroups, such as by demographics, item type, and topic or subtopic area.

Furthermore, because we aimed to approximate a nationally representative sample, we used periodic review of survey responses to guide more targeted recruitment efforts for demographic groups with low response rates. To increase response from groups of low response, we implemented additional waves of recruitment (Table 8). These organizations and institutions were selected based on their purpose and reach to demographic subgroups exhibiting low response. For example, specific contacts at postsecondary institutions were selected based on low response from those states.

| Organization                                      | Description   |
|---|---|
| National Coalition of Latinx with<br>Disabilities | Organization seeking to improve the lives of Latinx individuals with disabilities |

## Table 8. Survey Methods: Site Recruitment—Second Wave



| Organization   | Description  |
|--|--|
| National Center for College<br>Students with Disabilities                | Organization focused on providing technical assistance regarding disability and higher education |
| National Association of College<br>Admission Counseling                  | Organization seeking to help students make decisions about pursuing postsecondary education      |
| Decoding Dyslexia  | Parent-led network that aims to increase dyslexia awareness and support students with dyslexia   |
| Smart Kids with Learning<br>Disabilities                                 | Organization seeking to help children with learning and attention differences                    |
| University of Oklahoma   | Postsecondary institution  |
| Missouri State University  | Postsecondary institution  |
| Ohio State University  | Postsecondary institution  |
| Utah State University  | Postsecondary institution  |
| Landmark College   | Postsecondary institution specifically for students with learning disabilities                   |
| Vocational Rehabilitation at the<br>Tennessee Department of<br>Education | Vocational rehabilitation center at the Tennessee Department of Education                        |
| Churchill Center   | Organization that provides professional development for language-<br>based learning disabilities |

## 4.1.5 Response Rate

Response rate was calculated as the number of survey respondents who met inclusion criteria divided by the number of survey respondents who completed the inclusion criteria block. This calculation is sometimes referred to as an eligibility rate (American Association for Public Opinion Research [AAPOR], 2016). We utilized this calculation (instead of a traditional response rate calculated as the number of survey completers divided by all sample members; Valliant et al., 2018) for two reasons. First when river or real-time sampling (e.g., nonprobability sampling) is used, the denominator of survey respondents asked to take the survey is unknown (AAPOR,



2016). In online survey research where recruitment primarily occurs through social media, it is nearly impossible to estimate the number of individuals who fit the sample criteria and visited the recruitment site but did not participate in the survey.

Second, because river sampling dips into a site's user stream, individuals who would not necessarily fit the sample of interest may still take the survey. In our survey, recruitment avenues (e.g., state and national organizations, postsecondary institutions, parent advocacy groups) included individuals who do not fit criteria for our sample of interest. For example, not all individuals at postsecondary institutions who receive services or support from a disability resource center will have LD. If a sampling frame were used, these individuals could not potentially take the survey as they would not fit the sample frame criteria. Thus, calculating response rate as a proportion of survey respondents who met inclusion criteria divided by the number of survey respondents who completed the inclusion criteria block is a more accurate depiction of response rate.

## 4.1.6 Disbursement of Stipend

A monetary stipend was included to increase participation broadly and to increase participation from particular groups of interest. Due to concerns about survey length, achieving a nationally representative sample, and recruiting hard-to-reach groups, young adults who completed the survey received a \$20 Amazon.com Gift Card; however, receiving the stipend was contingent on a review of data quality for the completed survey (see below) in order to maintain integrity of the survey (Eckerd et al., 2021). Additionally, remuneration was limited to one gift card per participant. Survey studies with similar samples have reported encouraging findings when using an incentive. For example, a study of survey length and compensation found that participation from the 18- to 34-year-old age group significantly increased when surveys were offered with compensation and that there was greater representation of persons of color compared to surveys that did not offer compensation (Kost & de Rosa, 2018).

Upon completion of the survey, participants were routed to a contact information form to provide their first and last name and email address. Personal contact information (i.e., first name, last name, email address) was kept separate from survey responses, and, following data quality checks, participants were emailed only about receiving the stipend. Because the stipend form and survey were separate surveys with no personal contact information collected within the survey, we utilized the survey response identifier as the key to link responses to the survey and responses to the stipend contact form. Within Qualtrics, the ResponseID variable is a unique string of numbers and letters to identify each response (Qualtrics, 2024b), and each response to a survey is assigned a ResponseID. We used embedded data to "pull" the ResponseID from the survey into the stipend contact form. In this way, if a survey is flagged as fraudulent and needs to be removed from the sample (described below), we were also able to remove the respondent's associated contact information from the stipend form.



## **4.2 Construction of the Analytic Sample**

To construct the analytic sample (see Figure 5), we first conducted data quality checks and applied fraudulent and suspicious criteria to identify and remove respondents who exhibited human or nonhuman bot activity, then applied weights to approximate a nationally representative sample.



## Figure 5. Survey Methods: Procedure for Construction of the Analytic Sample

## 4.2.1 Data Quality Checks and Removal Decisions

We used data quality checks to periodically screen and flag survey responses for fraudulent or suspicious activity due to the propensity of human and nonhuman bots to take online surveys (Al-Fannah, 2017; Chandler & Paolacci, 2017; Prince et al., 2012). Suspicious activity consisted of responses that could reasonably be due to error or coincidence (e.g., typos, intentional nonanswers), while fraudulent activity consisted of responses that were likely due to automation or respondent misrepresentation (Pozzar et al., 2020). A summary of each indicator and its associated fraudulent or suspicious designation is provided in Table 9, and more detailed descriptions are provided below.



## Table 9. Survey Methods: Fraudulent and Suspicious Criteria

| Indicator   | Designation |
|---|-------------|
| Evidence of inattention   |             |
| Survey completion time < 5 minutes  | Fraudulent  |
| Duplicate or unusual response to open-ended items   |             |
| Response to open-ended item provided in a language other than English                                 | Fraudulent  |
| Exact response (1) across all open-ended items or (2) of more than three words to any open-ended item | Fraudulent  |
| Response is obviously irrelevant to item  | Fraudulent  |
| Response is a nonanswer   | Suspicious  |
| Inconsistent responses to verifiable items  |             |
| Reported IP address is outside of the United States   | Fraudulent  |
| Evidence of bot automation or bad actors  |             |
| Response provided to one or more hidden items   | Fraudulent  |
| Multiple survey responses from the same IP address  | Fraudulent  |
| Embedded survey data for recruitment source does not align with valid options                         | Fraudulent  |
| reCAPTCHA score less than 0.5   | Fraudulent  |
| Multiple incentive submissions from the same survey ResponseID  | Fraudulent  |
| No matching survey ResponseID across survey and incentive form  | Fraudulent  |
| Duplicate email addresses on the incentive form   | Fraudulent  |



| Indicator   | Designation |
|---|-------------|
| Amazon.com Gift Card undeliverable due to invalid email address     | Fraudulent  |
| Duplicate email address on Young Adult and Educator incentive forms | Fraudulent  |
| Duplicate IP address on Young Adult and Educator Surveys            | Fraudulent  |

## 4.2.1.A Evidence of Inattention

The Evidence of Inattention criteria contained one fraudulent indicator based on the amount of time used to complete the survey. While some (e.g., Teitcher et al., 2015) recommend using duration cutoffs of two standard deviations above or below the mean completion time, most items on the Young Adult Survey were multiple-choice and, based on cognitive interviews, were not cognitively taxing or time-consuming to answer. Total survey durations less than 5 minutes (300 seconds) were considered fraudulent.

#### 4.2.1.B Duplicate or Unusual Response to Open–Ended Items

The Duplicate or Unusual Response to Open-Ended Items criteria focused on the open-ended items within the survey and included the following fraudulent/suspicious indicators: (1) response provided in a language other than English, (2) exact response across all open-ended items or exact response of more than three words to any open-ended item, (3) response obviously irrelevant to item, and (4) response that is a nonanswer. Each of these indicators (described in greater detail below) were applied to the five open-ended response items in the Young Adult Survey:

- **1.** What is your major or course of study? (Q6.8)
- 2. What is your primary job title? (Q7.4) (or for those with only one job, "What is your job title?" [Q7.5])
- What is your hourly wage for this job? Please enter using dollars and cents (e.g., 7.50). (Q7.9)
- 4. What are three things that make someone successful in life? Please use words or phrases in the boxes below. (Q11.2)
- 5. Is there anything else about your experiences with your learning disability that you think we should know? (Q11.11)

Each open-ended item was required to answer; however, respondents could continue so long as the open-response item contained a minimum of two characters. For example, a survey



respondent could enter in any two characters (e.g., no, na, ew, bs, po) to continue to the next survey item.

Lastly, when reviewing the final sample, these criteria were also applied to text responses from items where a write-in option was provided (e.g., "Other" with a textbox to type in; see survey in Appendix C).

#### Response provided in a language other than English

In this indicator, each open-response item was examined to determine whether the response was provided in English, as each open-ended response was required to be in English. A survey respondent was flagged as fraudulent if an entire response to an open-ended item was provided in a language other than English, or the open response was a mix of English and non-English words. We utilized the cld2 (Ooms, 2022), cld3 (Ooms, 2023), and textcat (Hornik et al., 2013) packages in R to examine responses. The cld2 package probabilistically detects more than 80 languages, ideally using at least 200 characters. When using the detect language function, the cld2 package returns the top three languages detected or NA (not available) if the language cannot reliably be determined. The cld3 package utilizes a neural network model for language identification and, while being the successor to the cld2 package, is still in its experimental phase. Similar to cld2, the detect language function of the cld3 package returns the language or NA if the language cannot reliably be determined. Lastly, the textcat package uses existing language profiles to match and identify the language of input texts (i.e., text from open-response items). The textcat function returns the detected language based on the existing language profiles.

All three packages detect the language of the input text. In other words, each package was used to determine what language respondents typed their open-response answers in. Due to differences in how each package detects language (e.g., neural network model vs. Bayesian), we utilized results from all three packages where survey responses that returned "English" from all three packages automatically passed this indicator; all other responses were individually reviewed. In this way, we were able to affirmatively determine whether responses marked as not English should be flagged as fraudulent and excluded from the survey sample.

## Exact response across all open-ended items or exact response of more than three words to any open-ended item

First, survey responses were flagged as fraudulent if more than one respondent utilized the exact same text across all open-response items. While it is plausible that more than one individual would respond the exact same way across all five open-response items, we find it highly unlikely that no variation in spelling, spacing, or capitalization would occur. Thus, respondents who utilized the same responses across all five open-ended items were flagged as fraudulent. This did not apply to nonanswers (e.g., instances where multiple survey respondents put "No" for all open-ended items). To examine this indicator, all five open-respondent response items were pasted into a string variable where strings with more than one respondent



were examined. For example, four survey respondents had the following string "We-media major,,,,Believe you can,You must have hope in life,Must have a dream,In life there will be a lot of strange sunshine, others do not like to communicate with me," and all four were flagged as fraudulent and removed from the sample.

Next, exact responses of more than three words to any open-ended item were flagged as fraudulent. Because we expected similar responses from respondents in similar situations, we used only two of the five items to examine fraudulent or suspicious behavior. For example, respondents who are waiters or waitresses will likely use the same words to describe this occupation. Thus, we used only "What are three things that make someone successful in life?" and "Is there anything else about your experiences with your learning disability that you think we should know?" in examining exact responses of more than three words. For the item where we ask respondents to list three things that make someone successful in life, three separate text boxes are provided (one box for each thing). To examine this fraud indicator, we combined the text in box 1, box 2, and box 3 into one variable using the paste function in R to examine similarities in exact responses across this specific item. Respondents who entered the exact same three factors that totaled to more than three words were marked as fraudulent and removed from the sample. For example, five respondents entered "Cheerful mind, Sincere friendship, Optimistic mood" with no variations in spelling, spacing, or order, and all five were flagged as fraudulent. Within this item, we made exceptions for responses such as "No, No, No" and other phrases indicating respondents did not want to answer (e.g., "NA, NA, NA", "yes, yes, yes").

For the item where we ask respondents if there is anything else about their learning disability that they thought we should know, we flagged respondents as fraudulent if the exact same response of more than three words was provided. For example, 22 survey respondents responded with "My experiences with my learning disability have been both challenging and enlightening. While it can be frustrating at times, it has also taught me resilience and the importance of finding alternative ways to learn and adapt. I've discovered that everyone's journey with a learning disability is unique, and it's essential to approach it with empathy and understanding" (57 total words). We find it highly unlikely that 22 unique individuals would reply using the exact same answer with no variations in spelling or spacing. Within this item, we made exceptions for responses such as "None," "Not at this time," "Not currently," and other phrases indicating respondents had nothing else to share.

Lastly, given the propensity of online surveys to attract human or nonhuman bots, we were concerned about survey respondents utilizing ChatGPT or other artificial intelligence and machine learning programs to fill out the survey. Given the distinctive format of ChatGPT, where a noun or phrase is often followed by a colon (e.g., "Resilience and Persistence: Success often requires facing challenges and setbacks."), responses to open-ended items that followed this format were marked as fraudulent under this indicator, regardless of word count.



#### Response obviously irrelevant to item

Survey respondents were flagged as fraudulent on this indicator if a response to an open-ended item was obviously irrelevant to the question asked. For example, a survey respondent entered "I am not going back and looking at it now because it looks really bad but it looks like it was a good deal and the price" in response to "Is there anything else about your experiences with your learning disability that you think we should know?" Like other indicators in this section, we did not flag nonanswer responses (e.g., NA) as fraudulent.

#### Response that is a nonanswer

Responses were flagged as suspicious if a response was a nonanswer—for example, if, instead of answering the open-response item, the respondent entered a string of letters (e.g., "dwsdw"). Responses that met this criterion were flagged as suspicious but retained in the sample for two reasons. First, the Young Adult Survey was relatively long, ranging from 65 to 85 items depending on postsecondary and employment status. Though the Young Adult Survey primarily consisted of multiple-choice items, answering 65–85 items may be cognitively taxing, and participants may be tired of taking the survey by the time they were asked to answer an open-response item. Second, all items were required to answer, and open-ended items required to answer, we did not want to unnecessarily exclude survey respondents who did not provide a fully fleshed out open-response answer if they were simply tired of taking the survey. Further, given the length and topics of the survey, young adults ages 18–24 with LD may not want to answer an open-ended item. Given these conditions, we did not want to unnecessarily exclude survey respondents who provided a nonanswer to an open-ended item, so these survey responses were flagged as suspicious but retained in the sample.

#### 4.2.1.C Inconsistent Responses to Verifiable Items

We included one indicator in this section. Because our inclusion criteria target young adults ages 18–24 with LD currently living in the United States, we used respondents' IP addresses (as well as longitude and latitude) as a proxy for their geographic location. Respondents whose locations were outside of the United States were marked as fraudulent and removed from the sample. Though it is possible survey respondents located within the United States may use a virtual private network (VPN) to conceal their IP address and thus their location, we included this indicator due to the widespread recruitment efforts over social media.

#### 4.2.1.D Evidence of Bot Automation or Bad Actors

We included several indicators to attempt to identify human and nonhuman bots. Some indicators were applied within responses to the Young Adult Survey, while others were applied to responses collected from both the Young Adult Survey and the Educator Survey.



#### Response provided to a hidden item

Any response to a hidden item indicated fraudulent activity, and the respondent was removed from the sample.

#### Multiple survey responses from the same IP address

Multiple survey responses from the same IP address were also used to indicate fraudulent activity. While it is plausible that multiple respondents might have used the same device to take the survey, it is also plausible that a single respondent might have attempted multiple submissions to receive multiple survey stipends. Thus, all respondents with duplicated IP addresses were marked as fraudulent and removed from the sample. Because (1) survey respondents were able to exit and return at a later time to complete the survey and (2) survey responses were marked as incomplete only if a week had passed without any activity, it is highly unlikely that a duplicate IP would be due to a single survey respondent completing the survey over time.

#### Embedded survey data for "source" does not align with valid options

Respondents were flagged as fraudulent and removed from the sample if the embedded data captured from the survey link did not align with what we created to track recruitment. In planning recruitment, we created several unique survey links to track the number of respondents by recruitment method. For example, we created a survey link for Facebook, a survey link for Twitter/X, and so on. The embedded data feature in Qualtrics captured these recruitment efforts based on the links we created. We flagged respondents as fraudulent if embedded data that we did not create was present. For example, "email" and "facebook" were embedded data elements we created, but "email." was not, so respondents with "email." were flagged as fraudulent and removed from the sample.

#### reCAPTCHA score less than 0.5

We included one indicator based on reCAPTCHA scores. In Qualtrics, a reCAPTCHA score greater than or equal to 0.5 indicates the respondent is likely human, while a score less than 0.5 suggests the respondent is likely a bot (Qualtrics, 2024a). Thus, we marked respondents with reCAPTCHA scores less than 0.5 as fraudulent and removed them from the sample.

#### Multiple incentive submissions from the same survey response ID

This indicator utilized the survey response identifier as recorded on the stipend contact form. If a survey response identifier appeared more than once on the stipend form, the associated survey responses were flagged as fraudulent and removed from the sample.

#### No matching survey response ID across survey and incentive form

This indicator utilized the survey response identifier as recorded on the stipend contact form. Because the stipend contact form automatically collects the survey response identifier through embedded data, the same survey response identifier would appear on both the survey and on



the stipend form. Thus, survey responses were removed if there was not a matching identifier when comparing the survey and stipend contact form.

#### Duplicate email addresses on the incentive form

Duplicate email addresses on the stipend contact form were also used to indicate fraudulent activity, as duplicate email addresses (even in combination with unique survey response identifiers) indicated a single individual was attempting to receive multiple survey stipends.

#### Amazon.com Gift Card undeliverable due to invalid email address

Survey responses were removed and marked as fraudulent if, after sending the stipend via email, the email was bounced back or undeliverable.

#### Duplicate email address on the Young Adult Survey and Educator Survey incentive forms

Both the Young Adult Survey and the Educator Survey were collecting responses at the same time. Because participants were recruited using social media where some organizations were recruiting for both surveys (e.g., WestEd social media posted about the Young Adult Survey and the Educator Survey), we were concerned human and nonhuman bots would take both surveys in an attempt to receive both survey stipends, a total of \$30 in Amazon.com Gift Cards (\$10.00 for completing the Educator Survey and \$20.00 for completing the Young Adult Survey. While it is plausible that some young adults ages 18–24 with LD would also be K–12 educators who teach students with LD, the potential risk of including numerous human and nonhuman bot responses in both surveys outweighed this potential benefit. Thus, survey responses were flagged as fraudulent and removed from the sample if the same email address appeared on both the Young Adult Survey and the Educator Survey stipend forms.

#### Duplicate IP address on the Young Adult Survey and the Educator Survey

Similar to the above indicator, survey responses were flagged as fraudulent and removed from the sample if the same IP address appeared on both the Young Adult Survey and the Educator Survey.

#### 4.2.1.E Removal Decisions

Prior to administration of the survey and in line with best practices for data integrity and transparency (Buchanan & Scofield, 2018; Pozzar et al., 2020), we established a priori removal rules. Survey responses were excluded from analysis and participants did not receive a stipend if there was any fraudulent activity.

Survey responses that exhibited any fraudulent activity were removed, and survey responses that contained one suspicious indicator were included in the sample but flagged as suspicious. Survey responses with no fraudulent or suspicious activity were considered legitimate. Lastly, surveys partially completed by the close of the survey window were excluded from analysis.



In reviewing the quality of survey data and applying the fraudulent and suspicious criteria, we documented which participants were removed and for which reason (see "Results" section below).

## 4.2.2 Missing Data

All survey items were marked required to answer. Nonanswers to open-response items (e.g., NA, No) were removed prior to thematic coding (see below). Additionally, all Likert scale options were included in analysis, with the exception of "Not applicable." For example, we use a 6-point Likert scale where "I am not aware of disability laws" is one of the options. In cleaning the data, "I am not aware of disability laws" was coded with a numeric value. Conversely, we use a 6-point Likert scale where "Not applicable" is one of the options. In this case, "Not applicable" was dropped and not assigned a numeric value.

## 4.2.3 Weighting

Prior to analyses, survey responses were weighted by gender, race/ethnicity, and geographic division to achieve a nationally representative sample. In survey methods, weighting can be used to adjust a survey sample for unrepresentativeness and/or nonresponse bias (Valliant & Dever, 2018), particularly when nonprobability sampling methods are used (Caughey et al., 2020). Population-level inferences from observed, unweighted survey samples force us to make assumptions about how respondents were sampled and why respondents decided to respond (Caughey et al., 2020). Adjustment weighting, or calibration weighting, can decrease variance, correct for bias, and adjust for nonresponse (Valliant et al., 2018) and includes methods such as raking or post-stratification (Deville & Särndal, 1992). Importantly, calibration can ameliorate nonresponse bias only to the extent that the target variables predict response probabilities and outcome values.

In essence, when adjustment or calibration weights are included, the survey sample is weighted to population-level estimates obtained from auxiliary data sources (e.g., census data, administrative records; Caughey et al., 2020). Typically, data from auxiliary sources will contain population-level estimates for either marginal (e.g., estimates for race, estimates for gender) or joint distributions (e.g., estimates for interaction of race and gender) for the variables of interest (Caughey et al., 2020). Generally, joint distributions are preferred over multiple marginal distributions, as multiple marginal distributions can introduce some bias because the auxiliary variables are additive instead of interactive (Caughey et al., 2020). A measurement model is then used to relate information from auxiliary sources to the true population distribution. Different weighting methods can be used based on whether marginal or joint distribution is assumed (e.g., entropy weighting vs. linear weighting), but the difference across methods is generally small (Kalton & Flores-Cervantes, 2003). When separate marginal distributions are used (as is the case with the Young Adult Survey sample), target weights can be estimated in the following ways: (1) raking weights based on marginal distributions (e.g.,



separate weights for each variable of interest; Berinsky et al., 2011; Valliant et al., 2018), (2) synthetic joint population weights created from observed marginal proportions (e.g., using the marginal distributions to estimate interactions to create a joint distribution; Leeman & Wasserfallen, 2017), or (3) ecological inference, which incorporates auxiliary information from multiple sources to estimate the interaction of multiple target variables (Freedman, 2001; King et al., 2004).

We utilized raking weights for two reasons. First, auxiliary information on national estimates for cross-classifications of LD and gender, race/ethnicity, and state are unavailable. Though national surveys (e.g., U.S. Census, ACS, CPS) provide estimates for disability by gender, race/ethnicity, and state, "disability" is typically defined as severe hearing or vision impairment; significant ambulatory issues; or severe difficulties with learning, remembering, concentrating, dressing, bathing, or going outside the home (U.S. Census Bureau, 2021b) and would not provide accurate estimates of young adults ages 18–24 with LD. Second, raking is often used when the sample sizes in some cells would be small if all variables of interest were cross-tabulated (Valliant & Dever, 2018). Given our interest in weighting by gender, race/ethnicity, and U.S. Census division, we expected small cell sizes if all three traits of interest were crossed. When raking weights are estimated using the survey package, standard errors are estimated via Taylor series linearization (Valliant et al., 2018).

Because calibrating a sample to estimate population controls contributes to the variance of an estimator, especially when nonprobability samples are used (Valliant et al., 2018), we also examined the variance of estimators after raking weights were applied using the Kish (1965; 1992) design effect due to having unequal weights. The Kish measure is calculated as one plus the relvariance of the sample weights and interpreted as the increase in variance of an estimator due to having weights that are not the same (Valliant et al., 2018).

## 4.3 Data Analysis

After removing fraudulent responses, data were cleaned and analyzed. Data analyses were conducted using the weighted sample. Below we describe the data cleaning process and additional planned analyses.

## **4.3.1** Data Cleaning and Variable Creation

First, data were cleaned based on intended direction or level of assumed construct and in relation to existing surveys.

## 4.3.1.A Coding and Recoding

Across multiple-choice and Likert-type items, items were coded so a higher value on the item indicated a higher level of the assumed construct or intended outcome. For example, "I had a



teacher or another adult at my school who made me feel supported" was answered using a 5point Likert scale for level of agreement (Strongly disagree, Disagree, Undecided, Agree, Strongly agree). Responses for this item were coded so that a higher level of agreement was associated with a higher numeric value. In other words, "Strongly disagree" was coded as 1, "Disagree" as 2, "Undecided" as 3, "Agree" as 4, and "Strongly agree" as 5.

To be consistent across items, some multiple-choice or Likert-type items were reverse coded. For example, "I had to fight for my disability rights at my high school" was answered using a 5point Likert scale for level of agreement (Strongly disagree, Disagree, Undecided, Agree, Strongly agree), but responses to this item were coded so "Strongly disagree" was coded as 5, "Disagree" as 4, "Undecided" as 3, "Agree" as 2, and "Strongly agree" as 1. Across both example items, a higher numeric value is associated with the intended outcome (e.g., feeling supported by an adult or teacher at their high school, not having to fight for their disability rights during high school).

Across survey items, we utilized a variety of Likert scales where an unknown, unsure, or undecided option was included (Table 10). These options, considered by some to be nonanswers or missing data (e.g., Lee et al., 2021), were included in analyses and coded in relation to the other Likert scale options.

| Likert Scale   | ltem(s)  |
|--|--|
| Level of agreement using a 5-point Likert scale: Strongly disagree, Disagree,<br>Undecided, Agree, Strongly agree  | Q5.13, Q5.14, Q7.16,<br>Q7.17, Q9.4, Q9.6,<br>Q9.7, Q9.8, Q11.10 |
| Level of agreement using a 6-point Likert scale: Strongly disagree, Disagree,<br>Undecided, Agree, Strongly agree, I am not aware of disability laws             | Q9.5   |
| Level of agreement using a 6-point Likert scale: Strongly disagree, Disagree, Undecided, Agree, Strongly agree, Not applicable                                   | Q11.9  |
| Level of difficulty: Very difficult, Difficult, Neither difficult nor easy, Easy, Very easy  | Q6.12  |
| Level of accommodation implementation: Poorly, Not very well, Undecided, Well,<br>Very well, I have not asked to use my accommodations                           | Q6.17  |
| Level of frequency: In none of my classes, In some of my classes, In most of my classes, In all of my classes, My instructors are not aware of my accommodations | Q6.21  |

## Table 10. Likert Scales



| Likert Scale   | ltem(s) |
|--|---------|
| Level of usefulness: Not very useful, Somewhat useful, Very useful, Not<br>applicable, I do not have any workplace accommodations but they would be<br>helpful to me | Q7.15   |
| Level of confidence: Unconfident, Slightly confident, Somewhat confident, Fairly confident, Completely confident   | Q8.13   |
| Level of frequency: None of the time, Some of the time, Most of the time, All of the time  | Q11.3   |
| Level of satisfaction: Very satisfied, Dissatisfied, Neither satisfied nor dissatisfied, Satisfied, Very satisfied   | Q11.4   |

*Note.* Items in the table are identified using the parent item number. For example, Q5.13 asks participants to rate their level of agreement with each of the following statements thinking about their time in high school and lists six statements where each statement's item number is preceded with Q5.13 (e.g., Q5.13\_1, Q5.13\_2, Q5.13\_3, etc.). Only the parent item number (Q5.13) is listed here. See Appendix C for a full list of parent and child items.

### 4.3.1.B Alignment With Existing Surveys

Next, we utilized existing categorization systems to align our results with other surveys. In the Postsecondary block, we ask young adults to type in their current major or course of study at their postsecondary institution. To clean and analyze this open-response data, we utilized the 15-group field of degree classification from the ACS (U.S. Census Bureau, n.d.-a). The ACS is an ongoing annual survey conducted by the U.S. Census Bureau that provides information about jobs, occupations, education attainment, and housing (U.S. Census Bureau, 2024). The ACS asks about field of degree or major for individuals who hold a bachelor's degree or higher. Answers are then coded into the following 15-group classification: (1) Computers, Mathematics, and Statistics; (2) Biological, Agricultural, and Environmental Sciences; (3) Physical and Related Sciences; (4) Psychology; (5) Social Sciences; (6) Engineering; (7) Multidisciplinary Studies; (8) Science and Engineering Related; (9) Business; (10) Education; (11) Literature and Languages; (12) Liberal Arts and History; (13) Visual and Performing Arts; (14) Communications; and (15) Other (U.S. Census Bureau, n.d.-a). Further, we added "Trade" and "Undecided" to capture responses that did not align with the 15-group classification.

Further, in the Employment block, we ask young adults to type in their primary job title (if they hold more than one job) or their job title (if they hold only one job). To clean and analyze this item, we utilized the occupation classification system from the CPS conducted by the U.S. Census Bureau and U.S. Bureau of Labor Statistics (U.S. Census Bureau, 2021c). The CPS is the primary source of monthly labor force statistics and collects information about employment, earnings, and education (U.S. Census Bureau, 2021a). The CPS items about primary and secondary jobs are coded using occupation classification codes and contain 23 detailed groups



and 11 major groups. We utilized the following 23-group classification: (1) Management; (2) Business and Financial Operations; (3) Computer and Mathematical Science; (4) Architecture and Engineering; (5) Life, Physical, and Social Science; (6) Community and Social Service; (7) Legal; (8) Education, Training, and Library; (9) Arts, Design, Entertainment, Sports, and Media; (10) Healthcare Practitioner and Technical; (11) Healthcare Support; (12) Protective Service; (13) Food Preparation and Serving; (14) Building and Grounds Cleaning and Maintenance; (15) Personal Care and Service; (16) Sales and Related; (17) Office and Administrative Support; (18) Farming, Fishing, and Forestry; (19) Construction and Extraction; (20) Installation, Maintenance, and Repair; (21) Production; (22) Transportation and Material Moving; (23) Armed Forces (U.S. Census Bureau, 2020).

Utilizing classification or categorization systems from existing national surveys allowed us to (1) provide insights and make comparisons within and across degree fields and occupations broadly (e.g., representation of young adults with LD across degree fields and occupations) and (2) provide insights about disclosing LD to postsecondary institutions or employers, acquiring accommodations and supports, and perceptions of usefulness of accommodations and supports specifically.

## 4.3.1.C Variable Delineation and Creation

The Young Adult Survey contained multiple-choice and select-all-that-apply items. In some instances, the select-all-that-apply items were delineated into separate variables representing each available option. For example, item 8.10 presents a list of 10 living expenses (e.g., housing, utilities, cell phone bill, Internet, car insurance) and asks young adults to select all that they can afford without public or private help. Because young adults could presumably select different combinations of the 10 options, this item was delineated into 10 variables where each variable represented selecting one of the options. In order words, a variable was created to indicate the number of survey respondents who selected housing, a variable was created to indicate the number of survey respondents who selected cell phone bill, and so on.

## **4.3.2 Structural Equation Modeling of Latent Factors**

Structural equation modeling (SEM) was used to estimate and model latent factors as measured by multiple indicators (Hayduk et al., 2007) as well as examine relationships among plausible constructs (e.g., topics; Kline, 2016). Specifically, we used SEM to evaluate the latent factor structure of survey items hypothesized to pool together and the relations among the latent factors. Furthermore, we used model generation to build, examine, and respecify models. Model generation is typically used in situations when an initial model does not fit the data and is subsequently modified (Kline, 2016). The respecified model is then run with the same data in order to achieve a model that makes theoretical sense, is reasonably parsimonious, and corresponds reasonably with the data (Joreskog, 1993; Kline, 2016). Because the perceptions and experiences of young adults with LD is an under-studied area, SEM model



generation can be used to build beginning theories about the potential latent factors that may affect young adults' perceptions and experiences of special education and transition services in K–12 environments and access to accommodations and supports in postsecondary and work environments. This information can then impact policies and research in this area.

We used multiple goodness-of-fit indices to evaluate model fit, including the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean-Square Error of Approximation (RMSEA), and Standardized Root Mean-Square Residual (SRMR). The following criteria were used to determine whether the model had adequate fit: CFI/TLI ≥ 0.95, RMSEA < 0.06, and SRMR < 0.08 (Hu & Bentler, 1999).

## 4.3.3 Subgroup Analyses

We used subgroup analyses (e.g., correlations, comparisons of means/frequencies of response, analysis of variance [ANOVA]], and/or standardized mean different effect sizes) to compare responses based on respondent characteristics, such as gender and race/ethnicity. More specifically, to examine group differences on latent factors of interest, we used logistic regression and generalized linear modeling.

## 4.3.3.A Creation of Subgroup Variables

Groups of interest included (1) gender, (2) race/ethnicity, (3) geographic division and/or geographic region, (4) co-occurrence with ADHD, (5) co-occurrence with mental health symptoms, and (6) formal LD identification. A summary of the subgroup variables is provided in Table 11.

The gender variable in the Young Adult Survey (Q4.3) included female, male, non-binary, transgender man or transgender woman, other, and prefer not to answer; however, for the sake of parsimony and interpretability we only included male and female where male was used as the reference group.

Similarly, the race/ethnicity variable in the Young Adult Survey (Q4.4) included American Indian or Alaska Native, Asian American or Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Pacific Islander, two or more, other, White, and prefer not to answer as available options. For the subgroup analyses, we used White and non-White where White was used as the reference group.

Geographic division and geographic region utilized the current U.S. state the survey responded lived in (Q4.2) and mirrored the geographic division and geographic region used by the U.S. Census. We used West as the reference group for region and Pacific as the reference group for division.

For co-occurrence with ADHD, we utilized item Q4.7 that asks survey respondents to select all that apply to them where "ADHD" is one response option. Subgroup analyses compared survey



respondents who self-reported ADHD with survey respondents with LD who did not self-report ADHD. Individuals who did not self-report ADHD were used as the reference group.

For co-occurrence with mental health symptoms, we utilized item Q10.2 that asks respondents to select all that have occurred over the past year and lists symptoms of common mental health disorders (e.g., feelings of fear, dread, or uneasiness) along with an option for "None of the above". The mental health co-occurrence variable was dichotomous and indicated whether survey respondents reported any symptoms within the past year (1) or none of the above (0), where none of the above was used as the reference group.

We created two variables that captured the type of LD. The first variable (LD) utilized item Q2.6 that asks respondents whether they had a formal identification of LD or whether they did not have a formal identification of LD but struggled with reading, writing, and/or mathematics that affected their daily lives. The LD variable indicated whether the individual self-reported formal identification of LD (1) or the individual struggled with reading, math, or writing in ways that affected their daily lives but did not include formal identification of LD (0). Struggling with reading, writing, and/or math without formal identification of LD was used as the reference level.

The second variable (LD type) indicated the specific type of LD (e.g., LD for reading, LD for math). We utilized item Q2.6 asks respondents whether they had a formal identification of LD or whether they did not have a formal identification of LD but struggled with reading, writing, and/or mathematics that affected their daily lives. Additionally, item Q2.7 asks survey respondents that self-reported formal LD to select all the areas that apply to them and lists reading disability, math disability, writing disability, dyspraxia, and offers an "Other" option with a text box. The final LD type subgroup variable indicated whether the individual self-reported formal identification of (1) LD for reading, (2) LD for math, (3) LD for writing, (4) co-occurrence of LD for reading, math, and/or writing, or (5) the individual struggled with reading, math, or writing in ways that affected their daily lives but did not include formal identification of LD. Struggling with reading, writing, and/or math without formal identification of LD was used as the reference level.

| Subgroup Variable | Reference Group | Comparison Group(s) |
|-------------------|-----------------|---------------------|
| Gender            | Male            | Female              |
| Race              | White           | Non-White           |

## Table 11. Subgroup Variables



| Subgroup Variable    | Reference Group  | Comparison Group(s)   |
|----------------------|--|---|
| Geographic Region    | West   | Midwest, Northeast, South   |
| Geographic Division  | Pacific  | New England, Middle Atlantic, East<br>North Central, West North Central,<br>South Atlantic, East South Central,<br>West South Central, Mountain |
| ADHD Status          | Does not self-report ADHD  | Self-reports ADHD   |
| Mental Health Status | Does not self-reported selected mental<br>health symptoms  | Self-reports selected mental health symptoms  |
| LD                   | No formal identification of LD, but<br>struggle with reading, writing, and/or<br>math in ways that affect their daily<br>lives | Formal identification of LD   |
| LD_type              | No formal identification of LD, but<br>struggle with reading, writing, and/or<br>math in ways that affect their daily<br>lives | LD for reading, LD for math, LD for writing, co-occurring types of LD   |

## 4.3.3.B Process for Subgroup Analyses—Logistic Regression

We utilized logistic regression to compare subgroups on three outcomes of interest: (1) graduating from high school, (2) enrolling at a postsecondary institution, and (3) being employed or seeking employment.

Logistic regression is used to establish or explore a relationship between a binary outcome variable and a group of predictor variables. Because the outcome is binary (e.g., whether an individual graduates from high school, whether an individual enrolls at a postsecondary institution, or whether an individual is employed or seeking employment), logistic regression represents the estimated probability of being in one binary outcome category or the other (Stolzfus, 2011). Coefficients from a logistic regression model are often exponentiated so results are interpreted as an odds ratio, where an odds ratio represents the odds of the outcome occurring vs. not occurring for each independent variable. For example, if a logistic regression model is predicting whether an individual graduated high school and includes race as a predictor (where race compares White to non-White individuals), an odds ratio of 0.25 indicates that the odds of non-White individuals graduating high school are 0.25 times lower



than the odds for White individuals. Alternatively, non-White individuals are 75% less likely to graduate high school than White individuals.

### 4.3.3.C Process for Subgroup Analyses—GLM

Subgroup analyses were also conducted on significant latent factors identified in the SEMs. We then created two variables based on the significant latent factors. The first added the items from the latent factor and the second averaged the items from the latent factor; each representing a continuous variable for the latent factor of interest.

Next, we checked model assumptions for generalized linear models (GLMs), including linearity, homogeneity of variance, and normally distributed residuals (Finch et al., 2019). Additionally, we checked normality of the outcome variable, as one primary assumption of significance tests in regression-based analyses is that the outcome variable is normally distributed. Normality of the outcome and residuals were examined using multiple methods to ensure they approximated a normal distribution, including histograms, QQ plots, skewness, and kurtosis. Histograms were used to determine whether the bell curve approached a normal distribution, where extreme skew can be relatively easy to detect (Kline, 2016). When histograms are used, a symmetrical distribution indicates the data meet assumptions of normality. To incorporate the raked weights, we used the svyhist function of the *survey* package to create and examine histograms. With a QQ plot, residuals are plotted along with a straight line that reflects the expected distribution of the data if the fit is normal (Finch et al., 2019); deviations from the straight line indicate evidence of nonnormality. Additionally, we used skewness and kurtosis estimates where skewness indicates the shape of the distribution is asymmetrical about the mean while kurtosis indicates the peakedness of the curve (Kline, 2016). Estimates of skewness and kurtosis between -2 and 2 are considered ideal (Gravetter & Wallnau, 2014), where skewness estimates greater than the absolute value of three and kurtosis estimates greater than the absolute value of 10 indicate a problem (Kline, 2011). In instances where the outcome variable was not normally distributed, we used log, square root, and cube root transformations. We also examined outliers using boxplots. This same process was repeated using the average of the survey items on the latent factor of interest (as opposed to the sum) to allow for analyses in the event the summation of the items did not approximate a normal distribution. The transformation that most approximated normality was then standardized to have a mean of 0 and a standard deviation of 1.

Then, we used the svyglm function of the *survey* package to use GLM with raked weights where the continuous variable representing the latent factor of interest was the outcome and categorical variables for demographics of interest (i.e., race/ethnicity, gender, geographic region) were included as predictors. In Model 1, an interaction term between the outcome and each subgroup was included to examine how the latent construct, subgroups of interest, and outcomes of interest (e.g., graduating from high school, enrolling at a postsecondary institution, being employed, well-being) were related. For example, when we examined High



School Climate: Social Inclusion, gender was included as an interaction term with graduating from high school. Including subgroup variables as interaction terms in Model 1 allowed us to examine differences in the latent construct by outcome condition (e.g., whether graduated from high school) and subgroup.

In Model 2, subgroups were included as separate categorical predictors without an interaction term. We did not interact subgroup variables with the latent construct or the outcome to allow for clearer interpretations.

## 4.3.4 Thematic Coding of Open-Response Items

Because we expected similar responses from respondents in similar situations, we selected two of the five open-ended items for thematic coding: "What are three things that make someone successful in life?" and "Is there anything else about your experiences with your learning disability that you think we should know?"

The first item, "What are three things that make someone successful in life?," was separately analyzed by two coders using conventional content analysis (Hsieh & Shannon, 2005), an inductive approach where codes are derived directly from the participant's responses (Saldana & Omasta, 2016). First, responses for the item were compiled into a dataset in Excel. Because we did not ask participants to rank order their choices when responding, we collapsed all data points into one dataset. This resulted in 3,849 units of data.

The data set was analyzed in three rounds of coding. First, the units of data were read several times in total by the primary and secondary coder to gain familiarity with the data. Next, responses were individually read to generate initial codes and collate relevant data to each code. In order to retain the integrity of the data, codes were kept as close to the original response as possible. For example, "authenticity" was kept as "authenticity" and "integrity" was kept as "integrity." However, some codes were used to clarify the original data response, such as "lack of disability" being coded as "disability status." As more survey responses were read, initial codes were revised, and previously coded survey responses were amended based on successive coding iterations. For example, "self-belief" and "having faith in yourself" both were recoded as "belief in oneself." The primary and secondary coders then met to review all data units and codes to reach consensus for all 3,849 units of data.

In the second round of coding, codes were aggregated into potential themes, with relevant data collected for each theme across all survey responses. Themes were then reviewed and checked against individually coded survey responses and survey responses for each item, first by both coders individually and then together to reach consensus. For example, the data codes of "housing," "shelter," "cars, "food," and "clothing" were all aggregated into the theme of "resources."



In the final round of coding, initial themes were then collapsed into broader, overarching themes by both coders. For example, the themes of "resilience," "determination," "perseverance," "hard work," and "courage" were all collapsed into the broader theme of "resilience." Overall alignment was 92%. The overarching themes were then named and defined through ongoing analysis and refinement with the broader WestEd and NCLD team. Ultimately, this systematic procedure produced themes that were developed and supported by specific statements from survey responses, which illustrated participants' answers to the overarching survey items.

The second item, "Is there anything else about your experiences with your learning disability that you think we should know?," was also coded by a primary and secondary coder. First, all responses from the survey item were compiled into a dataset in Excel. Before analysis, all data units that conveyed that participants did not have anything else to report—such as "I don't have anything else to say," "n/a," "no, nothing else," and "that's all"—were removed. This resulted in 400 units of data for analysis. Data were analyzed using a deductive approach with a priori codes (Bingham, 2023) developed from the structural equation models. The following a priori codes were used: networks of support, discrimination, mental health, accommodations and supports, quality of life and independence, thinking about one's future, employment, and resilience. Each data unit was coded by the coders individually, who then met to review the codes and reach consensus. During coding, two additional codes inductively arose from the second round of coding and allowed for refinement of the a priori codes.

Overall code alignment was 87%. Exemplar data units that both confirmed and deviated from the structural equation models were then used to enrich the SEM findings.

Several measures were taken to ensure the rigor and transparency of the coding process. First, both coders engaged in repeated readings of the data in order to immerse themselves in the dataset. Second, initial and subsequent codes that were developed were kept as close to the original data unit language as possible to ensure alignment and to allow the participants' voices to emerge, rather than the voices of the researchers. Third, we used a combination of inductive and deductive processes to allow the findings to emerge while also leveraging theory and prior research to make sense of the data. Fourth, we used multiple coders and engaged in several consensus meetings to ensure coder alignment with the data and reliability. In these meetings, coders reviewed and collated codes to identify patterns and potential themes. Fifth, during analysis of both questions, a constant comparison method was used to continuously compare data across different respondents and contexts to refine themes. Sixth, we maintained an audit trail during the course of analysis to ensure transparency and allow for cross-checking of how themes were generated. Finally, we engaged in several iterations of peer debriefing and external audit with the broader WestEd and NCLD team to ensure credibility and dependability.



# 5. Results

In the following section, we first describe the construction of the analytic sample, including data quality by fraud/suspicious criteria and recruitment source and weighting, then describe the descriptive statistics, subgroup analyses, and model results.

All data cleaning and analyses (e.g., descriptives, subgroup analyses, SEM) were done in R (version 4.2.1; R Core Team, 2024), and all code and data codebooks can be provided upon request by contacting NCLD.

Though the Young Adult Survey provides information across a variety of topics of interest for young adults with LD, we are not able to make causal claims as we have not established temporal precedence (i.e., all variables and items were concurrently measured; Kline, 2016). Further, all data were self-reported. Despite these limitations, the Young Adult Survey provides rich information from one of the largest nationally representative samples of young adults with LD.

## **5.1 Construction of the Analytic Sample**

To construct the analytic sample, we first removed respondents who did not consent to taking the survey, did not complete the inclusion criteria block, or did not meet inclusion criteria. Next, we removed respondents who met fraudulent criteria, identified respondents who met suspicious criteria, and applied weights to approximate a nationally representative sample. We describe each step in greater detail below.

## 5.1.1 Survey Responses and Data Validity

We received a total of 21,880 survey responses (see Table 12 for summary of removal counts by criteria), where the majority of responses (n = 17,535, 82.58%) were collected using delayed survey access from February 22, 2024, 12 a.m., until the survey closed on May 3, 2024, 12 a.m.

## Table 12. Summary of Removal Counts by Criteria





| Criteria   | n (%)          |
|--|----------------|
| Did not finish inclusion block   | 535 (2.52)     |
| Did not meet inclusion criteria  | 7,612 (35.85)  |
| Not in the United States   | 160 (0.75)     |
| Not ages 18–24   | 194 (0.91)     |
| Currently in high school   | 4,351 (20.49)  |
| Did not receive all or most of their K–12 education in the United States | 86 (0.41)      |
| Do not have LD or do not struggle  | 128 (0.60)     |
| Not Hispanic or Latino <sup>a</sup>                                      | 2,693 (12.68)  |
| Exhibited at least one fraudulent indicator                              | 12,338 (58.11) |

*Note.* Percentages were calculated using the total number of survey respondents who completed the inclusion criteria block (*n* = 21,233).

<sup>a</sup> Criteria applied only to surveys completed between April 22, 2024, 9:30 a.m., and May 3, 2024, 12 a.m.

Of the total number of survey responses (n = 21,880), 647 were removed because they did not provide consent (n = 112; 0.51%) or did not complete the inclusion criteria block (n = 535; 2.45%).

Of those who completed the inclusion block (*n* = 21,233), 160 (0.75%) were removed because they were not located in the United States; 194 (0.91%) were not 18–24 years old; 4,351 (20.49%) were in high school; 86 (0.41%) did not attend all of part of their K–12 education in the United States; and 128 (0.60%) did not have a learning disability or struggle with reading, mathematics, or writing in ways that affected their daily life. For surveys administered from April 22, 2024, 9:30 a.m., to May 3, 2024, 12 a.m., 2,693 (12.68%) were not Hispanic or Latino and thus were removed. Our response rate, calculated as the number of survey respondents who met inclusion criteria divided by the number of survey respondents who completed the inclusion block, was 64.15%.

Of those who met our inclusion criteria (n = 13,621), 12,338 (90.58%) were removed because they exhibited at least one fraudulent indicator. Table 13 provides a detailed summary of counts for each fraudulent and suspicious criterion.



## Table 13. Summary of Fraudulent and Suspicious Indicators

| Indicator   | n (%)          |
|---|----------------|
| Fraud—remove if one present   | 12,338 (90.58) |
| Duration < 5 minutes  | 10 (0.07)      |
| IP address outside U.S.   | 3,603 (26.45)  |
| Response to hidden item   | 375 (2.75)     |
| Open response provided in a language other than English             | 11 (0.08)      |
| Duplicate IP address  | 3,417 (25.09)  |
| reCAPTCHA score < 0.5   | 639 (4.69)     |
| Source is not one we created  | 461 (3.38)     |
| Exact open response of more than three words provided               | 2,675 (19.64)  |
| Response to open item obviously irrelevant                          | 192 (1.41)     |
| Multiple incentive form submissions from the same survey ResponseID | 10 (0.07)      |
| Survey ResponseIDs across survey and incentive form do not match    | 721 (5.29)     |
| Multiple incentive form submissions from the same email address     | 105 (0.77)     |
| Invalid email address provided on incentive form                    | 1 (0.01)       |
| Duplicate email address on Young Adult and Educator incentive list  | 16 (0.12)      |
| Duplicate IP address on Young Adult and Educator Surveys            | 102 (0.75)     |
| Suspicious  |                |



| Indicator                              | n (%)        |
|--|--------------|
| Open response is a nonanswer           | 3 (0.02)     |
| Final sample                           | 1,283 (9.42) |
| Open response nonsensical or nonanswer | 3 (0.02)     |
| No suspicious indicators               | 1,280 (9.40) |

*Note*. Percentages were calculated using the total number of survey respondents who met inclusion criteria (*n* = 13,621).

The final sample included 1,283 individuals, where 3 (0.23%) were flagged on the suspicious criteria and 1,280 (99.77%) exhibited no suspicious indicators.

#### 5.1.1.A Data Quality by Recruitment Source

To gain a sense of data quality, we examined the number of survey respondents by fraudulent indicator and recruitment source. Recruitment sources were tracked using survey links that contained embedded data fields. In Qualtrics, this is accomplished by adding embedded data field names to the anonymous survey link (Qualtrics Digital Success, 2024). We added an embedded data field for "Source" to the anonymous survey link and set values to "email", "Facebook", "flyer", "LinkedIn", and "Twitter/X" (see Figure 6). These links were then included in our recruitment materials in Appendix D. For example, the drafted social media post for Facebook included the survey link specific to Facebook, where multiple individuals could access the survey link. Further, the recruitment source was coded as "blank" for survey respondents that did not have a value in the "source" embedded data field. As shown in Table 14, survey respondents recruited via email, Facebook, LinkedIn, and Twitter/X exhibited relatively high levels of fraudulent behavior, where at least 85% of responses from each source were flagged as fraudulent. These findings are in line with broader survey literature, where researchers often find high rates of fraudulent behavior from respondents recruited from Twitter/X and LinkedIn (e.g., Leighton et al., 2021; Pozzar et al., 2020).



### Figure 6. Young Adult Survey Links with Embedded Data Fields

https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV\_51lKibKX0siHqtg https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV\_51lKibKX0siHqtg?source=facebook https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV\_51lKibKX0siHqtg?source=twitter https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV\_51lKibKX0siHqtg?source=linkedin https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV\_51lKibKX0siHqtg?source=email https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV\_51lKibKX0siHqtg?source=email

Note. The survey link in the first row was used to indicate a blank recruitment source.

|   | Recruitment Source |               |                |               |                |             |  |  |  |
|---|--------------------|---------------|----------------|---------------|----------------|-------------|--|--|--|
| Criteria                                      | Blank              | Email         | Facebook       | Flyer         | LinkedIn       | Twitter/X   |  |  |  |
|   | <i>n</i> (%)       | n (%)         | n (%)          | n (%)         | n (%)          | n (%)       |  |  |  |
| Total<br>responses                            | 1,148              | 5,861         | 4,529          | 195           | 2,351          | 194         |  |  |  |
| Fraudulent                                    | 1,147              | 4,738         | 4,061          | 131           | 2,051          | 192         |  |  |  |
|   | (99.91)            | (91.36)       | (89.67)        | (67.18)       | (87.24)        | (98.97)     |  |  |  |
| Suspicious                                    | 0                  | 2             | 1              | 0             | 0              | 0           |  |  |  |
|   | (0.00)             | (0.03)        | (0.02)         | (0.00)        | (0.00)         | (0.00)      |  |  |  |
| No<br>fraudulent or<br>suspicious<br>behavior | 1<br>(0.09)        | 446<br>(7.61) | 467<br>(11.50) | 64<br>(32.82) | 300<br>(12.76) | 2<br>(1.03) |  |  |  |

#### Table 14. Data Quality by Recruitment Source

*Note.* Percentages were calculated using the total number of survey respondents who met inclusion criteria for each specific recruitment source. For example, percentages in the "Facebook" column were calculated using the total number of survey respondents recruited via Facebook.

## 5.1.2 Missing Data

Every survey item was marked required to answer, thus the final dataset had no missing data. Nonanswers to open-response items (e.g., NA, No) were removed prior to thematic coding.



Furthermore, when coding Likert-type items, "Not Applicable" was not assigned a numeric value, thus essentially coded as missing.

## 5.1.3 Weighting

To approximate a nationally representative sample based on gender, race/ethnicity, and U.S. Census division, we used data from the Individuals with Disabilities Education Act (IDEA) Section 618 data (USDOE, 2023) that provides annual state-level counts of students with disabilities delineated by each of the 13 federal disability categories as our auxiliary data source. More specifically, we used data from Part B: Child Count and Educational Environment from 2014-2022. Across included years, data files contained columns containing state name; state education agency (SEA) education environment (i.e., least restrictive environment setting); SEA disability category; student ages; and counts of students by race/ethnicity, gender, and whether or not they were English Learners (ELs). Each column contained a count of students meeting a particular criterion. For example, rows could be filtered to provide the total number of students across all disability categories being served inside regular class 40%–79% of the day by age, gender, race/ethnicity, and EL status. When filtered to state-level counts for school-age students (ages 5–21 or ages 6–21 depending on school year) whose primary disability was Specific Learning Disability (SLD), we pulled counts for male, female, American Indian or Alaska Native, Asian, Black or African American, Hispanic/Latino, Native Hawaiian or other Pacific Islander, two or more, and White. We recognize that counts of K-12 students do not necessarily represent young adults ages 18–24 with SLD; however, we utilized the IDEA Section 618 data because (1) it is the most comprehensive, national dataset on SLD available and (2) other national surveys (e.g., ACS) include estimates of disability by gender and race/ethnicity, but "disability" typically includes individuals reporting significant difficulty in a number of areas (e.g., hearing, vision, cognition, ambulation, self-care, independent living; U.S. Census Bureau, n.d.-a) that do not align with SLD or LD.

Given that we only had marginal distributions available (e.g., mutually exclusive national estimates for gender, race/ethnicity, state), we utilized raking to estimate calibration weights. To account for variation over time and to address concerns with under-identification due to the COVID-19 pandemic (Blad, 2021; Hunt et al., 2023; USDOE, OSERS, 2021), we utilized data from 2014 to 2022 to provide national estimates of LD by gender, race/ethnicity, and geographic location (i.e., state) based on divisions from the U.S. Census Bureau. First, we created targets for each demographic of interest (i.e., targets for gender, targets for race/ethnicity, targets by U.S. Census division) using counts from IDEA Section 618 data. We created target totals (i.e., counts) and target proportions (i.e., percentages). Totals were calculated by adding the number of students ages 6–21 (or students ages 5–21, depending on the school year) with LD in a demographic category across included years and dividing by the number of years. For example, we added the number of female students with SLD from 2014–2022 and divided by seven years. Proportions were calculated by first calculating the percentage of a demographic for each selected year, then averaging the proportions over included years. For example, the



percentage of female students with SLD was calculated by (1) dividing the count of female students with SLD by the sum of male and female students with SLD for a specific year (this was repeated for each included school year) and (2) averaging the annual percentages of female students with SLD. Notably, the IDEA Section 618 data was not necessarily consistent. For example, in the 2014 school year, the sum of male and female students with SLD was not equal to the sum of all races/ethnicities with SLD.

Next, we added additional population targets to include respondents from our survey who selected gender or race/ethnicity options that did not align with IDEA Section 618 data. Within our survey, all participants were required to answer questions about their gender, their race/ethnicity, and the state they currently live in. Our options for state mirrored those in IDEA Section 618 data (i.e., 50 U.S. states plus Washington, D.C.), but we included additional options for gender and race/ethnicity. For example, our survey included "Male," "Female," "Nonbinary," "Transgender man or transgender woman," "Other," and "Prefer not to answer" as options for gender while IDEA Section 618 reports only for "Male" and "Female" categories. Similarly, our survey contained all the race/ethnicity options from IDEA Section 618 (i.e., American Indian or Alaskan Native, Asian American or Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Pacific Islander, White, and two or more); however, we also included "Other" and "Prefer not to answer." To be inclusive of all individuals and retain the ability to make comparisons across different genders, we used our survey sample counts for "Non-binary," "Transgender man or transgender woman," "Other" (gender), "Prefer not to answer" (gender), and "Prefer not to answer" (race/ethnicity) as the population targets. Therefore, we were able to retain the full sample of 1,283 individuals for raking weights.

Table 15 provides a summary of the population targets and proportions across included years (i.e., 2014, 2015, 2016, 2017, 2018, 2020, 2021) for gender, race/ethnicity, and U.S. Census division. We utilized counts from IDEA Section 618 data as population targets in the weighting process and proportions as a validity check to compare percentages of individuals with SLD before and after raking.

| Demographic         | Total <sup>a</sup> | Proportion <sup>a</sup> |  |  |
|---------------------|--------------------|-------------------------|--|--|
| Gender <sup>b</sup> |                    |                         |  |  |
| Female              | 922,070            | 0.3989                  |  |  |
| Male                | 1,389,316          | 0.6011                  |  |  |

## **Table 15. Population Targets Used for Analysis**



| Demographic                                       | Totalª  | Proportion <sup>a</sup> |
|---|---------|-------------------------|
| Non-binary <sup>e</sup>                           | 9       | Not calculated          |
| Transgender man or transgender woman <sup>e</sup> | 19      | Not calculated          |
| Other <sup>e</sup>                                | 4       | Not calculated          |
| Prefer not to answer <sup>e</sup>                 | 0       | Not calculated          |
| Race/Ethnicity <sup>b</sup>                       |         |                         |
| American Indian or Alaska Native                  | 36,294  | 0.0157                  |
| Asian   | 35,410  | 0.0153                  |
| Black   | 438,635 | 0.1898                  |
| Hispanic  | 747,782 | 0.3235                  |
| Native Hawaiian or Pacific Islander               | 11,027  | 0.0048                  |
| White   | 989,229 | 0.4280                  |
| Two or more                                       | 79,303  | 0.0343                  |
| Other <sup>e</sup>                                | 0       | Not calculated          |
| Prefer not to answer <sup>e</sup>                 | 2       | Not calculated          |
| Region <sup>c</sup>                               |         |                         |
| New England <sup>d</sup>                          | 97,054  | 0.0423                  |
| Middle Atlantic                                   | 357,171 | 0.1558                  |



| Demographic                     | Total <sup>a</sup> | Proportion <sup>a</sup> |
|---------------------------------|--------------------|-------------------------|
| East North Central <sup>d</sup> | 325,515            | 0.1420                  |
| West North Central <sup>d</sup> | 140,455            | 0.0613                  |
| South Atlantic                  | 446,550            | 0.1948                  |
| East South Central              | 107,262            | 0.0468                  |
| West South Central              | 249,980            | 0.1090                  |
| Mountain <sup>d</sup>           | 193,145            | 0.0842                  |
| Pacific                         | 375,512            | 0.1638                  |

#### <sup>a</sup> USDOE, 2023.

<sup>b</sup> Additional genders and races/ethnicities were provided as options on the Young Adult Survey; the categories listed here align with those from IDEA Section 618 data.

<sup>c</sup>Regions are based on the nine divisions from the U.S. Census Bureau (U.S. Census Bureau, n.d.-b).

<sup>d</sup> Across years (2014, 2015, 2016, 2017, 2018, 2020, 2021), data from at least one state not available, suppressed due to small sample size, or flagged due to questionable data quality.

<sup>e</sup> Total represents total number of Young Adult Survey participants.

We then used the rake function from the survey package (Lumley, 2004, 2024) in R to create raked weights. The rake function produces similar estimates as using the calibrate function that computes ratio estimator weights (Valliant et al., 2018). Table 16 provides estimates, standard errors, and coefficients of variation (CVs) for estimated totals and estimated proportions for gender, race/ethnicity, and U.S. Census division from the target population, original survey sample, and the sample after raking weights were applied. When calibration is used appropriately, (1) the standard errors for the weights should be 0, and (2) the sum of the weights should approximate the population total (Valliant et al., 2018).



## Table 16. Comparison Across Population, Sample, and Raking: Gender, Race, and U.S. Division

|                                      | Estimated Totals |       |      | Estimated Proportion |      |      |
|--------------------------------------|------------------|-------|------|----------------------|------|------|
|                                      | Est.             | SE    | CV   | Est.                 | SE   | CV   |
| Gender                               |                  |       |      |                      |      |      |
| Female                               |                  |       |      |                      |      |      |
| Actual population total <sup>a</sup> | 922,070          | -     | -    | 0.3989               | -    | -    |
| Original sample                      | 495              | 17.44 | 0.04 | 0.3858               | 0.01 | 0.04 |
| Raked estimate                       | 932,547.06       | 0.05  | 0.00 | 0.3989               | 0.00 | 0.00 |
| Male                                 |                  |       |      |                      |      |      |
| Actual population total <sup>a</sup> | 1,389,316        | -     | -    | 0.6011               | -    | -    |
| Original sample                      | 756              | 17.63 | 0.02 | 0.5892               | 0.01 | 0.02 |
| Raked estimate                       | 1,405,102.58     | 0.05  | 0.00 | 0.6011               | 0.00 | 0.00 |
| Non-binary                           |                  |       |      |                      |      |      |



|                                      | Estimated Totals |      |      | Estimated Proportion |      |      |
|--------------------------------------|------------------|------|------|----------------------|------|------|
|                                      | Est.             | SE   | CV   | Est.                 | SE   | CV   |
| Actual population total <sup>b</sup> | 9                | -    | -    | -                    | -    | -    |
| Original sample                      | 9                | 2.99 | 0.33 | 0.0070               | 0.00 | 0.33 |
| Raked estimate                       | 9.10             | 0.02 | 0.00 | 0.0000               | 0.00 | 0.00 |
| Transgender woman or transgender man |                  |      |      |                      |      |      |
| Actual population total <sup>b</sup> | 19               | -    | -    | -                    | -    | -    |
| Original sample                      | 19               | 4.33 | 0.23 | 0.0148               | 0.00 | 0.23 |
| Raked estimate                       | 19.22            | 0.00 | 0.00 | 0.0000               | 0.00 | 0.00 |
| Other                                |                  |      |      |                      |      |      |
| Actual population total <sup>b</sup> | 4                | -    | -    | -                    | -    | -    |
| Original sample                      | 4                | 2.00 | 0.50 | 0.0031               | 0.00 | 0.50 |
| Raked estimate                       | 4.05             | 0.00 | 0.00 | 0.0000               | 0.00 | 0.00 |



|                                      | Estimated Totals |      |      | Estimated Proportion |      |      |
|--------------------------------------|------------------|------|------|----------------------|------|------|
|                                      | Est.             | SE   | CV   | Est.                 | SE   | CV   |
| Race                                 |                  |      |      |                      |      |      |
| American Indian or Alaska Native     |                  |      |      |                      |      |      |
| Actual population total <sup>a</sup> | 36,294           | -    | -    | 0.0157               | -    | -    |
| Original sample                      | 26               | 5.05 | 0.19 | 0.0203               | 0.00 | 0.19 |
| Raked estimate                       | 36,294           | 0.00 | 0.00 | 0.0155               | 0.00 | 0.00 |
| Asian American or Asian              |                  |      |      |                      |      |      |
| Actual population total <sup>a</sup> | 35,410           | -    | -    | 0.0153               | -    | -    |
| Original sample                      | 30               | 5.41 | 0.18 | 0.0234               | 0.00 | 0.18 |
| Raked estimate                       | 35,410           | 0.00 | 0.00 | 0.0151               | 0.00 | 0.00 |
| Black or African American            |                  |      |      |                      |      |      |
| Actual population total <sup>a</sup> | 438,635          | -    | -    | 0.1898               | -    | -    |


|                                      | Estimated Totals |       |      | Estimated Proportion |      |      |
|--------------------------------------|------------------|-------|------|----------------------|------|------|
|                                      | Est.             | SE    | CV   | Est.                 | SE   | CV   |
| Original sample                      | 239              | 13.95 | 0.06 | 0.1863               | 0.01 | 0.06 |
| Raked estimate                       | 438,635          | 0.00  | 0.00 | 0.1876               | 0.00 | 0.00 |
| Hispanic or Latino                   |                  |       |      |                      |      |      |
| Actual population total <sup>a</sup> | 747,782          | -     | -    | 0.3225               | -    | -    |
| Original sample                      | 410              | 16.71 | 0.04 | 0.3196               | 0.01 | 0.04 |
| Raked estimate                       | 747,782          | 0.00  | 0.00 | 0.3199               | 0.00 | 0.00 |
| Native Hawaiian or Pacific Islander  |                  |       |      |                      |      |      |
| Actual population total <sup>a</sup> | 11,027           | -     | -    | 0.0048               | -    | -    |
| Original sample                      | 5                | 2.23  | 0.45 | 0.0039               | 0.00 | 0.45 |
| Raked estimate                       | 11,027           | 0.00  | 0.00 | 0.0047               | 0.00 | 0.00 |
| Two or more                          |                  |       |      |                      |      |      |



|                                      | Estimated Totals |       |      | Estimated Proportion |      |      |
|--------------------------------------|------------------|-------|------|----------------------|------|------|
|                                      | Est.             | SE    | CV   | Est.                 | SE   | CV   |
| Actual population total <sup>a</sup> | 79,303           | -     | -    | 0.0343               | -    | -    |
| Original sample                      | 16               | 3.98  | 0.25 | 0.0125               | 0.00 | 0.25 |
| Raked estimate                       | 79,303           | 0.00  | 0.00 | 0.0339               | 0.00 | 0.00 |
| White                                |                  |       |      |                      |      |      |
| Actual population total <sup>a</sup> | 989,229          | -     | -    | 0.4280               | -    | -    |
| Original sample                      | 555              | 17.75 | 0.03 | 0.4326               | 0.01 | 0.03 |
| Raked estimate                       | 989,229          | 0.00  | 0.00 | 0.4232               | 0.00 | 0.00 |
| Prefer not to answer                 |                  |       |      |                      |      |      |
| Actual population total <sup>b</sup> | 2                | -     | -    | -                    | -    | -    |
| Original sample                      | 2                | 1.41  | 0.71 | 0.0016               | 0.00 | 0.71 |
| Raked estimate                       | 2                | 0.00  | 0.00 | 0.0000               | 0.00 | 0.00 |



|                                      | Estimated Totals |       |      | Estimated Proportion |      |      |
|--------------------------------------|------------------|-------|------|----------------------|------|------|
|                                      | Est.             | SE    | CV   | Est.                 | SE   | CV   |
| Division <sup>c</sup>                |                  |       |      |                      |      |      |
| East North Central                   |                  |       |      |                      |      |      |
| Actual population total <sup>a</sup> | 325,514.60       | -     | -    | 0.1420               | -    | -    |
| Original sample                      | 148              | 11.45 | 0.08 | 0.1154               | 0.01 | 0.08 |
| Raked estimate                       | 331,909          | 0.05  | 0.00 | 0.1420               | 0.00 | 0.00 |
| East South Central                   |                  |       |      |                      |      |      |
| Actual population total <sup>a</sup> | 107,262.10       | -     | -    | 0.0468               | -    | -    |
| Original sample                      | 54               | 7.20  | 0.13 | 0.0421               | 0.01 | 0.13 |
| Raked estimate                       | 109,369          | 0.02  | 0.00 | 0.0468               | 0.00 | 0.00 |
| Middle Atlantic                      |                  |       |      |                      |      |      |
| Actual population total <sup>a</sup> | 357,171.40       | -     | -    | 0.1558               | -    | -    |



|                                      | Estimated Totals |       |      | Estimated Proportion |      |      |
|--------------------------------------|------------------|-------|------|----------------------|------|------|
|                                      | Est.             | SE    | CV   | Est.                 | SE   | CV   |
| Original sample                      | 145              | 11.35 | 0.08 | 0.1130               | 0.01 | 0.08 |
| Raked estimate                       | 364,188          | 0.07  | 0.00 | 0.1558               | 0.00 | 0.00 |
| Mountain                             |                  |       |      |                      |      |      |
| Actual population totala             | 193,144.90       | -     | -    | 0.0842               | -    | -    |
| Original sample                      | 105              | 9.82  | 0.09 | 0.0818               | 0.01 | 0.09 |
| Raked estimate                       | 196,939          | 0.04  | 0.00 | 0.0842               | 0.00 | 0.00 |
| New England                          |                  |       |      |                      |      |      |
| Actual population total <sup>a</sup> | 97,054.00        | -     | -    | 0.0423               | -    | -    |
| Original sample                      | 52               | 7.07  | 0.14 | 0.0405               | 0.01 | 0.14 |
| Raked estimate                       | 98,961           | 0.03  | 0.00 | 0.0423               | 0.00 | 0.00 |
| Pacific                              |                  |       |      |                      |      |      |



|                                      | Estimated Totals |       |      | Estimated Proportion |      |      |
|--------------------------------------|------------------|-------|------|----------------------|------|------|
|                                      | Est.             | SE    | CV   | Est.                 | SE   | CV   |
| Actual population total <sup>a</sup> | 375,511.60       | -     | -    | 0.1638               | -    | -    |
| Original sample                      | 294              | 15.06 | 0.05 | 0.2292               | 0.01 | 0.05 |
| Raked estimate                       | 382,889          | 0.05  | 0.00 | 0.1638               | 0.00 | 0.00 |
| South Atlantic                       |                  |       |      |                      |      |      |
| Actual population total <sup>a</sup> | 446,550.00       | -     | -    | 0.1948               | -    | -    |
| Original sample                      | 271              | 14.63 | 0.05 | 0.2112               | 0.01 | 0.05 |
| Raked estimate                       | 455,322          | 0.06  | 0.00 | 0.1948               | 0.00 | 0.00 |
| West North Central                   |                  |       |      |                      |      |      |
| Actual population total <sup>a</sup> | 140,454.60       | -     | -    | 0.0613               | -    | -    |
| Original sample                      | 59               | 7.51  | 0.13 | 0.0460               | 0.01 | 0.13 |
| Raked estimate                       | 143,214          | 0.03  | 0.00 | 0.0613               | 0.00 | 0.00 |



|                                      | Estimated Totals |       |      | Estimated Proportion |      |      |
|--------------------------------------|------------------|-------|------|----------------------|------|------|
|                                      | Est.             | SE    | CV   | Est.                 | SE   | CV   |
| West South Central                   |                  |       |      |                      |      |      |
| Actual population total <sup>a</sup> | 249,980.10       | -     | -    | 0.1090               | -    | -    |
| Original sample                      | 155              | 11.68 | 0.08 | 0.1208               | 0.01 | 0.08 |
| Raked estimate                       | 254,891          | 0.05  | 0.00 | 0.1090               | 0.00 | 0.00 |

<sup>a</sup> Population totals estimated from IDEA Section 618 data from 2014-2022.

<sup>b</sup> Population total reflects the number of Young Adult Survey participants who selected this category.

<sup>c</sup> Regions are based on the nine divisions from the U.S. Census Bureau (U.S. Census Bureau, n.d.-b).



In line with best practice, we compared the sum of the weights to the external population count (see Table 17). When weights are used, the sum of the weights should be an estimate of the total number in the population (Valliant et al., 2018). We also provide the mean, median, minimum, maximum weights as well as the Kish design effect in Table 18, with a column for estimates when all categories for gender and race/ethnicity are included and when only categories paralleling those in IDEA Section 618 are included.

We used the deffK function of the PracTools package (version 1.5; Valliant & Zipf, 2024) to estimate the Kish (1965; 1992) design effect due to weighting, which is interpreted as the increase in variance of an estimator due to having weights that are not the same (Valliant et al., 2018). While the weights in Table 18 appear large, the Kish design effect due to weighting was 1.1467, suggesting the raked weights resulted in a 14.67% increase in variance. Notably, a 3.04% increase in variance is observed when all available genders and race/ethnicities are utilizing, as compared to when only gender and race/ethnicity categories that align with those in IDEA Section 618 data are used.

| Demographic | Sum of Raked Weights | Population |
|-------------|----------------------|------------|
| Gender      | 2,292,643            | 2,311,418  |
| Race        | 2,292,643            | 2,337,682  |
| Division    | 2,292,643            | 2,292,643  |

## Table 17. Comparison of Weights and Population Totals

*Note.* Population totals across gender, race, and division were not equal due to inconsistencies in IDEA Section 618 data. The largest population total (division) was used across all categories.

#### **Table 18. Summary Statistics of Weights**

| Statistic | Using all gender and race categories | Using IDEA Section 618 gender and race categories |
|-----------|--------------------------------------|---|
| Mean      | 1786.94                              | 2282.31   |
| Median    | 1669.48                              | 1886.60   |



| Statistic | Using all gender and race categories | Using IDEA Section 618 gender and race categories |
|-----------|--------------------------------------|---|
| Minimum   | 0.36                                 | 822.78  |
| Maximum   | 8627.08                              | 8627.08   |
| deffK     | 1.1467                               | 1.1163  |

All weights by crossed gender, race/ethnicity, and U.S. Census divisions are provided in Appendix F. The smallest weights were assigned to individuals who selected "Transgender woman or transgender man," "Non-binary," "Other," or "Prefer not to answer" as their gender or who selected "Prefer not to answer" or "Other" for their race/ethnicity. When these individuals were excluded, the smallest weight was assigned to Asian American or Asian females residing in Pacific states while the largest weight was assigned to males residing in Middle Atlantic states who selected "Two or more" races/ethnicities.

Final target weights were included in analyses through the surveydesign function of the survey package.

# **5.2 Descriptive Statistics**

Below we provide descriptive statistics using the final, weighted analytic sample. Results are primarily presented in tables and organized by survey block. The values in the tables below do not represent the response size of our sample (n = 1,283). Instead, they represent the weighted percentage when actual survey responses were weighted using the methodology described above. We present weighted percentages in these tables as they reflect responses from a nationally representative sample of young adults ages 18–24; further, we provide the unweighted sample size in the notes for each table.

# 5.2.1 Demographics and Characteristics of LD

Table 19 provides a summary of demographics, including age, gender, race/ethnicity, highest level of education obtained, geographic region, and sexuality. The majority of participants were between the ages of 22 and 23 (42.49%), male (60.11%), and White (42.32%). Further, 42.16% of young adults ages 18–24 with LD hold a high school diploma.



# **Table 19. Characteristics: Demographics**

| Variable                             | Weighted % |
|--------------------------------------|------------|
| Age (Q2.3)                           |            |
| 18                                   | 1.86       |
| 19                                   | 7.68       |
| 20                                   | 17.29      |
| 21                                   | 16.97      |
| 22                                   | 19.63      |
| 23                                   | 22.86      |
| 24                                   | 13.71      |
| Gender (Q4.3)                        |            |
| Female                               | 39.89      |
| Male                                 | 60.11      |
| Non-binary                           | 0.00       |
| Transgender woman or transgender man | 0.00       |
| Other                                | 0.00       |
| Prefer not to answer                 | 0.00ª      |
| Race/Ethnicity (Q4.4)                |            |
| American Indian or Alaska Native     | 1.55       |



| Variable                                       | Weighted % |
|--|------------|
| Asian  | 1.51       |
| Black  | 18.76      |
| Hispanic                                       | 31.99      |
| Native Hawaiian or Pacific Islander            | 0.47       |
| White  | 42.32      |
| Two or more                                    | 3.39       |
| Other  | 0.00ª      |
| Prefer not to answer                           | 0.00       |
| Highest Level of Education Obtained (Q4.6)     |            |
| Primary school                                 | 3.50       |
| GED or equivalent                              | 8.56       |
| High school diploma                            | 42.16      |
| Vocational or technical certificate or license | 16.74      |
| Associate's degree                             | 8.75       |
| Bachelor's degree                              | 18.54      |
| Master's degree                                | 1.19       |
| Doctoral degree                                | 0.55       |
| Geographic Division (Q4.2)                     |            |



| Variable             | Weighted % |
|----------------------|------------|
| East North Central   | 14.20      |
| East South Central   | 4.68       |
| Middle Atlantic      | 15.58      |
| Mountain             | 8.42       |
| New England          | 4.23       |
| Pacific              | 16.38      |
| South Atlantic       | 19.48      |
| West North Central   | 6.13       |
| West South Central   | 10.90      |
| Sexuality (Q4.5)     |            |
| Straight (not gay)   | 84.99      |
| Bisexual             | 6.11       |
| Lesbian or gay       | 7.68       |
| Something else       | 0.77       |
| Not sure             | 0.06       |
| Prefer not to answer | 0.39       |

*Note*. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283). Each variable or survey item may not total to 100% due to rounding.

<sup>a</sup> Weighted percentage is exactly 0, as no individuals selected this response option.



Most young adults with LD report having documented LD (69.60%) and were identified during elementary school (41.90%) (see Table 20). Reading disability was most common (34.35%), followed by writing disability (29.08%) and mathematics disability (25.16%). In addition to LD, 17.65% of respondents self-reported ADHD and 14.20% of respondents self-reported mental health disability.

#### Table 20. Characteristics: LD

| Variable  | Weighted % |
|---|------------|
| Age/Grade of LD Identification (Q5.3)   |            |
| Before kindergarten   | 9.79       |
| K–5th grade   | 41.90      |
| 6th–8th grade   | 26.27      |
| 9th–12th grade  | 7.75       |
| l'm not sure  | 2.90       |
| I don't have a documented LD  | 11.38      |
| Type of LD (Q2.6)   |            |
| Documented LD (Q2.7) <sup>a</sup>   | 69.60      |
| Reading   | 34.35      |
| Writing   | 29.08      |
| Math  | 25.16      |
| Dyspraxia   | 8.92       |
| Other (Q2.7_5_TEXT)   | 4.09       |
| Not LD but struggle in reading, writing, or mathematics that affects daily life | 30.40      |



| Variable  | Weighted % |
|---|------------|
| Additional Diagnoses (Q4.7) <sup>a</sup>                                      |            |
| Attention deficit hyperactivity disorder                                      | 17.65      |
| Mental health disability  | 14.20      |
| Speech or language impairment   | 8.53       |
| Autism spectrum disorder  | 8.72       |
| Hearing impairment, deafness, deaf-blindness, visual impairment, or blindness | 3.26       |
| Physical or orthopedic impairment (e.g., cerebral palsy)                      | 3.44       |
| Traumatic brain injury  | 2.07       |
| Gifted or twice exceptional   | 4.56       |
| Other medical condition (e.g., diabetes, asthma, sickle cell anemia)          | 8.78       |
| None of the above   | 52.43      |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283). Each variable or survey item may not total to 100% due to rounding.

<sup>a</sup> This item was select-all-that-apply and may not total to 100%.

## 5.2.2 Experiences in K–12 and High School

The Experiences in High School block was given to all survey respondents who reported attending high school and focused on social and instructional supports in grades 9–12.

As shown in Table 21, nearly 49.59% of young adults repeated a grade during K–12, 5.61% repeated a grade more than once during K–12, and 44.79% never repeated a grade. Of those who did repeat a grade, most repeated a grade during middle school (grades 6–8). Lastly, approximately 63% of young adults ages 18–24 with LD reported receiving special education services in K–12 for LD.



## Table 21. Experiences in K–12

| Variable   | Weighted % |
|--|------------|
| Portion of K–12 in the United States (Q2.5)      |            |
| Part   | 13.59      |
| All  | 86.41      |
| Grade Retention (Q5.2)                           |            |
| I repeated a grade once                          | 49.59      |
| I repeated a grade more than once                | 5.61       |
| I did not repeat any grades                      | 44.79      |
| Grade Retention—Grade Levels (Q5.2) <sup>a</sup> |            |
| K–5th grades                                     | 18.42      |
| 6th–8th grades                                   | 30.12      |
| 9th–12th grades                                  | 12.71      |
| Special Education Services in K–12 for LD (Q5.4) |            |
| Yes  | 62.86      |
| Νο   | 33.55      |
| l'm not sure                                     | 3.59       |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283). Each variable or survey item may not total to 100% due to rounding.

<sup>a</sup> This item was select-all-that-apply and may not total to 100%.

When examining experiences in high school, 88.91% of young adults ages 18–24 with LD went to high school. Of the individuals who went to high school, 2.69% left high school before graduating, 38.20% graduated high school but thought about leaving, and 59.11% graduated high school and never thought about leaving (Table 22).



### Table 22. Attending and Leaving High School

| Variable   | Weighted % |
|--|------------|
| Enrollment (Q5.6) <sup>a</sup>                           |            |
| Yes, I went to high school.                              | 88.91      |
| No, I did not go to high school.                         | 11.09      |
| Leaving High School (Q5.17) <sup>b</sup>                 |            |
| I left high school before graduating.                    | 2.69       |
| I graduated high school but thought about leaving.       | 38.20      |
| I graduated high school and never thought about leaving. | 59.11      |

*Note*. Each variable or survey item may not total to 100% due to rounding.

<sup>a</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283).

<sup>b</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who went to high school (*n* = 1,133).

We examined reasons for leaving high school in Table 23. Of the young adults ages 18–24 with LD who did not attend high school, 16.33% selected "School was too hard" as one their reasons for not attending, followed by needing money (15.98%) and not liking school (13.70%). Of the young adults ages 18–24 with LD who left or considered leaving high school before graduating, 25.73% selected "School was too hard", followed by not liking school (15.10%) and needing money (12.02%).



# Table 23. Attending and Leaving High School: Reasons for Not Attending, Leaving, orConsidering Leaving High School by Path

| Variable   | Did Not Attend<br>High School<br>(Q5.7,<br>Q5.7_11_TEXT)<br>Weighted % <sup>a</sup> | Left or Considered<br>Leaving High<br>School<br>(Q5.18,<br>Q5.18_9_TEXT)<br>Weighted % <sup>b</sup> |
|--|---|---|
| Needed money   | 15.98   | 12.02   |
| To pursue a job opportunity                                  | 7.38  | 7.60  |
| Enlisted in the military                                     | 2.30  | 1.66  |
| School was too hard  | 16.33   | 25.73   |
| Didn't like school   | 13.70   | 15.10   |
| Health problems (e.g., physical, mental, substance abuse)    | 8.13  | 10.85   |
| Didn't feel safe at school or going to and from school       | 10.07   | 8.08  |
| Didn't feel supported by my high school                      | 12.66   | 9.17  |
| Didn't get needed disability services                        | 9.61  | 7.57  |
| Family obligations (e.g., taking care of family or children) | 2.14  | 1.25  |
| Other  | 1.71  | 0.97  |

*Note*. These items were select-all-that-apply and may not total to 100%.

<sup>a</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who did not attend high school (*n* = 150).

<sup>b</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who did attend high school (*n* = 1,133).

As shown in Table 24, 55.87% of respondents who went to high school attended public school at one point during high school, followed by private school (21.30%) and private school for children with disabilities (14.94%).



# Table 24. Type(s) of High School(s) Attended

| Type of High School (Q5.10)  | Weighted % |  |
|--|------------|--|
| Public school (including online)   | 55.87      |  |
| Charter school (including online)  | 8.44       |  |
| Montessori school  | 5.81       |  |
| Private school   | 21.30      |  |
| Private school for children with disabilities  | 14.94      |  |
| Alternative school or center (e.g., juvenile justice schools, school or center for behavior) | 1.42       |  |
| Homeschool   | 4.20       |  |
| Department of Defense school or school on a military base                                    | 0.64       |  |
| Military academy   | 0.78       |  |
| Other  | 0.54       |  |
| I don't know   | 0.09       |  |

*Note*. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who went to high school (*n* = 1,133). This item was select-all-that-apply and may not total to 100%.

Table 25 displays the number and percentage of young adults (1) who report having a specific program, service, or support at their high school and (2) who participated in each specific program, service, or support. Most participants report having academic counseling to complete high school (82.80%), career counseling (80.06%), and career and technical education (75.15%).



# Table 25. High School Supports: Program, Service, or Support—Availability andParticipation

| Program, Service, or Support   | Available at My High<br>School<br>(Q5.11_1—Q5.11_10)<br>Weighted % | Participated<br>(Q5.12)<br>Weighted % |
|--|--|---------------------------------------|
| Career and technical education (e.g., courses focused on an occupation or job sector)              | 75.15  | 31.91                                 |
| Pre-employment transition services   | 53.80  | 9.79                                  |
| TRIO program (e.g., Upward Bound, Talent<br>Search, Student Support Services)                      | 55.27  | 16.48                                 |
| Career counseling  | 80.06  | 45.78                                 |
| College counseling   | 80.68  | 39.96                                 |
| Academic counseling to complete high school  | 82.80  | 32.03                                 |
| On-the-job training or apprenticeship  | 55.02  | 16.67                                 |
| Class period(s) dedicated to study skills, self-<br>advocacy, social skills, or independent living | 73.65  | 46.85                                 |
| Military outreach (e.g., campus recruitment visit)   | 41.57  | 3.02                                  |
| Advanced Placement, International<br>Baccalaureate, or dual enrollment classes                     | 50.58  | 7.83                                  |

*Note*. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who went to high school (*n* = 1,133). These items were select-all-that-apply and may not total to 100%.

As shown in Table 26, 20.77% of young adults ages 18–24 with LD who went to high school were not able to take elective courses.



#### **Table 26. Access to Elective Courses**

| Access to Elective Courses (Q5.15)                     | Weighted % |
|--|------------|
| I was able to take elective courses in high school     | 79.23      |
| I was not able to take elective courses in high school | 20.77      |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who went to high school (*n* = 1,133).

Tables 27–30 present results from Likert-type items and are grouped by level of support or perception. Table 27 addresses school-level supports; 76.72% of young adults ages 18–24 with LD either agreed or strongly agreed that their high school was a supporting and inviting place for students to learn, and 72.35% either agreed or strongly agreed that their high school had adequate mental health resources for students. Table 28 addresses teacher-level supports, where 82.84% of young adults ages 18–24 with LD who went to high school either agreed or strongly agreed that they had a teacher or another adult at their school who made them feel supported, while 26.14% felt they were bullied by their teachers due to their LD. Table 29 addresses peer supports, where 50.14% of young adults who went to high school felt they were bullied by their peers because of their LD. Lastly, Table 30 addresses individual-level supports and perceptions. When prompted to think of themselves while they were in high school, at least 50% of young adults who went to high school felt they received from their high school prepared them for life after high school (Table 30).

| Item   | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean ( <i>SD</i> ) |
|--|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------------------|
| My high school was<br>a supporting and<br>inviting place for<br>students to learn<br>(Q5.13_4) | 2.02               | 5.96               | 15.29              | 48.95              | 27.77               | 3.94<br>(0.92)                 |
| My school had<br>adequate mental   | 2.30               | 9.21               | 16.19              | 46.49              | 25.86               | 3.84<br>(0.99)                 |

#### Table 27. High School Supports: School



| Item                                    | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean ( <i>SD</i> ) |
|---|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------------------|
| health resources for students (Q5.14_5) |                    |                    |                    |                    |                     |                                |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD who went to high school (n = 1,133). Not all items may total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

#### Table 28. High School Supports: Teachers

| Item   | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean ( <i>SD</i> ) |
|--|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------------------|
| I had a teacher or<br>another adult at my<br>school who made<br>me feel supported<br>(Q5.13_1) | 1.76               | 5.82               | 9.58               | 51.57              | 31.27               | 4.05<br>(0.89)                 |
| My teachers<br>believed I could<br>succeed (Q5.13_2)   | 2.28               | 4.40               | 10.62              | 48.17              | 34.53               | 4.08<br>(0.91)                 |
| I was bullied by my<br>teachers because of<br>my learning<br>disability (Q5.13_6) <sup>a</sup> | 28.26              | 33.55              | 12.06              | 17.14              | 9.00                | 3.55<br>(1.30)                 |
| I felt like my<br>teachers wanted me<br>in their classes<br>(Q5.14_4)                          | 1.51               | 5.52               | 16.66              | 49.77              | 26.53               | 3.94<br>(0.89)                 |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD who went to high school (n = 1,133). Not all items may total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

<sup>a</sup> Item has been reverse coded.



#### Table 29. High School Supports: Peers

| ltem  | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean ( <i>SD</i> ) |
|---|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------------------|
| I was bullied by my<br>peers because of my<br>learning disability<br>(Q5.13_5) <sup>a</sup> | 15.88              | 20.98              | 13.00              | 37.92              | 12.22               | 2.90 (1.31)                    |

*Note*. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who went to high school (*n* = 1,133). Not all items may total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

<sup>a</sup> Item has been reverse coded.

# Table 30. High School Supports: Self

| ltem  | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean ( <i>SD</i> ) |
|---|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------------------|
| I was interested in<br>my schoolwork in<br>high school<br>(Q5.13_3)   | 1.92               | 8.68               | 13.47              | 49.35              | 26.58               | 3.90<br>(0.96)                 |
| The level of<br>academic support I<br>received from my<br>high school<br>prepared me for life<br>after high school<br>(Q5.14_1) | 1.84               | 8.58               | 13.27              | 52.86              | 23.45               | 3.88<br>(0.93)                 |
| My high school<br>classes prepared me<br>to advocate for my<br>needs after high<br>school (Q5.14_2)                             | 4.30               | 7.45               | 13.17              | 50.14              | 24.94               | 3.84<br>(1.02)                 |
| I had to fight for my<br>disability rights at   | 8.06               | 20.59              | 16.23              | 37.58              | 17.54               | 2.64<br>(1.22)                 |



| Item                         | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean ( <i>SD</i> ) |
|------------------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------------------|
| my high school<br>(Q5.14_3)ª |                    |                    |                    |                    |                     |                                |

Note. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who went to high school (*n* = 1,133). Not all items may total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

<sup>a</sup> Item has been reverse coded.

We next asked individuals what they did immediately after leaving high school. A similar item was given to individuals that did not attend high and provided the same response options. Table 31 presents these paths according to whether individuals attended high school and whether they considered leaving high school. As shown in Table 31, most individuals who did not attend high school or attended high school but left without graduating entered the workforce, while most individuals who did attend high school went to postsecondary after leaving high school.

| Path  | Did Not Attend<br>High School<br>(Q5.8)<br>Weighted % <sup>a</sup> | Attended but Left<br>High School<br>(Q5.20)<br>Weighted % <sup>b</sup> | Attended but<br>Considered<br>Leaving High<br>School (Q5.20)<br>Weighted % <sup>c</sup> | Attended and Did<br>Not Consider<br>Leaving High<br>School (Q5.20)<br>Weighted % <sup>d</sup> |
|---|--|--|---|---|
| Enrolled in<br>vocational, business,<br>or technical school | 26.31  | 19.12  | 36.93   | 21.60   |
| Enrolled at a<br>community college<br>or university         | 2.68   | 2.98   | 22.10   | 54.85   |
| Entered the<br>workforce                                    | 39.24  | 35.75  | 21.18   | 5.77  |
| Completed a gap<br>year                                     | 7.51   | 16.43  | 13.47   | 10.07   |
| Enlisted in the military                                    | 0.73   | 7.30   | 0.17  | 0.55  |

#### Table 31. Immediate Path After or Instead of High School



| Path  | Did Not Attend<br>High School<br>(Q5.8)<br>Weighted %ª | Attended but Left<br>High School<br>(Q5.20)<br>Weighted % <sup>b</sup> | Attended but<br>Considered<br>Leaving High<br>School (Q5.20)<br>Weighted % <sup>c</sup> | Attended and Did<br>Not Consider<br>Leaving High<br>School (Q5.20)<br>Weighted % <sup>d</sup> |
|---|--|--|---|---|
| Volunteer or mission<br>work (e.g., Peace<br>Corps) | 8.45   | 11.47  | 3.95  | 4.57  |
| Other   | 15.08  | 6.94   | 2.19  | 2.59  |

*Note.* Item Q5.8 asked individuals who did not attend high school what they did instead of going to high school and presented the options in the "Path" column. Item Q5.20 asked individuals who attended high school what they did after high school and presented the options in the "Path" column. Each variable or survey item may not total to 100% due to rounding.

<sup>a</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who did not attend high school (*n* = 150).

<sup>b</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who attended but left high school before graduating (*n* = 31).

<sup>c</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who attended but considered leaving high school (*n* = 439).

<sup>d</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who attended and did not consider leaving high school (*n* = 663).

#### 5.2.3 Postsecondary Education

The Postsecondary block first asked respondents about their current postsecondary enrollment status. Individuals who are currently enrolled at a postsecondary institution were asked additional questions about their degree or program of study, disclosure of their LD to their postsecondary institution, and accommodations and supports. Individuals who graduated from a postsecondary institution or attended a postsecondary institution but left received a small subset of questions. These individuals were able to continue to the Employment block, while individuals currently enrolled at a postsecondary institution continued to the Adaptive and Daily Living Skills block.

As shown in Table 32, 44.60% of young adults ages 18–24 with LD are currently enrolled at a postsecondary institution, 27.33% graduated from a postsecondary institution, 20.93% have never gone to a postsecondary institution, and 7.15% attended a postsecondary institution but did not finish.



### Table 32. Postsecondary Enrollment Status

| Current Postsecondary Enrollment Status (Q6.2)  | Weighted % |
|---|------------|
| I am currently going to a college, university, or vocational, business, or technical school (including graduate school) | 44.60      |
| I attended a college, university, or vocational, business, or technical school or program but did not finish            | 7.15       |
| I graduated from a college, university, or vocational, business, or technical school or program                         | 27.33      |
| I have never gone to a college, university, or vocational, business, or technical school or program                     | 20.93      |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283). This variable may not total to 100% due to rounding.

Of the individuals who graduated from a postsecondary institution, 76.32% said their institution was aware they had LD (Table 33).

#### Table 33. Postsecondary Enrollment: Completers

| Was your school or program aware that you have a learning disability? (Q6.3) | Weighted % |
|--|------------|
| Yes  | 76.32      |
| No   | 23.68      |

*Note.* This item was given only to respondents who graduated from a postsecondary institution. Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD who graduated from a postsecondary institution (n = 344). This variable may not total to 100% due to rounding.

Of those who attended but left a postsecondary institution, 38.80% left because school was too hard, 26.47% left because they didn't like school, 23.07% left to pursue a job opportunity, and 19.74% left because they didn't get the disability services they needed (Table 34).

After leaving their postsecondary institution, most individuals entered the workforce (46.51%). In the "Other" category, one individual shared that they took a semester off and decided not to go back.



# Table 34. Postsecondary Enrollment: Leavers

| Item   | Weighted % |
|--|------------|
| Reasons for Leaving (Q6.4)                                   |            |
| School was too expensive                                     | 18.70      |
| To pursue a job opportunity                                  | 23.07      |
| Enlisted in the military                                     | 10.36      |
| School was too hard  | 38.80      |
| Didn't like school   | 26.47      |
| Health problems (e.g., physical, mental, substance abuse)    | 17.72      |
| Not enough time  | 10.49      |
| Didn't feel safe at school or going to and from school       | 10.76      |
| Didn't feel supported by my instructors                      | 17.10      |
| Didn't get needed disability services                        | 19.74      |
| Didn't get into desired program                              | 7.86       |
| Family obligations (e.g., taking care of family or children) | 1.51       |
| Other  | 2.13       |
| Path Immediately After Leaving (Q6.5, Q6.5_6_TEXT)           |            |
| Went to another school or program to continue my education   | 14.99      |
| Entered the workforce  | 46.51      |
| Completed a gap year   | 19.18      |
| Entered the military   | 4.08       |



| Item  | Weighted % |
|---|------------|
| Volunteer or mission work (e.g., Peace Corps) | 12.28      |
| Other   | 2.96       |

*Note.* Items in this table were given only to respondents who attended but left a postsecondary institution. Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD who attended but left a postsecondary institution (n = 99). Each variable or survey item may not total to 100% due to rounding.

Of the individuals who are currently enrolled at a postsecondary institution, 49.18% are attending a college or university; 36.93% are attending a vocational, business, or technical school; and 13.89% are attending a community college (Table 35).

#### Table 35. Postsecondary Enrollment: Current Enrollees

| Type of School or Program Currently Attending (Q6.6) | Weighted % |
|--|------------|
| Vocational, business, or technical school            | 36.93      |
| Community college                                    | 13.89      |
| College or university (including graduate school)    | 49.18      |

*Note.* Items in this table were given only to respondents who are currently enrolled at a postsecondary institution. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who are currently enrolled at a postsecondary institution (*n* = 570).

The majority of young adults are enrolled at a postsecondary institution full-time (79.77%) and working toward a bachelor's degree (52.86%) (Table 36).



| Characteristic         | Weighted % |
|------------------------|------------|
| Enrollment Type (Q6.9) |            |
| Full-time              | 79.77      |
| Part-time              | 20.23      |



| Characteristic   | Weighted % |
|--|------------|
| Type of Degree or Certification (Q6.7, Q6.7_6_TEXT)  |            |
| Vocational certificate, trade certificate, or license (e.g., mechanics, cosmetology, culinary arts, medical assistant) | 29.80      |
| Associate's degree   | 14.34      |
| Bachelor's degree  | 52.86      |
| Master's degree (including combined bachelor's and master's programs)  | 2.14       |
| Doctoral degree  | 0.35       |
| Other  | 0.51       |
| Combined Associate's and Bachelor's  | -          |
| Major or Course of Study (Q6.8) <sup>a</sup>   |            |
| Biological, Agricultural, and Environmental Sciences   | 7.30       |
| Business   | 14.42      |
| Communications   | 4.02       |
| Computers, Mathematics, and Statistics   | 10.99      |
| Education  | 3.57       |
| Engineering  | 8.96       |
| Liberal Arts and History   | 2.82       |
| Literature and Languages   | 2.25       |
| Multidisciplinary Studies  | 0.41       |
| Other  | 2.64       |



| Characteristic                  | Weighted % |
|---------------------------------|------------|
| Physical and Related Sciences   | 2.99       |
| Psychology                      | 3.77       |
| Science and Engineering Related | 7.08       |
| Social Sciences                 | 6.59       |
| Trade                           | 13.66      |
| Undecided                       | 0.00       |
| Visual and Performing Arts      | 8.51       |

*Note.* Items in this table were given only to respondents who are currently enrolled at a postsecondary institution. Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD who are currently enrolled at a postsecondary institution (n = 570). Each variable or survey item may not total to 100% due to rounding.

<sup>a</sup> Respondents' answers were categorized using field of degree classifications from the ACS (U.S. Census Bureau, n.d.-a). We added "Trade" and "Undecided."

About 78% of individuals currently enrolled at a postsecondary institution disclosed their LD to their school (Table 37).

#### Table 37. Current Postsecondary Enrollees: LD Disclosure

| LD Disclosure to Current Postsecondary Institution        | Weighted % |
|---|------------|
| Is your school or program aware that you have LD? (Q6.10) |            |
| Yes   | 78.36      |
| Νο  | 21.64      |

*Note.* Items in this table were given only to respondents who are currently enrolled at a postsecondary institution. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who are currently enrolled at a postsecondary institution (*n* = 570).

Of individuals who are currently enrolled at a postsecondary institution and disclosed their LD, 44.28% disclosed their LD because they wanted a safety net if they ever needed help, 36.84%



were encouraged by a family member to do so, and 32.44% felt it was an important part of who they are (Table 38). Additional reasons (see "Other") were to receive accommodations or other support resources.

Further, individuals tended to rate the disclosure process as easy (36.55%) or very easy (17.97%), and the majority (57.34%) were able to use an existing Individualized Education Program (IEP), 504 plan, or evaluation to receive postsecondary supports for LD.

## Table 38. Current Postsecondary Enrollees: LD Disclosure Process

| Variable  | Weighted % |
|---|------------|
| Reasons for Disclosure (Q6.11, Q6.11_9_TEXT)                                      |            |
| I was struggling academically   | 28.97      |
| A family member encouraged me   | 36.84      |
| Someone at my high school encouraged me   | 20.10      |
| Someone at my university, college, or program encouraged me                       | 24.53      |
| I wanted a safety net if I ever needed help                                       | 44.28      |
| My mental health was negatively affecting my academic performance                 | 17.58      |
| I thought I had to disclose, even if I did not want to                            | 18.98      |
| I had to disclose to enter a disability-specific program or receive a scholarship | 12.61      |
| It is an important part of who I am   | 32.44      |
| Other   | 0.77       |
| To receive accommodations   | -          |
| To receive support resources  | -          |



| Variable  | Weighted % |
|---|------------|
| Ease of Disclosure Process (Q6.12)  |            |
| Very difficult  | 3.57       |
| Difficult   | 15.17      |
| Neither difficult nor easy  | 26.85      |
| Easy  | 36.44      |
| Very easy   | 17.97      |
| Documentation (Q6.13)   |            |
| The school or program accepted my IEP, 504 plan, or existing evaluation (Q6.14)         | 57.33      |
| My documentation was less than three years old  | 37.97      |
| My documentation was more than three years old  | 16.19      |
| I'm not sure how old my documentation was   | 3.18       |
| I completed a new full evaluation (Q6.15, Q6.15_4_TEXT)                                 | 32.16      |
| I paid for the new evaluation out of pocket   | 14.09      |
| The new evaluation was covered by insurance   | 15.69      |
| I'm not sure  | 1.63       |
| Other   | 0.75       |
| My family paid for the new evaluation   | -          |
| My school facilitated the new evaluation  | -          |
| The school or program required a new full evaluation, but I was not able to complete it | 7.71       |



| Variable          | Weighted % |
|-------------------|------------|
| None of the above | 2.79       |

*Note.* Items in this table were given only to respondents who are currently enrolled at a postsecondary institution and who disclosed their LD to their current postsecondary institution. Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD who are currently enrolled at a postsecondary institution and who disclosed their LD to their current postsecondary institution (n = 445). Each variable or survey item may not total to 100% due to rounding.

Most individuals who disclosed their LD to their institution reported receiving additional time for tests (45.30%), technology (such as speech-to-text; 35.37%), a tutor (34.36%), or a different test setting (28.34%) (Table 39). Overwhelmingly, individuals reported that their postsecondary institution implements their accommodations well or very well (85.60%).

| Variable   | Weighted % |
|--|------------|
| Accommodations Received (Q6.16, Q6.16_14_TEXT)                                 |            |
| Additional time for tests  | 45.30      |
| Tutor  | 34.36      |
| Note taker   | 17.87      |
| Technology (e.g., screen reader, Livescribe Smartpen, speech-to-text software) | 35.37      |
| Alternate format textbook or course materials (e.g., audio to text)            | 24.43      |
| Learning or behavior management support  | 26.29      |
| Reader, interpreter, or in-class aide  | 14.00      |
| Additional time or modified classwork  | 25.81      |
| Different test setting   | 28.34      |
| Early registration for classes   | 22.68      |

#### Table 39. Current Postsecondary Enrollees: Accommodations—Institution



| Variable   | Weighted % |  |
|--|------------|--|
| Independent living supports  | 13.66      |  |
| Physical changes to classroom  | 7.61       |  |
| Large print/books on tape or Braille materials                                 | 5.29       |  |
| Other accommodations or supports   | 1.91       |  |
| Classes later in the day   | -          |  |
| Scribe for tests   | -          |  |
| Reduced credit hours required to keep merit scholarship                        | -          |  |
| How well does your school or program implement your accommodations?<br>(Q6.17) |            |  |
| Poorly   | 0.66       |  |
| Not very well  | 4.09       |  |
| Undecided  | 5.46       |  |
| Well   | 51.20      |  |
| Very well  | 34.40      |  |
| I have not asked to use my accommodations                                      | 4.18       |  |

*Note.* Items in this table were given only to respondents who are currently enrolled at a postsecondary institution and who disclosed their LD to their current postsecondary institution. Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD who are currently enrolled at a postsecondary institution and who disclosed their LD to their current postsecondary institution (n = 445). Each variable or survey item may not total to 100% due to rounding.

As shown in Table 40, 76.77% of young adults have requested accommodations from all or some of their instructors. Of the individuals that requested accommodations from all or some of their instructors, 29.78% requested accommodations in all of their classes.



# Table 40. Current Postsecondary Enrollees: Accommodations—Instructors

| Variable  | Weighted % |  |
|---|------------|--|
| Have you requested accommodations from any of your instructors? (Q6.18) <sup>a</sup>    |            |  |
| None of my instructors  | 23.24      |  |
| Some of my instructors  | 50.63      |  |
| All of my instructors   | 26.14      |  |
| Which classes have you requested accommodations in? (Q6.19, Q6.19_11_TEXT) <sup>b</sup> |            |  |
| All of my classes   | 29.78      |  |
| English   | 21.11      |  |
| Mathematics (e.g., calculus, liberal arts math)   | 38.89      |  |
| Science (e.g., engineering, biology, chemistry, anatomy, computer science)              | 36.18      |  |
| Business (e.g., accounting, finance)  | 14.07      |  |
| Economics   | 11.48      |  |
| Social studies/history (e.g., government, civics)                                       | 11.30      |  |
| Social sciences (e.g., psychology, sociology)   | 13.69      |  |
| Lab (e.g., Chemistry lab, Stats lab)  | 10.82      |  |
| Legal/law   | 3.64       |  |
| Skilled crafts (e.g., mechanics, plumbing, cosmetology)                                 | 13.72      |  |
| Other   | 0.71       |  |
| Core courses (i.e., writing skills)   | -          |  |
| Select all the accommodations you have requested (Q6.20, Q6.20_15_TEXT) <sup>b</sup>    |            |  |



| Variable   | Weighted % |
|--|------------|
| Extended deadlines on assignments                                    | 43.38      |
| Extended time on tests, quizzes, or exams                            | 53.34      |
| Reduced workload   | 25.58      |
| Note taker or scribe   | 18.10      |
| Voice to text  | 22.29      |
| Closed captioning  | 13.78      |
| Recorded lectures  | 26.73      |
| Separate testing environment   | 27.08      |
| Alternative assignment options                                       | 14.80      |
| Verbal response to test questions                                    | 15.70      |
| Material or technical adaptations (e.g., e-textbook, text-to-speech) | 21.42      |
| Flexible attendance policy   | 14.83      |
| Materials provided ahead of time                                     | 19.59      |
| Physical changes to classroom  | 4.63       |
| Other  | 0.66       |
| Tutoring time with instructor  | -          |

*Note.* Items in this table were given only to respondents who are currently enrolled at a postsecondary institution and who disclosed their LD to their current postsecondary institution. Each variable or survey item may not total to 100% due to rounding.

<sup>a</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who are currently enrolled at a postsecondary institution and who disclosed their LD to their current postsecondary institution (*n* = 445).

<sup>b</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who are currently enrolled at a postsecondary institution, disclosed their LD to their current postsecondary institution, and requested accommodations from all or some of their instructors (*n* = 339). This item was select-all-that-apply and may not total to 100%.



Table 41 contains the Likert-type items asking about perceptions of support across classes. More than 40% of young adults reported they received the accommodations they needed in most or all of their classes, their instructors were positive about implementing their accommodations, they were comfortable asking for their accommodations, and they received the supports they needed without feeling they were different or a burden.

# Table 41. Current Postsecondary Enrollees: Accommodations—Perceptions of Support Across Classes

| Item  | Instr. not<br>aware<br>Weighted<br>% | None of<br>my classes<br>Weighted<br>% | Some of<br>my classes<br>Weighted<br>% | Most of<br>my classes<br>Weighted<br>% | All of my<br>classes<br>Weighted<br>% | Weighted<br>Mean<br>(SD) |
|---|--------------------------------------|--|--|--|---------------------------------------|--------------------------|
| My instructors give<br>me the<br>accommodations I<br>need (Q6.21_1)                             | 0.99                                 | 0.85                                   | 16.63                                  | 30.72                                  | 27.57                                 | 4.08 (0.86)              |
| My instructors are<br>positive about<br>implementing my<br>accommodations<br>(Q6.21_2)          | 0.74                                 | 2.06                                   | 19.35                                  | 25.70                                  | 28.91                                 | 4.04 (0.91)              |
| I feel comfortable<br>asking my<br>instructors for the<br>supports I need<br>(Q6.21_3)          | 1.60                                 | 3.57                                   | 15.84                                  | 26.48                                  | 29.28                                 | 4.02 (0.98)              |
| I get the supports I<br>need without<br>feeling that I am<br>different or a<br>burden (Q6.21_4) | 2.28                                 | 5.78                                   | 18.25                                  | 28.25                                  | 22.20                                 | 3.81 (1.03)              |

*Note.* Items in this table were given only to respondents who are currently enrolled at a postsecondary institution and who disclosed their LD to their current postsecondary institution. Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD who are currently enrolled at a postsecondary institution and who disclosed their LD to their current postsecondary institution (n = 445). Not all items may total to 100% due to rounding.

# **5.2.4 Current Employment**

The Employment block was given to survey participants who were not currently enrolled at a postsecondary institution. Additionally, individuals who are seeking employment (e.g., currently



unemployed but looking for a job) or currently unemployed and not looking for a job received a small subset of items.

As shown in Table 42, 22.85% of young adults are currently employed, 25.22% are unemployed but looking for a job, and 7.33% are unemployed but not looking for a job.

#### **Table 42. Employment Status**

| Are you currently employed? (Q7.2)               | Weighted % <sup>a</sup> | Weighted % <sup>b</sup> |
|--|-------------------------|-------------------------|
| I have a job                                     | 22.85                   | 41.24                   |
| I do not have a job but am looking               | 25.22                   | 45.52                   |
| I do not have a job and am not looking for a job | 7.33                    | 13.23                   |

*Note.* Items in this table were given only to respondents who are not currently enrolled at a postsecondary institution. Not all items may total to 100% due to rounding.

<sup>a</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (n = 1,283).

<sup>b</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD that are not currently enrolled in postsecondary (*n* = 713).

Of the individuals who are currently unemployed and looking for a job, 27.56% said they have never had a job but are currently looking, and 22.04% said they were unemployed due to disability discrimination (Table 43). Most individuals have been looking for work for two to six months.

## Table 43. Currently Seeking Employment: Characteristics

| Variable   | Weighted % |
|--|------------|
| What is your primary reason for unemployment? (Q7.18)  |            |
| I have never had a job before but am currently looking | 27.56      |
| Scheduling or availability of shifts                   | 5.75       |
| Transportation   | 2.86       |


| Variable   | Weighted % |  |  |
|--|------------|--|--|
| The job was too hard or not a good fit                       | 12.42      |  |  |
| Family obligations (e.g., taking care of family or children) | 2.22       |  |  |
| Health problems (e.g., physical, mental, substance abuse)    | 12.20      |  |  |
| The business closed, moved, or downsized                     | 2.18       |  |  |
| The job was seasonal   | 6.53       |  |  |
| Fired or laid off  | 5.28       |  |  |
| Disability discrimination                                    | 22.04      |  |  |
| Other  | 0.96       |  |  |
| About how long have you been looking for work? (Q7.19)       |            |  |  |
| Less than 2 months   | 23.67      |  |  |
| 2 to 6 months  | 43.61      |  |  |
| 6 to 12 months   | 25.46      |  |  |
| More than 12 months  | 7.26       |  |  |

*Note.* Items in this table were given only to respondents who are not currently enrolled at a postsecondary institution and are currently unemployed and seeking employment. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who are currently unemployed and seeking employment (*n* = 327). Not all items may total to 100% due to rounding.

Of the young adults who are currently employed, 76.99% hold one job, 15.28% hold two jobs, and 7.73% hold more than two jobs (Table 44). The majority (47.09%) work 30–39 hours per week and hold salaried positions (63.75%).



# Table 44. Currently Employed: Characteristics

| Variable   | Weighted % |
|--|------------|
| Number of jobs (Q7.3)                              |            |
| 1  | 76.99      |
| 2  | 15.28      |
| 3  | 5.14       |
| 4  | 2.21       |
| More than 4  | 0.38       |
| Number of hours per week (Q7.6)                    |            |
| Less than 10 hours                                 | 1.72       |
| 10 to 19 hours                                     | 7.31       |
| 20 to 29 hours                                     | 20.17      |
| 30 to 39 hours                                     | 47.09      |
| 40 hours   | 17.48      |
| More than 40 hours                                 | 6.23       |
| Type of Wage (Q7.7)                                |            |
| Hourly (Q7.9)                                      | 36.25      |
| Below federal minimum wage (less than \$7.25/hour) | 2.77       |
| Federal minimum wage (\$7.25/hour)                 | 0.00       |
| Above federal minimum wage (more than \$7.25/hour) | 33.47      |
| Salary (Q7.8)                                      | 63.75      |



| Variable               | Weighted % |
|------------------------|------------|
| \$0 to \$20,999        | 12.22      |
| \$21,000 to \$40,999   | 23.10      |
| \$41,000 to \$85,999   | 21.49      |
| \$86,000 to \$164,999  | 4.53       |
| \$165,000 to \$209,999 | 0.56       |
| \$210,000 to \$525,999 | 0.98       |
| \$526,000+             | 4.53       |

*Note.* Items in this table were given only to respondents who are not currently enrolled at a postsecondary institution and are currently employed. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who are currently employed (*n* = 292). Each variable or survey item may not total to 100% due to rounding.

As shown in Table 45, 12.55% of young adults who are currently employed are in the food preparation and serving industry.

# Table 45. Currently Employed: Position or Job Title

| What is your primary job title (Q7.4) or job title (Q7.5)? <sup>a</sup> | Weighted % |  |  |
|---|------------|--|--|
| Architecture and Engineering Occupations                                | 0.77       |  |  |
| Armed Forces  | 0.60       |  |  |
| Arts, Design, Entertainment, Sports, and Media                          | 8.10       |  |  |
| Building and Grounds Cleaning and Maintenance                           | 3.64       |  |  |
| Business  | 1.03       |  |  |
| Business and Financial Operations                                       | 6.73       |  |  |



| What is your primary job title (Q7.4) or job title (Q7.5)? <sup>a</sup> | Weighted % |  |  |
|---|------------|--|--|
| Community and Social Services   | 0.89       |  |  |
| Computer and Mathematical   | 3.92       |  |  |
| Construction  | 5.77       |  |  |
| Education Instruction and Library                                       | 1.92       |  |  |
| Farming, Fishing, and Forestry  | 0.49       |  |  |
| Food Preparation and Serving  | 12.55      |  |  |
| Health Practitioners and Technical Occupations                          | 3.07       |  |  |
| Installation, Maintenance, and Repair                                   | 1.93       |  |  |
| Life, Physical, and Social Science                                      | 1.27       |  |  |
| Management  | 10.06      |  |  |
| Office and Administrative Support                                       | 9.40       |  |  |
| Personal Care and Service   | 10.54      |  |  |
| Production  | 1.59       |  |  |
| Protective Service  | 0.32       |  |  |
| Sales and Related   | 10.74      |  |  |
| Transportation and Material Moving                                      | 4.67       |  |  |

*Note.* Items in this table were given only to respondents who are not currently enrolled at a postsecondary institution and are currently employed. Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD who are currently employed (n = 292). Each variable or survey item may not total to 100% due to rounding.

<sup>a</sup> Respondents' answers were categorized using occupation classifications from the U.S. Census Bureau (U.S. Census Bureau, 2020).



Most young adults (52.19%) report their current job is aligned with their future goals (Table 46).

#### **Table 46. Currently Employed: Alignment With Future Goals**

| Is your job aligned with your future goals? (Q7.10)      | Weighted % |
|--|------------|
| My job is aligned with my future goals.                  | 52.19      |
| My job is not aligned with my future goals.              | 42.29      |
| I am not sure if my job is aligned with my future goals. | 5.53       |

*Note.* Items in this table were given only to respondents who are not currently enrolled at a postsecondary institution and are currently employed. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who are currently employed (*n* = 292). This variable may not total to 100% due to rounding.

Table 47 contains the Likert-type items about perceptions of qualifications, pay, and support. Over 70% of young adults either agreed or strongly agreed that their work is manageable, they feel supported at their job, they feel qualified for their job, and they can see themselves being successful at their job.

# Table 47. Currently Employed: Workplace Perceptions—Qualifications, Pay, andSupport

| Item  | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean<br>( <i>SD</i> ) |
|---|--------------------|--------------------|--------------------|--------------------|---------------------|-----------------------------------|
| My work is<br>manageable<br>(Q7.16_1)                   | 0.57               | 2.85               | 4.04               | 68.08              | 24.46               | 4.13 (0.66)                       |
| l feel supported at<br>my job (Q7.16_2)                 | 1.16               | 5.93               | 12.50              | 47.15              | 33.26               | 4.05 (0.89)                       |
| I feel qualified for<br>this job (Q7.16_3)              | 1.18               | 2.73               | 8.54               | 51.31              | 36.24               | 4.19 (0.79)                       |
| My job pays me<br>enough to support<br>myself (Q7.16_4) | 2.19               | 10.86              | 9.68               | 53.52              | 23.75               | 3.86 (0.97)                       |



| ltem  | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean<br>( <i>SD</i> ) |
|---|--------------------|--------------------|--------------------|--------------------|---------------------|-----------------------------------|
| l can see myself<br>being successful at<br>my job (Q7.16_5) | 0.32               | 2.09               | 10.07              | 51.99              | 35.53               | 4.20 (0.73)                       |
| I feel socially<br>accepted at my job<br>(Q7.16_6)          | 0.95               | 0.64               | 8.81               | 57.15              | 32.45               | 4.20 (0.70)                       |

*Note.* Items in this table were given only to respondents who are not currently enrolled at a postsecondary institution and are currently employed. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who are currently employed (*n* = 292). Not all items may total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

Similar to individuals who are currently enrolled at a postsecondary institution, approximately 75% of young adults that are currently employed either formally or informally disclosed their LD to their employer (Table 48).

#### Table 48. Currently Employed: LD Disclosure

| Variable   | Weighted % |  |  |
|--|------------|--|--|
| Does your employer know you have LD? (Q7.11)           |            |  |  |
| Yes, I formally disclosed                              | 42.01      |  |  |
| Yes, I disclosed but did not provide any documentation | 33.75      |  |  |
| No   | 24.25      |  |  |

*Note.* Items in this table were only given to respondents who are not currently enrolled at a postsecondary institution and are currently employed. Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD who are currently employed (n = 292). This variable may not total to 100% due to rounding

Most individuals who disclosed their LD were able to provide a formal evaluation from a licensed practitioner (19.10%) (Table 49). Despite disclosing their disability, 28.67% of young adults who are currently employed do not believe they need accommodations, and 5.06% were not aware they could receive accommodations.



# Table 49. Currently Employed: Accommodations

| Variable  | Currently<br>Employed<br>Weighted % <sup>a</sup> | Employed and<br>Formally Disclosed<br>LD<br>Weighted % <sup>b</sup> | Employed and<br>Receive<br>Accommodations<br>Weighted % <sup>c</sup> |
|---|--|---|--|
| Documentation (Q7.12, Q7.12_5_TEXT) <sup>d</sup>  |  |   |  |
| IEP   | 2.45   | 5.84  | 4.60   |
| 504 plan  | 3.53   | 8.41  | 10.70  |
| Doctor's note   | 13.57  | 32.31   | 26.76  |
| Formal evaluation from a licensed<br>practitioner (e.g., licensed school<br>psychologist)       | 19.10  | 45.48   | 28.48  |
| Other   | 0.00 <sup>g</sup>                                | 0.00 <sup>g</sup>   | 0.00 <sup>g</sup>  |
| None of the above   | 3.35   | 7.97  | 2.51   |
| Have you received any formal or<br>informal accommodations for your LD?<br>(Q7.13) <sup>e</sup> |  |   |  |
| Yes   | 23.18  | 40.31   | 100  |
| I asked but was denied all accommodations   | 2.57   | 2.60  | 0.00 <sup>g</sup>  |
| I didn't ask for accommodations due to possible discrimination                                  | 22.76  | 17.76   | 0.00 <sup>g</sup>  |
| I didn't ask for accommodations<br>because I thought it would burden<br>the people I work with  | 17.77  | 12.40   | 0.00 <sup>g</sup>  |
| I don't think I need<br>accommodations  | 28.67  | 24.57   | 0.00 <sup>g</sup>  |



| Variable  | Currently<br>Employed<br>Weighted % <sup>a</sup> | Employed and<br>Formally Disclosed<br>LD<br>Weighted % <sup>b</sup> | Employed and<br>Receive<br>Accommodations<br>Weighted % <sup>c</sup> |
|---|--|---|--|
| I didn't know I could receive accommodations                                      | 5.06   | 2.36  | 0.00 <sup>g</sup>  |
| What accommodations or help have you received? (Q7.14, Q7.14_5_TEXT) <sup>f</sup> |  |   |  |
| Materials or technical adaptations  | 12.10  | 26.24   | 52.20  |
| Scheduling accommodations   | 10.98  | 23.50   | 47.39  |
| Assistance from a coworker or another person                                      | 13.40  | 23.61   | 57.82  |
| Assignment or supervision accommodations  | 6.46   | 10.43   | 27.88  |
| Other   | 0.00 <sup>g</sup>                                | 0.00 <sup>g</sup>   | 0.00 <sup>g</sup>  |
| How useful have these accommodations been? (Q7.15) <sup>f</sup>                   |  |   |  |
| Not very useful   | 0.00 <sup>g</sup>                                | 0.00 <sup>g</sup>   | 0.00 <sup>g</sup>  |
| Somewhat useful   | 3.33   | 5.85  | 14.36  |
| Very useful   | 19.23  | 32.98   | 82.96  |
| Not applicable  | 0.37   | 0.88  | 1.59   |
| I do not have any workplace<br>accommodations, but they would<br>be helpful to me | 0.25   | 0.60  | 1.08   |

*Note*. Each variable or survey item may not total to 100% due to rounding, due to survey flow where not all participants received the items in this table, or due to the item being select-all-that apply.

<sup>a</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who are not currently enrolled at a postsecondary institution and are currently employed (*n* = 292).

<sup>b</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who are not currently enrolled at a postsecondary institution and formally disclosed their LD to their current employer (*n* = 125).



<sup>c</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who are not currently enrolled at a postsecondary institution, currently employed, and receive formal or informal accommodations from their employer (*n* = 68).

<sup>d</sup> This item was given to individuals who formally disclosed their LD to their current employer.

<sup>e</sup> This item was given to individuals who are currently employed.

<sup>f</sup>This item was given to individuals who are currently employed and received formal or informal accommodations for their LD.

<sup>g</sup> Weighted percentage is exactly 0.

Table 50 contains the Likert-type items about perceptions of support and access to supports. More than 70% of young adults who are currently employed either agreed or strongly agreed that they know the process or procedures to obtain employment accommodations for a disability and reported receiving the supports they need without feeling like a burden.

#### Table 50. Currently Employed: Accommodations—Perceptions of Support

| ltem   | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean ( <i>SD</i> ) |
|--|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------------------|
| I know the process<br>or procedures to<br>obtain employment<br>accommodations for<br>a disability<br>(Q7.17_1) | 4.57               | 8.14               | 15.16              | 55.11              | 17.02               | 3.72 (0.99)                    |
| I get the supports I<br>need without<br>feeling like I am<br>different or a<br>burden (Q7.17_2)                | 1.64               | 8.20               | 14.38              | 55.34              | 20.44               | 3.85 (0.90)                    |
| My employer is<br>positive about<br>implementing my<br>accommodations<br>(Q7.17_3) <sup>a</sup>                | 0.00 <sup>b</sup>  | 0.00 <sup>b</sup>  | 1.74               | 12.81              | 8.62                | 4.30 (0.60)                    |
| My employer gives<br>me the<br>accommodations I<br>need (Q7.17_4) <sup>a</sup>                                 | 0.00 <sup>b</sup>  | 0.00 <sup>b</sup>  | 0.00 <sup>b</sup>  | 11.54              | 11.64               | 4.50 (0.50)                    |



| Item   | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean ( <i>SD</i> ) |
|--|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------------------|
| I feel comfortable<br>asking my employer<br>for the supports I<br>need (Q7.17_5) | 2.47               | 7.25               | 12.82              | 52.55              | 24.91               | 3.90 (0.94)                    |

*Note.* Items in this table were only given to respondents who are not currently enrolled at a postsecondary institution and are currently employed. Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD who are currently employed (n = 292). Not all items may total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

<sup>a</sup> Item appeared if respondent said they received formal or informal workplace accommodations. <sup>b</sup> Weighted percentage is exactly 0, as no individuals selected this response option.

# 5.2.5 Adaptive and Daily Living Skills

All survey participants received the Adaptive and Daily Living Skills block. The Adaptive and Daily Living Skills; Community, Social, and Financial Support; and Mental Health blocks were randomized, meaning survey participants could receive them in a different order.

As shown in Table 51, most young adults would describe the area where they live as urban (64.03%), followed by suburban (25.83%). Approximately 45% of young adults currently live with family, and 86.33% have not experienced homelessness. As shown in Table 52, most young adults are single (65.37%) and do not have any children (95.59%).

#### **Table 51. Current Life: Living Situation**

| Variable   | Weighted % |
|--|------------|
| Which best describes the area where you live? (Q8.2)       |            |
| Rural area   | 8.90       |
| Suburban area  | 25.83      |
| Urban area   | 64.03      |
| I'm not sure   | 1.24       |
| Which best describes your current living situation? (Q8.3) |            |



| Variable   | Weighted % |
|--|------------|
| I live by myself   | 21.73      |
| I live with a spouse or partner  | 8.66       |
| I live with roommates (e.g., college dorm, shared apartment or house, or group home) | 22.37      |
| I live with family   | 45.67      |
| I am currently experiencing homelessness   | 0.52       |
| None of the above  | 1.05       |
| Have you ever experienced homelessness? (Q8.6)                                       |            |
| Yes  | 13.67      |
| No   | 86.33      |

# Table 52. Current Life: Relationships and Children

| Variable   | Weighted % |
|--|------------|
| Are you currently: (Q8.4)                                |            |
| Single   | 65.37      |
| Dating   | 27.87      |
| Engaged  | 2.84       |
| Married  | 2.68       |
| In a marriage-like relationship or committed partnership | 0.85       |
| Separated  | 0.32       |



| Variable                         | Weighted %        |  |
|----------------------------------|-------------------|--|
| Divorced                         | 0.00 <sup>a</sup> |  |
| Widowed                          | 0.06              |  |
| Do you have any children? (Q8.5) |                   |  |
| Yes                              | 4.41              |  |
| No                               | 95.59             |  |

<sup>a</sup> Weighted percentage is exactly 0, as no individuals selected this response option.

Similarly, most young adults have not been in the military (98.59%) (Table 53).

#### Table 53. Current Life: Military

| Variable  | Weighted %        |
|---|-------------------|
| Were you ever in the military? (Q8.8, Q8.8_3_TEXT) <sup>a</sup>                   |                   |
| Yes   | 1.26              |
| Νο  | 98.59             |
| Other   | 0.15              |
| Which of the following was your primary reason for enlisting? (Q8.9) <sup>b</sup> |                   |
| To serve my country   | 32.75             |
| To have purpose   | 4.67              |
| To continue family tradition  | 0.00 <sup>c</sup> |
| Medical benefits and/or housing   | 10.23             |
| Alternative to college or employment  | 7.44              |



| Variable   | Weighted %        |
|--|-------------------|
| To save money  | 18.50             |
| Retirement benefits                                      | 8.46              |
| To receive training                                      | 9.34              |
| Education benefits for after discharge (e.g., G.I. Bill) | 8.60              |
| Something else   | 0.00 <sup>c</sup> |

*Note*. Each variable or survey item may not total to 100% due to rounding.

<sup>a</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283).

<sup>b</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who have ever been in the military (*n* = 17).

<sup>c</sup> Weighted percentage is exactly 0, as no individuals selected this response option.

Most young adults report having health insurance (73.18%), with 40.18% having health insurance through their parents, family members, or caregivers (Table 54).

#### Table 54. Current Life: Health Insurance

| Variable  | Weighted % |
|---|------------|
| Do you have health insurance? (Q8.11)                             |            |
| Yes   | 73.18      |
| Νο  | 26.82      |
| How do you have health insurance? Select all that apply: (Q.8.12) |            |
| Employer  | 12.14      |
| Spouse or domestic partner  | 1.64       |
| Postsecondary institution (e.g., college, university)             | 7.17       |
| Medicare or Medicaid  | 19.19      |



| Variable                                      | Weighted % |
|---|------------|
| Parents, family members, or caregivers        | 40.18      |
| Affordable Care Act or Healthcare marketplace | 3.23       |
| Directly through an insurance company         | 5.96       |
| Other   | 0.28       |

As shown in Table 55, 57.77% of young adults are able to afford Internet without public or private help, 56.08% their cell phone bill, 52.78% groceries, and 45.63% transportation.

# Table 55. Current Life: Financial Stability

| Variable  | Weighted % |
|---|------------|
| Which are you able to afford without public or private help (e.g., government, family, charity, scholarships)? Select all that apply: (Q8.10) |            |
| Housing (e.g., rent, mortgage)  | 29.29      |
| Utilities (e.g., water, electric)   | 40.37      |
| Cell phone bill   | 56.08      |
| Internet  | 57.77      |
| Car payments  | 11.74      |
| Car insurance   | 10.73      |
| Transportation costs (e.g., bus or metro pass, gas, car registration)   | 45.63      |
| Groceries   | 52.78      |
| Healthcare (e.g., physical or mental health services, insurance)  | 19.10      |



| Variable          | Weighted % |
|-------------------|------------|
| None of the above | 12.07      |

Table 56 contains the Likert-type items about young adults' level of confidence doing everyday activities. Most young adults were fairly or completely confident they could use a map, take care of their mental health, take care of their physical health, use technology, use the healthcare system, and take care of their personal finances.

# Table 56. Current Life: Adaptive Living Skills

| Rate your level of<br>confidence in doing<br>each of the<br>following activities:<br>(Q8.13)                        | U<br>Weighted<br>% | Slightly<br>Weighted<br>% | Some<br>Weighted<br>% | Fairly<br>Weighted<br>% | C<br>Weighted<br>% | Weighted<br>Mean<br>( <i>SD</i> ) |
|---|--------------------|---------------------------|-----------------------|-------------------------|--------------------|-----------------------------------|
| Using a map, GPS, or<br>the public<br>transportation<br>system (Q8.13_1)  | 2.34               | 11.22                     | 20.43                 | 37.81                   | 28.20              | 3.78 (1.05)                       |
| Taking care of my<br>mental health (e.g.,<br>taking breaks,<br>managing stress,<br>seeing a therapist)<br>(Q8.13_2) | 3.64               | 12.28                     | 21.96                 | 35.84                   | 26.28              | 3.69 (1.10)                       |
| Taking care of my<br>physical health (e.g.,<br>eating healthy,<br>going to the gym)<br>(Q8.13_3)                    | 3.74               | 8.14                      | 21.09                 | 35.39                   | 31.64              | 3.83 (1.08)                       |
| Using technology<br>(e.g., using a<br>computer or app to<br>pay bills) (Q8.13_4)                                    | 1.95               | 8.91                      | 18.11                 | 33.49                   | 37.54              | 3.96 (1.04)                       |



| Rate your level of<br>confidence in doing<br>each of the<br>following activities:<br>(Q8.13)              | U<br>Weighted<br>% | Slightly<br>Weighted<br>% | Some<br>Weighted<br>% | Fairly<br>Weighted<br>% | C<br>Weighted<br>% | Weighted<br>Mean<br>(SD) |
|---|--------------------|---------------------------|-----------------------|-------------------------|--------------------|--------------------------|
| Using the healthcare<br>system (e.g., going<br>to the doctor)<br>(Q8.13_5)                                | 1.77               | 10.27                     | 21.73                 | 36.67                   | 29.56              | 3.82 (1.03)              |
| Taking care of my<br>personal finances<br>(e.g., paying bills on<br>time, managing a<br>budget) (Q8.13_6) | 5.10               | 12.77                     | 21.46                 | 34.39                   | 26.28              | 3.64 (1.15)              |

Note. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (n = 1,283). Not all items may total to 100% due to rounding. U = Unconfident, Slightly = Slightly confident, Some = Somewhat confident, Fairly = Fairly confident, C = Completely confident. All Likert-type items have been coded so that a higher mean is better.

# **5.2.6 Community, Social, and Financial Supports**

All participants received the Community, Social, and Financial Supports block. The Adaptive and Daily Living Skills; Community, Social, and Financial Support; and Mental Health blocks were randomized, meaning survey participants could receive the three survey blocks in a different order.

As shown in Table 57, 28.18% of young adults report joining support groups for individuals with LD since turning 18; 19.04% have used Medicaid, SNAP, or Electronic Benefits Transfer (EBT) benefits; and 18.71% have used federal or state disability aid.

| Variable   | Weighted % |
|--|------------|
| Have you used any of the following since turning 18 years old? Select all that apply: (Q9.2)               |            |
| Federal or state disability aid (e.g., Supplemental Security Income, Social Security Disability Insurance) | 18.71      |
| Unemployment benefits  | 12.47      |

#### Table 57. Community, Social, and Financial Supports: Community and Financial



| Variable  | Weighted % |
|---|------------|
| Medicaid, SNAP, or EBT benefits                           | 19.04      |
| Public housing voucher                                    | 5.77       |
| Financial aid from a religious or community organization  | 17.23      |
| Vocational rehabilitation services                        | 8.53       |
| Support for substance abuse                               | 5.71       |
| Support groups for individuals with learning disabilities | 28.18      |
| None of the above   | 34.14      |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283). This item was select-all-that-apply and may not total to 100%.

Table 58 contains the Likert-type items for perceptions of the impact of LD on young adults. Notably, 28.75% either disagreed or strongly disagreed that their LD has a positive impact on them, and 34.15% either disagreed or strongly disagreed that they are proud to have LD.

| Item   | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean<br>( <i>SD</i> ) |
|--|--------------------|--------------------|--------------------|--------------------|---------------------|-----------------------------------|
| My learning<br>disability has a<br>positive impact on<br>me (Q9.6_1) | 7.45               | 21.30              | 17.55              | 40.51              | 13.18               | 3.31 (1.16)                       |
| My learning<br>disability is a part of<br>who I am (Q9.6_2)          | 2.62               | 8.81               | 12.19              | 48.85              | 27.53               | 3.90 (0.99)                       |

# Table 58. Community, Social, and Financial Supports: Impact of LD on Self



| Item  | S        | D        | U        | A        | SA       | Weighted      |
|---|----------|----------|----------|----------|----------|---------------|
|   | Weighted | Weighted | Weighted | Weighted | Weighted | Mean          |
|   | %        | %        | %        | %        | %        | ( <i>SD</i> ) |
| l am proud to have a<br>learning disability<br>(Q9.6_3) | 11.50    | 22.65    | 16.46    | 33.36    | 16.03    | 3.20 (1.27)   |

*Note*. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283). Not all items may total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

Most young adults agreed or strongly agreed that while growing up they had an advocate for their disability, had an adult with a disability that they looked up to, knew that a person with a disability could be successful in life, and felt their family understood their disability (Table 59).

#### Table 59. Community, Social, and Financial Supports: Family Support—Then and Now

| ltem   | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean<br>(SD) |
|--|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------------|
| Then   |                    |                    |                    |                    |                     |                          |
| Growing up, I<br>had an advocate<br>for my disability<br>(Q9.7_1)                                      | 4.62               | 19.97              | 13.85              | 44.59              | 16.97               | 3.49<br>(1.13)           |
| Growing up, I<br>had an adult<br>with a disability<br>that I looked up<br>to (Q9.7_2)                  | 8.56               | 23.44              | 15.13              | 35.91              | 16.97               | 3.29<br>(1.24)           |
| Growing up, I<br>knew that a<br>person with a<br>disability could<br>be successful in<br>life (Q9.7_3) | 2.72               | 8.18               | 13.13              | 47.07              | 28.91               | 3.91<br>(0.99)           |
| Growing up, my<br>family<br>understood how   | 1.86               | 6.06               | 12.14              | 49.13              | 30.82               | 4.01<br>(0.92)           |



| Item  | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean<br>( <i>SD</i> ) |
|---|--------------------|--------------------|--------------------|--------------------|---------------------|-----------------------------------|
| my disability<br>impacted me<br>(Q9.7_4)  |                    |                    |                    |                    |                     |                                   |
| Now   |                    |                    |                    |                    |                     |                                   |
| My family<br>currently<br>understands me<br>as a person<br>(Q9.8_1)                     | 1.49               | 6.62               | 11.97              | 48.14              | 31.78               | 4.02<br>(0.92)                    |
| My family<br>currently<br>understands<br>how my<br>disability<br>impacts me<br>(Q9.8_2) | 1.23               | 5.51               | 11.06              | 50.88              | 31.33               | 4.06<br>(0.87)                    |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD (n = 1,283). Not all items may total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

Table 60 contains the Likert-type items for peer support. At least 50% of young adults either agreed or strongly agreed that they feel comfortable telling friends or romantic partners they have LD, feel connected to people in their age group, feel connected to peers with disabilities, feel connected to peers without disabilities, and feel their friends understand how their disability impacts them.

| Table 60. Community | v. Social. and | <b>Financial Sup</b> | ports: Peer Support  |
|---------------------|----------------|----------------------|----------------------|
|                     | y, Social, and | i manciai Sapi       | Joi to i cei Support |

| Item  | S        | D        | U        | A        | SA       | Weighted    |
|---|----------|----------|----------|----------|----------|-------------|
|   | Weighted | Weighted | Weighted | Weighted | Weighted | Mean        |
|   | %        | %        | %        | %        | %        | (SD)        |
| I feel comfortable<br>telling friends or<br>romantic partners I<br>have a learning<br>disability (Q9.6_4) | 5.67     | 12.73    | 16.22    | 44.21    | 21.17    | 3.62 (1.12) |



| ltem  | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean<br>( <i>SD</i> ) |
|---|--------------------|--------------------|--------------------|--------------------|---------------------|-----------------------------------|
| I feel connected to<br>people in my age<br>group (Q9.6_5)   | 2.48               | 12.04              | 15.11              | 51.28              | 19.10               | 3.72 (0.99)                       |
| I feel connected to<br>peers with<br>disabilities (or peers<br>who identify as<br>neurodivergent)<br>(Q9.6_6) | 2.54               | 7.21               | 14.28              | 51.88              | 24.10               | 3.88 (0.94)                       |
| I feel connected to<br>peers without<br>disabilities (Q9.6_7)   | 2.25               | 8.67               | 16.67              | 52.86              | 19.55               | 3.79 (0.93)                       |
| My friends<br>understand how my<br>disability impacts<br>me (Q9.8_3)  | 2.18               | 4.90               | 13.11              | 54.44              | 25.37               | 3.96 (0.88)                       |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD (n = 1,283). Not all items may total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

Table 61 contains the Likert-type items about perceptions of disability and society. More than 75% of young adults agreed or strongly agreed that disability is a natural part of life and that disability has a huge impact on a person's life. More than 50% of young adults agreed or strongly agreed that people without disabilities ignore people with disabilities, people become impatient with people with disabilities, and that people with disabilities are discriminated against.



# Table 61. Community, Social, and Financial Supports: Perceptions of Disability andSociety

| ltem   | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean<br>( <i>SD</i> ) |
|--|--------------------|--------------------|--------------------|--------------------|---------------------|-----------------------------------|
| Disability is a<br>natural part of life<br>(Q9.4_1)  | 2.27               | 8.83               | 13.37              | 53.03              | 22.50               | 3.85 (0.95)                       |
| Disability has a huge<br>impact on a<br>person's life<br>(Q9.4_2) <sup>a</sup>             | 1.91               | 5.25               | 11.43              | 48.80              | 32.62               | 1.95 (0.91)                       |
| People without<br>disabilities ignore<br>people with<br>disabilities (Q9.4_3) <sup>a</sup> | 6.16               | 15.92              | 20.67              | 40.01              | 17.23               | 2.54 (1.13)                       |
| People become<br>impatient with<br>people with<br>disabilities (Q9.4_4) <sup>a</sup>       | 3.45               | 11.79              | 16.29              | 46.73              | 21.74               | 2.28 (1.04)                       |
| Our society fails to<br>accommodate<br>people with<br>disabilities (Q9.4_5) <sup>a</sup>   | 4.96               | 17.50              | 20.31              | 39.57              | 17.66               | 2.53 (1.12)                       |
| People with<br>disabilities are<br>discriminated<br>against (Q9.4_6) <sup>a</sup>          | 4.15               | 10.14              | 18.11              | 47.70              | 19.90               | 2.31 (1.03)                       |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD (n = 1,283). Not all items may total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

<sup>a</sup> Item has been reverse coded.



Table 62 contains the Likert-type items for advocating for oneself under disability rights or laws. More than 75% of young adults either agreed or strongly agreed they are aware they have certain legal rights and protections because they are a person with a disability, they know where to access information about disability rights, they have talked to someone about their legal rights and protections about their disability, and they are comfortable advocating for their rights under disability law.

| Item   | Not<br>Aware<br>Weighted<br>% | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean<br>(SD) |
|--|-------------------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------------|
| I am aware<br>that I have<br>certain legal<br>rights and<br>protections<br>because I am a<br>person with a<br>disability<br>(Q9.5_1) | 4.71                          | 0.65               | 6.56               | 9.50               | 45.85              | 32.72               | 4.89<br>(1.22)           |
| I know where<br>to access<br>information<br>about<br>disability rights<br>(Q9.5_2)   | 5.43                          | 1.26               | 8.90               | 12.54              | 42.41              | 29.45               | 4.74<br>(1.30)           |
| I have talked<br>to someone<br>about my legal<br>rights and<br>protections<br>about my<br>disability<br>(Q9.5_3) <sup>a</sup>        | 4.43                          | 2.66               | 13.51              | 12.07              | 40.67              | 26.68               | 2.38<br>(1.32)           |
| l am<br>comfortable<br>advocating for<br>my rights<br>under  | 4.84                          | 1.58               | 6.31               | 10.70              | 43.08              | 33.50               | 4.86<br>(1.26)           |

#### Table 62. Community, Social, and Financial Supports: Advocating for Self



| ltem                        | Not<br>Aware<br>Weighted<br>% | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean<br>(SD) |
|-----------------------------|-------------------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------------|
| disability laws<br>(Q9.5_4) |                               |                    |                    |                    |                    |                     |                          |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283). Not all items may total to 100% due to rounding. Not Aware = I am not aware of disability laws, S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

<sup>a</sup> Item has been reverse coded.

# 5.2.7 Mental Health

All participants received the Mental Health block. The Adaptive and Daily Living Skills; Community, Social, and Financial Support; and Mental Health blocks were randomized, meaning survey participants could receive them in a different order.

Over the past year, 38.11% of young adults report a loss of interest in people or activities that they used to enjoy, and 32.89% of young adults report feeling sad or hopeless for long periods of time (Table 63). Further 24.92% report they have been diagnosed with a mental health disorder.

#### Table 63. Mental Health: Symptoms and Diagnoses

| Variable   | Weighted % |
|--|------------|
| Over the past year, have you experienced any of the following? Select all that apply: (Q10.2) <sup>a</sup> |            |
| Feelings of fear, dread, or uneasiness around everyday situations  | 27.60      |
| Feeling sad or hopeless for long periods of time (e.g., for at least two weeks at a time)                  | 32.89      |
| Loss of interest in people or activities that you used to enjoy  | 38.11      |
| Feeling shame or worthlessness for long periods of time (e.g., for at least two weeks at a time)           | 20.72      |
| None of the above  | 29.62      |



| Variable  | Weighted % |
|---|------------|
| Have you ever been diagnosed with a mental health disorder? (Q10.4) |            |
| Yes (Q10.5, Q10.5_5_TEXT) <sup>a</sup>                              | 24.92      |
| Anxiety   | 15.81      |
| Depression  | 15.25      |
| Post-traumatic stress disorder                                      | 7.62       |
| Obsessive compulsive disorder                                       | 3.10       |
| Other   | 1.29       |
| No  | 75.08      |

<sup>a</sup> This item was select-all-that apply.

As shown in Table 64, 56.06% of young adults consider a mental health disorder to be a disability. Further, 44.36% of young adults believe their learning disability negatively affects their mental health.

# **Table 64. Mental Health: Effects and Perceptions**

| Variable  | Weighted % |
|---|------------|
| How often do you use drugs or alcohol to cope with mental health challenges?<br>(Q10.3) |            |
| 5+ days per week  | 2.13       |
| 2 to 4 days per week  | 13.79      |
| Once a week   | 13.84      |
| A few times per month   | 15.20      |



| Variable   | Weighted % |
|--|------------|
| Never  | 55.04      |
| Do you consider a mental health disorder to be a disability? (Q10.6) |            |
| Yes  | 56.06      |
| Νο   | 32.41      |
| Unsure   | 11.53      |
| Which of the following best describes you? (Q10.7)                   |            |
| My learning disability negatively affects my mental health           | 44.36      |
| My learning disability positively affects my mental health           | 14.55      |
| My learning disability does not have an effect on my mental health   | 31.69      |
| Unsure   | 9.40       |

# **5.2.8 Surviving/Thriving**

All participants received the Surviving/Thriving block. Across all participants, the Surviving/Thriving block was the last survey block.

Approximately 67% of young adults report feeling good about their life most or all of the time (Table 65).



#### Table 65. Surviving/Thriving: Current Satisfaction With Life—Frequency

|  | None of<br>the Time<br>Weighted<br>% | Some of<br>the Time<br>Weighted<br>% | Most of<br>the Time<br>Weighted<br>% | All of the<br>Time<br>Weighted<br>% | Weighted<br>Mean<br>(SD) |
|--|--------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------|
| How often do you feel good about your<br>life? (Q11.3) | 1.29                                 | 31.13                                | 49.37                                | 18.21                               | 2.84<br>(0.72)           |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283). Not all items may total to 100% due to rounding.

Table 66 contains the Likert-type items for level of satisfaction across different areas. Most young adults appear to be satisfied or very satisfied across personal independence, who they are, mental health, physical health, family relationships, friendships, romantic relationships, connection to community, personal finances, employment, transportation, education or training, and housing. The greatest areas of dissatisfaction appear to be romantic relationships (18.90%) and employment (23.93%).

#### Table 66. Surviving/Thriving: Current Satisfaction With Life—Area

| How satisfied are<br>you currently in the<br>following areas? | VD<br>Weighted<br>% | D<br>Weighted<br>% | N<br>Weighted<br>% | S<br>Weighted<br>% | VS<br>Weighted<br>% | Weighted<br>Mean<br>( <i>SD</i> ) |
|---|---------------------|--------------------|--------------------|--------------------|---------------------|-----------------------------------|
| Self  |                     |                    |                    |                    |                     |                                   |
| Personal<br>independence<br>(Q11.4_7)                         | 2.52                | 10.84              | 19.97              | 45.80              | 20.88               | 3.72 (0.99)                       |
| Who I am<br>(Q11.4_8)   | 2.35                | 9.13               | 16.89              | 45.96              | 25.67               | 3.83 (0.99)                       |
| Health  |                     |                    |                    |                    |                     |                                   |
| Mental health<br>(Q11.4_5)                                    | 4.85                | 12.71              | 20.00              | 43.83              | 18.61               | 3.59 (1.08)                       |
| Physical health<br>(Q11.4_6)                                  | 3.42                | 9.11               | 14.50              | 51.88              | 21.08               | 3.78 (0.99)                       |



| How satisfied are<br>you currently in the<br>following areas? | VD<br>Weighted<br>% | D<br>Weighted<br>% | N<br>Weighted<br>% | S<br>Weighted<br>% | VS<br>Weighted<br>% | Weighted<br>Mean<br>( <i>SD</i> ) |
|---|---------------------|--------------------|--------------------|--------------------|---------------------|-----------------------------------|
| Relationships   |                     |                    |                    |                    |                     |                                   |
| Family<br>relationships<br>(Q11.4_2)                          | 1.38                | 5.26               | 11.86              | 48.72              | 32.77               | 4.06 (0.88)                       |
| Friendships<br>(Q11.4_3)                                      | 2.32                | 6.63               | 15.31              | 53.08              | 22.65               | 3.87 (0.92)                       |
| Romantic<br>relationships<br>(Q11.4_4)                        | 4.57                | 14.33              | 22.90              | 39.32              | 18.89               | 3.54 (1.09)                       |
| Connection to<br>community<br>(Q11.4_10)                      | 3.47                | 9.56               | 22.02              | 46.09              | 18.86               | 3.67 (1.00)                       |
| Upward Mobility   |                     |                    |                    |                    |                     |                                   |
| Personal<br>finances<br>(Q11.4_1)                             | 4.90                | 18.15              | 23.55              | 37.65              | 15.75               | 3.41 (1.10)                       |
| Employment<br>(Q11.4_9)                                       | 6.81                | 17.12              | 24.44              | 37.21              | 14.42               | 3.35 (1.13)                       |
| Transportation<br>(Q11.4_11)                                  | 1.96                | 10.76              | 18.62              | 50.80              | 17.86               | 3.72 (0.95)                       |
| Education or<br>training<br>(Q11.4_12)                        | 4.09                | 8.35               | 18.42              | 46.87              | 22.27               | 3.75 (1.02)                       |
| Housing<br>(Q11.4_13)   | 2.13                | 8.30               | 18.89              | 50.42              | 20.26               | 3.78 (0.93)                       |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD (n = 1,283). Not all items may total to 100% due to rounding. VD = Very dissatisfied, D = Dissatisfied, N = Neither satisfied nor dissatisfied, S = Satisfied, VS = Very satisfied. All Likert-type items have been coded so that a higher mean is better.



Table 67 provides information on participation in the criminal justice system before individuals turned 18 (if they did not attend high school), during high school (if they did attend high school), and since high school.

| Table 67. Sur | viving/Thriving: | <b>Negative Impacts-</b> | -Participation in the | <b>Justice System</b> |
|---------------|------------------|--------------------------|-----------------------|-----------------------|
|               |                  |                          |                       |                       |

| Select all that occurred  | Before turning 18<br>(Q5.9)<br>Weighted %ª | During high school<br>(Q5.16)<br>Weighted % | Since high school<br>(Q11.5)<br>Weighted % |
|---|--|---|--|
| I was stopped and questioned by police<br>for something other than a traffic<br>violation | 2.06                                       | 6.10  | 8.63                                       |
| I spent a night in jail or juvenile detention center                                      | 0.78                                       | 2.07  | 0.00 <sup>a</sup>                          |
| I was arrested  | 0.70                                       | 1.60  | 2.47                                       |
| I was charged as a minor  | 0.63                                       | 2.03  | 0.00 <sup>a</sup>                          |
| I was charged as an adult   | 0.20                                       | 1.46  | 0.00ª                                      |
| I was on probation or parole  | 0.25                                       | 1.60  | 2.12                                       |
| None of the above   | 7.99                                       | 76.87                                       | 86.77                                      |

*Note.* <sup>a</sup> This item was provided only to survey respondents who did not attend high school. Percentages represent weighted population estimates based on our survey sample of young adults ages 18-24 with LD (n = 1,283). Not all items may total to 100% due to rounding.

<sup>a</sup> Weighted percentage is exactly 0, as no individuals selected this response option.

As shown in Table 68, approximately 37.75% of young adults report that managing their emotions (e.g., anger, sadness, anxiety) has a negative impact on their quality of life.

#### Table 68. Surviving/Thriving: Negative Impacts—Executive Functioning

| Variable   | Weighted % |
|--|------------|
| Do any of the following have a negative impact on your quality of life (e.g., social, emotional, financial, professional)? Select all that apply: (Q4.8) |            |



| Variable   | Weighted % |
|--|------------|
| Managing my emotions (e.g., anger, sadness, anxiety) | 37.75      |
| Self-control (e.g., controlling impulses)            | 24.85      |
| Staying motivated                                    | 30.92      |
| Staying organized                                    | 30.57      |
| Remembering things                                   | 29.13      |
| Staying focused                                      | 31.52      |
| Managing my time (e.g., procrastinating)             | 24.61      |
| None of the above                                    | 21.87      |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283). This item was select-all-that apply and may not total to 100% due to rounding.

Approximately 53.98% of young adults have experienced some form of discrimination (Table 69). Of the individuals that have experienced any form of discrimination, 77.88% indicate this discrimination was based on disability. When asked about discrimination on the basis of their LD, 41.32% of young adults report experiencing discrimination on the basis of their LD in school (Table 70). Additionally, more than 50% of young adults have experienced difficulties getting a job because of their LD, and nearly 50% of young adults have experienced difficulties keeping a job because of their LD (Table 71).

#### Table 69. Surviving/Thriving: Discrimination—General

| Variable   | Weighted % |
|--|------------|
| Have you experienced any form of discrimination? (Q11.6) <sup>a</sup>              |            |
| Yes  | 53.98      |
| Νο   | 46.02      |
| What was this discrimination based on? Select all that apply: (Q11.7) <sup>b</sup> |            |



| Variable                             | Weighted % |
|--------------------------------------|------------|
| Race or ethnicity                    | 29.62      |
| Language                             | 7.94       |
| Religion                             | 11.67      |
| Disability                           | 77.88      |
| Gender identity or gender expression | 9.64       |
| Sexuality                            | 11.44      |
| Nationality                          | 3.08       |
| Other                                | 0.62       |
| Weight                               | -          |

*Note.* Each variable or survey item may not total to 100% due to rounding.

<sup>a</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283).

<sup>b</sup> Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD who have experienced discrimination (*n* = 704).

#### Table 70. Surviving/Thriving: Discrimination—LD

| Variable   | Weighted % |
|--|------------|
| Have you experienced discrimination because of your learning disability in the following areas? Select all that apply: (Q11.8) |            |
| Friendships  | 18.30      |
| Family   | 8.51       |
| Romantic relationships   | 14.40      |
| Work   | 20.98      |
| School   | 41.32      |



| Variable          | Weighted % |
|-------------------|------------|
| Community         | 27.30      |
| Other             | 0.63       |
| Church            | -          |
| Healthcare        | -          |
| Sports            | -          |
| None of the above | 31.98      |

# Table 71. Surviving/Thriving: Employment

| ltem   | NA<br>Weighted<br>% | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean<br>( <i>SD</i> ) |
|--|---------------------|--------------------|--------------------|--------------------|--------------------|---------------------|-----------------------------------|
| I have<br>experienced<br>difficulties<br>getting a<br>job because<br>of my<br>learning<br>disability<br>(Q11.9_1) <sup>a</sup> | 5.57                | 7.87               | 21.29              | 10.94              | 31.95              | 22.38               | 2.58<br>(1.29)                    |
| I have<br>experienced<br>difficulties<br>keeping a<br>job because<br>of my<br>learning<br>disability<br>(Q11.9_2) <sup>a</sup> | 7.75                | 9.92               | 21.19              | 12.98              | 28.68              | 19.47               | 2.71<br>(1.32)                    |



| ltem  | NA       | S        | D        | U        | A        | SA       | Weighted       |
|---|----------|----------|----------|----------|----------|----------|----------------|
|   | Weighted | Weighted | Weighted | Weighted | Weighted | Weighted | Mean           |
|   | %        | %        | %        | %        | %        | %        | (SD)           |
| I can find<br>jobs that<br>match my<br>skill set<br>(Q11.9_3) | 5.09     | 3.17     | 7.50     | 11.32    | 42.17    | 30.74    | 3.95<br>(1.03) |

Note. Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283). Not all items may total to 100% due to rounding. NA = Not applicable, S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better. Responses where "Not applicable" was selected are not included in calculation of mean and SD.

<sup>a</sup> Item has been reverse coded.

Table 72 contains the Likert-type items centered in resilience. More than 50% of young adults believed their intelligence is something they have control over, believed they are capable of learning new things, and felt understood as a person with LD. Furthermore, more than 70% of young adults are excited about their career and excited about their future.

#### Table 72. Surviving/Thriving: Resilience

| ltem   | S<br>Weighted<br>% | D<br>Weighted<br>% | U<br>Weighted<br>% | A<br>Weighted<br>% | SA<br>Weighted<br>% | Weighted<br>Mean<br>( <i>SD</i> ) |
|--|--------------------|--------------------|--------------------|--------------------|---------------------|-----------------------------------|
| My intelligence is<br>something I have<br>control over<br>(Q11.10_1)         | 1.68               | 11.04              | 16.75              | 53.70              | 16.83               | 3.73 (0.93)                       |
| I am capable of<br>learning new things<br>(Q11.10_2)                         | 0.91               | 4.41               | 11.15              | 53.73              | 29.80               | 4.07 (0.82)                       |
| I feel understood as<br>a person with a<br>learning disability<br>(Q11.10_3) | 2.13               | 13.10              | 19.54              | 47.71              | 17.51               | 3.65 (0.98)                       |
| I am excited about<br>my career<br>(Q11.10_4)                                | 2.56               | 7.98               | 17.71              | 47.43              | 24.33               | 3.83 (0.97)                       |



| Item  | S        | D        | U        | A        | SA       | Weighted      |
|---|----------|----------|----------|----------|----------|---------------|
|   | Weighted | Weighted | Weighted | Weighted | Weighted | Mean          |
|   | %        | %        | %        | %        | %        | ( <i>SD</i> ) |
| I am excited about<br>my future<br>(Q11.10_5) | 1.63     | 5.60     | 15.16    | 47.86    | 29.75    | 3.99 (0.91)   |

*Note.* Percentages represent weighted population estimates based on our survey sample of young adults ages 18–24 with LD (*n* = 1,283). Not all items may total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

#### **5.2.9 Thematic Coding: Three Things Needed for Success**

All participants received the open-response question asking, "What are three things that make someone successful in life?" (Q11.2). This question was a forced response, and participants needed to have entered at least two characters. Table 73 presents the five themes that were developed from the analysis as well as their definitions and the number of data units that supported each theme. Appendix G details the individual data units that fell under each code.

| Theme Definition   | n (%)        |
|--|--------------|
| Resilience: Factors within an individual that are developed through<br>experience and context that allow them to confront and overcome<br>obstacles, persevere, and persist. These are attributes that can be innate<br>but can also be developed and shaped by the historical, cultural, and social<br>environment of an individual. Example data include determination, hard<br>work, courage, perseverance, dedication, consistency, and focus.   | 953 (24.57%) |
| Sense of self: Attributes and qualities of an individual that shape their<br>identity and allow them to make decisions, form relationships, and<br>navigate life, ultimately supporting their quality of life. These factors are<br>developed through historical, cultural, and social experiences and are<br>therefore malleable. These personal factors include example data such as<br>integrity, being a life-long learner, patience, growth and positive mindsets,<br>self-discipline, creativity, and acceptance of oneself. | 887 (22.87%) |
| Foundation for flourishing: The factors within a society that people can<br>access to support their ability to take care of themselves, meet their basic<br>human needs, and create the life they envision for themselves. These are<br>elements that support individuals in being agentic and making the choices<br>they want to make towards a happy and healthy life. Example data include  | 834 (21.51%) |

#### Table 73. Thematic Coding: Three Things Needed for Success



| Theme Definition  | n (%)        |
|---|--------------|
| access to education, resources such as housing and transportation, physical<br>and mental well-being, financial stability, career and job opportunities and<br>training and the skills needed to navigate life.   |              |
| Connectedness: The connection to entities outside of oneself, including the<br>network of support comprising external relationships with family, friends,<br>and coworkers, connectedness to the community that enriches one's life,<br>as well as a spiritual connection to something greater than one's own life.<br>This also involves the components and interpersonal skills that affect the<br>formation, maintenance, and quality of those relationships. Example data<br>include family relationships, friendships, romantic relationships,<br>professional networking, faith, religion, communication skills, conflict<br>resolution skills, and love. | 609 (15.70%) |
| Vision for oneself: Having what one needs in order to look to the future<br>and shift from surviving to thriving. In other words, being at a place where<br>one can live beyond the here and now, and instead envision a life for their<br>future self. This includes the skills and resources needed to develop<br>personal goals and a plan for the future that is actively being pursued.<br>Example data that contribute to a vision for oneself include clear goals,<br>having dreams, planning skills, a purpose for one's life, and vision.  | 487 (12.56%) |
| Not applicable: Codes that were removed from analysis due to lack of relevance (e.g., n/a; none)  | 108 (2.78%)  |

*Note. N* refers to the number of individual data units that were ultimately grouped under each theme. Percentages were calculated by dividing the total number of data units classified under each theme by the total number of data units that were recorded (*n* = 3,878).

# **5.2.10 Thematic Coding: Additional Information About Participants'** Learning Disability

All participants received the open-response question asking, "Is there anything else about your experiences with your learning disability that you think we should know?" (Q11.11). This question was a forced response, and participants needed to have entered at least two characters. Table 74 presents the themes and definitions that were developed from deductive and inductive analysis as well as example quotes and the number of data units that supported each theme. Negative and positive representative quotes for each theme are presented. Appendix H details the individual data units that fell under each code.



# Table 74. Thematic Coding: Additional Information

| Theme Definition   | Example Quotes  | n (%)       |
|--|---|-------------|
| Disability identity: How one has come<br>to understand their disability or<br>aspects of their disability  | I've become more adaptable and open-minded<br>because of the challenges posed by my learning<br>disability.<br>I have experienced both positive and negative  | 84 (12.84%) |
|  | reactions due to my learning disability and I am able to lead a fulfilled life regardless of my condition.  |             |
| Well-being: Indications about how<br>satisfied one feels about their life and<br>life experiences, levels of happiness,<br>and perceptions of self in relation to<br>overall existence | There are so many things I want to accomplish,<br>educationally and technologically, but seems<br>impossible due to my disability status.<br>I have grown so much with my disability, and I am so   | 59 (9.02%)  |
|  | proud of myself for that.   |             |
| Implications of disability: Descriptions<br>of ways disability impacts their life or<br>how they experience their disability   | As someone with LD, I often require extra time and patience to process information and instructions, which can sometimes be frustrating.  | 45 (6.88%)  |
|  | As a person with disabilities, I just have to put in more effort to learn basic skills and knowledge.   |             |
| Resilience: Discussions of keeping<br>going, not stopping or giving up,<br>persisting when things are hard, and<br>how one feels about these actions                                   | Living with learning disabilities has taught me<br>resilience and creativity in problem solving. It's<br>important to recognize that everyone's experience is<br>unique, but with understanding and support,<br>individuals with learning disabilities can thrive and<br>contribute in meaningful ways.   | 28 (4.28%)  |
|  | As Flearnea more about now my brain processed<br>information, I began to adjust my learning approach.<br>I had to consciously work harder to reach the same<br>level of success as my peers. I was constantly taking<br>notes, even on self-explanatory concepts, because I<br>had a harder time retaining knowledge, and since it<br>forced my brain to constantly focus. Once I had begun<br>working alongside my brain, I not only found myself<br>succeeding but excelling. |             |
| Networks of support: Experiences<br>with family, friends, relationships,<br>and levels of support from one's<br>community  | Most people don't know I have one unless I tell them.<br>In the past, it affected me more socially with same<br>aged peers. Not so much now. I chose friends in   | 24 (3.67%)  |



| Theme Definition  | Example Quotes   | n (%)      |
|---|--|------------|
|   | college that "get me" and vice versa and that works<br>for me.<br>My family and peers have been my backbone, they<br>gave me a platform to navigate the world on my own<br>terms and through that I have learned to embrace my<br>unique abilities.  |            |
| Discrimination: Experiences with<br>discrimination related to aspects of<br>oneself as well as feelings related to<br>discrimination          | It's really hard trying to exist in a society where<br>disabilities are viewed as a bad thing.<br>Well, I think it's important to understand that<br>learning disabilities are not always visible or obvious.<br>Just because I don't "look" like I have a learning<br>disability doesn't mean I don't have one. It can be<br>really frustrating when people make assumptions<br>about my abilities based on how I look or talk. I also<br>think it's important to know that having a learning<br>disability doesn't mean I'm not intelligent or capable.<br>It just means I have a different way of learning and<br>processing information.           | 24 (3.67%) |
| Accommodations and supports:<br>Access or denial to accommodations<br>and supports as well as a discussion<br>of what supports are beneficial | It's vital to recognize the diversity among individuals<br>with learning disabilities: achievements, challenges<br>faced, and the varying strategies employed to<br>navigate daily tasks and long-term goals.<br>Understanding and supporting these unique aspects<br>can significantly enhance their experiences and<br>successes.<br>Everyone's expression of learning disabilities is<br>different, so personalized support and strategies are<br>necessary.  | 23 (3.52%) |
| Feeling different: Experiences of<br>feeling isolated or different from<br>one's peers or community   | Growing up "twice exceptional" is hard because<br>people don't take into consideration that you could be<br>disabled. I thought I was just "bad at reading" for like<br>my whole life until I realized I had a disability I could<br>accommodate.<br>My experience is not universal, but it shows even<br>though kids are young, they can figure out they are<br>different and feel alienated and strange because of it.<br>Being diagnosed gave a name for my experience,<br>demystified it, and provided steps for how to improve<br>my situation. The diagnosis and label of 'different' is<br>not what made me feel different; I already felt that | 23 (3.52%) |


| Theme Definition  | Example Quotes  | n (%)      |
|---|---|------------|
|   | way. It is important to help kids understand what is<br>happening and why they have different experiences<br>from their classmates.   |            |
| Mental health: Experiences related to<br>emotional regulation, feelings,<br>mental well-being, and mental health<br>care  | It's essential to recognize the emotional impact of<br>living with a learning disability. There have been<br>moments of frustration, self-doubt, and even anxiety<br>about how others perceive my abilities.<br>My experiences with a learning disability have<br>highlighted the significance of self-care and<br>managing stress effectively.   | 22 (3.36%) |
| Societal change: Discussions of<br>changes one wishes to see in society<br>and the world at large, attitudes,<br>biases, and prejudices one wishes to<br>see be changed | The world is not set up for neurodivergent people and<br>I wish this was addressed more.<br>People with learning disabilities are part of the<br>community and should be as valuable as people<br>without disabilities.   | 19 (2.91%) |
| School experiences: Experiences<br>across K-12 and postsecondary<br>settings  | Due to the trauma I endured during my childhood at<br>school, I struggle with anything related to disability<br>services. I tend to be short-tempered in settings<br>where I am receiving help for my disabilities. For<br>example, the people that work in disability services at<br>my university are very kind, but I can't help but to be<br>short tempered and quick to assume that they don't<br>want to help me. | 17 (2.60%) |
|   | It was very hard coping with a learning disability in<br>high school, repeating grades, and scaling through<br>high school, because my pace was slower than my<br>mates. But with the support I got, I felt I was no less<br>of a person and could do anything I set my mind to<br>do, though it might take time.   |            |
| Personality: Descriptions of<br>personality traits or aspects of<br>themselves  | Despite my learning disability, I am exceptional at<br>creative thinking and problem-solving.<br>I wish I could learn something someone with<br>disabilities can become an expert on.   | 17 (2.60%) |
| Quality of life: Being able to take care of oneself; physical health,   | My learning disability did have a certain negative<br>impact on my work and life at some point, but it<br>didn't stop me from pursuing a good life.   | 11 (1.68%) |



| Theme Definition  | Example Quotes  | n (%)           |
|---|---|-----------------|
| transportation, health care system,<br>technology; navigating one's life  | Social challenges would hinder my interactions and cooperation with peers and instructors.  |                 |
| Thinking about one's future:<br>Discussions of the plans one has for<br>their futures well as envisioning goals<br>or desired outcomes for the future | Sometimes, I don't know how else to think or behave<br>because I feel drained merely thinking about my<br>future.<br>I pray every day to be a successful person.  | 11 (1.68%)      |
| Employment: Experiences and<br>feelings about finding and retaining<br>employment   | I have advocated for accommodations at work but<br>been denied. I have a really great job overall and<br>understand my rights, but am afraid to ask for more<br>because of the fear of being fired. I think this is<br>common in the disability community– knowing how<br>to advocate for yourself but being unable to do so<br>because of the potential consequences.<br>My experience with learning disability impacted my<br>career life positively. | 8 (1.22%)       |
| Not applicable: Codes that were<br>removed from analysis due to lack of<br>relevance  | N/A<br>Thank you<br>There's nothing else  | 239<br>(36.54%) |

*Note. N* refers to the number of individual data units that were ultimately grouped under each theme. Percentages were calculated by dividing the total number of data units classified under each theme by the total number of data units that were recorded (*n* = 654).

### **5.3 Research Questions**

The following research questions guided our analyses and were based on existing literature as described in the *State of Learning Disabilities*. We note here as a limitation we were constrained by the survey items in our efforts to optimize depth and breadth while balancing survey fatigue.

**Research Question 1:** How are factors of high school climate and family support related to whether young adults ages 18–24 with LD graduated high school? (Model 1A)

**Research Question 2:** How are factors of high school climate and family support related to whether young adults ages 18–24 with LD enrolled in postsecondary education? (Model 1B)



**Research Question 3:** How are factors of high school climate and family support related to whether young adults ages 18–24 with LD are currently employed or seeking employment? (Model 1C)

**Research Question 4:** How are confidence with daily living skills, LD identity and acceptance, societal views of disability, and awareness of disability rights related to the well-being of young adults ages 18–24 with LD? (Model 2)

**Research Question 5:** Do model results and outcomes of interest vary by demographics (i.e., gender, race/ethnicity, U.S. Census division) and other subgroups of interest (e.g., ADHD, mental health, type of LD)?

Below we describe our process to build models based on available survey items and existing theory, estimate models, and examine differences across subgroups.

## **5.4 Logistic Regression**

We used logistic regression to examine whether outcomes of interest (e.g., graduating from high school, enrolling at a postsecondary institution, being employed or seeking employment) differed by subgroups (Research Question [RQ] 5) differed for subgroups. Below we describe how variables were created for the logistic regression models and provide a summary of each model in Table 75.

The "graduating from high school" outcome was created by using Q5.17 that asks individuals who attended high school which best describes them and lists: (1) I dropped out of high school, (2) I graduated high school, but thought about dropping out, and (3) I graduated high school and never thought about dropping out. Individuals who graduated from high school and never thought about dropping out were coded as 1, individuals who graduated from high school but thought about dropping out were also coded as 1, and individuals who dropped out of high school were coded as 0.

The "enrolling at a postsecondary institution" outcome variable was created by using Q6.2 that asks individuals about their postsecondary enrollment. Individuals who are currently attending, graduated, or attended but left a college, university, or vocational, business, or technical school were coded as 1, and individuals who have never attended a postsecondary institution were coded as 0.

The "employed or seeking employment" outcome variable was created by using Q7.2 that asks individuals about their employment status. Individuals who are currently employed or who do not have a job but are looking for a job were coded as 1, and individuals who do not have a job and are not looking for a job were coded as 0.



Each logistic regression model was run two different ways. Both ways included race, gender, ADHD status, and mental health status as predictor variables. However, the first way included LD as an additional predictor variable, where LD compared individuals with formal identification of LD with individuals who did not have formal identification of LD but struggled with reading, writing, and mathematics in ways that affected their daily lives. The second way included LD\_type as an additional predictor variable, where LD\_type compared individuals with formal identification of LD for reading, formal identification of LD for math, formal identification of LD for writing, formal identification of LD in co-occurring areas, and individuals who do not have formal identification of LD. For example, as shown in Table 75, the logistic regression model using graduating from high school as an outcome and LD Approach 1 included gender, race, U.S. region, ADHD status, mental health status, and LD (formal LD vs. struggle).

We note here that both approaches utilize the same sample of respondents.

| Outcome Variable                               | Predictor Variable |      |                |                |                            |    |         |  |
|--|--------------------|------|----------------|----------------|----------------------------|----|---------|--|
|  | Gender             | Race | U.S.<br>Region | ADHD<br>Status | Mental<br>Health<br>Status | LD | LD_type |  |
| Graduating from High<br>School                 |                    |      |                |                |                            |    |         |  |
| LD Approach 1                                  | х                  | х    | х              | х              | х                          | х  |         |  |
| LD Approach 2                                  | х                  | х    | х              | х              | х                          |    | х       |  |
| Enrolling at a<br>Postsecondary<br>Institution |                    |      |                |                |                            |    |         |  |
| LD Approach 1                                  | х                  | х    | х              | х              | х                          | х  |         |  |
| LD Approach 2                                  | х                  | x    | х              | х              | х                          |    | х       |  |
| Being Employed or<br>Seeking Employment        |                    |      |                |                |                            |    |         |  |

#### Table 75. Summary of Variables Included Each Logistic Regression Model



| Outcome Variable | Predictor Variable |      |                |                |                            |    |         |  |
|------------------|--------------------|------|----------------|----------------|----------------------------|----|---------|--|
|                  | Gender             | Race | U.S.<br>Region | ADHD<br>Status | Mental<br>Health<br>Status | LD | LD_type |  |
| LD Approach 1    | х                  | х    | х              | х              | х                          | х  |         |  |
| LD Approach 2    | х                  | х    | х              | х              | х                          |    | х       |  |

*Note.* LD compared individuals with formal identification of LD (LD = 1) vs. individuals who did not have formal identification of LD but struggled with reading, writing, and mathematics in ways that affected their daily lives (LD = 0). LD\_type compared individuals with formal identification of LD for reading (LD\_type = Reading), formal identification of LD for math (LD\_type = Math), formal identification of LD for writing (LD\_type = Writing), formal identification of LD in co-occurring areas (LD\_type = Co-occurring), and individuals who do not have formal identification of LD (LD\_type = Struggle). Both approaches utilized the same sample of respondents.

### 5.4.1 Logistic Regression Results: LD Approach 1

Results for all three logistic regression models using LD Approach 1 are provided in Table 76. Results suggest young adults ages 18–24 with formal identification of LD were 2.32 times (or 132%) more likely to graduate from high school and 1.68 times (or 68%) more likely to enroll at a postsecondary institution than young adults ages 18–24 who did not have formal identification of LD. Additionally, young adults ages 18–24 with formal identification of LD were 0.30 times (or 70%) less likely to be employed or seeking employment than young adults ages 18–24 who did not have formal identification of LD; however, we note here this model only examined individuals who are currently employed or seeking employment and does not take into account the individuals that are currently enrolled at a postsecondary institution, even if they are employed. Given the percentage of the sample that is currently enrolled at a postsecondary institution (44.60%) and the priority within the survey blocks that was placed on answering postsecondary enrollment items, results from the employment logistic regression model should be interpreted with caution. Additionally, females were 1.43 times (or 43%) more likely to enroll in a postsecondary institution than males, and young adults ages 18–24 with LD and ADHD were 1.97 times (or 97%) more likely to enroll at a postsecondary institution than young adults ages 18–24 with LD that do not have ADHD.



## Table 76. Logistic Regression: Outcome by Subgroup—LD Approach 1

| Model                             | Est.<br>(Log Odds) | Odds Ratio<br>(e^Est.) | SE   | t-value | p     |
|-----------------------------------|--------------------|------------------------|------|---------|-------|
| Model 1: High School Graduation   |                    |                        |      |         |       |
| Intercept                         | 3.40               | 30.05                  | 0.54 | 6.32    | 0.000 |
| Race                              | 0.65               | 1.91                   | 0.39 | 1.67    | 0.095 |
| Gender                            | 0.14               | 1.15                   | 0.40 | 0.35    | 0.729 |
| LD                                | 0.84               | 2.32                   | 0.39 | 2.18    | 0.030 |
| ADHD                              | 0.10               | 1.11                   | 0.48 | 0.22    | 0.827 |
| Mental Health                     | -0.80              | 0.45                   | 0.50 | -1.61   | 0.108 |
| Model 2: Postsecondary Enrollment |                    |                        |      |         |       |
| Intercept                         | 0.86               | 2.37                   | 0.19 | 4.54    | 0.000 |
| Race                              | 0.11               | 1.12                   | 0.14 | 0.78    | 0.435 |
| Gender                            | 0.36               | 1.43                   | 0.15 | 2.36    | 0.019 |
| LD                                | 0.52               | 1.68                   | 0.15 | 3.46    | 0.001 |
| ADHD                              | 0.68               | 1.97                   | 0.23 | 2.92    | 0.004 |
| Mental Health                     | -0.24              | 0.79                   | 0.16 | -1.47   | 0.143 |
| Model 3: Employment Status        |                    |                        |      |         |       |
| Intercept                         | 2.78               | 16.17                  | 0.35 | 7.87    | 0.000 |
| Race                              | -0.14              | 0.87                   | 0.25 | -0.57   | 0.569 |



| Model         | Est.<br>(Log Odds) | Odds Ratio<br>(e^Est.) | SE   | t-value | p     |
|---------------|--------------------|------------------------|------|---------|-------|
| Gender        | -0.07              | 0.93                   | 0.25 | -0.29   | 0.775 |
| LD            | -1.21              | 0.30                   | 0.32 | -3.83   | 0.000 |
| ADHD          | -0.48              | 0.62                   | 0.34 | -1.40   | 0.163 |
| Mental Health | 0.27               | 1.30                   | 0.25 | 1.04    | 0.297 |

*Note*. LD = Learning Disability. ADHD = attention deficit hyperactivity disorder. Estimates in the Odds Ratio column were created by using the exp function in R (e.g., e^Estimate). Race compared White vs. non-White (with White as the reference group). Gender compared males vs. females (with male as the reference group). LD compared individuals with formal identification of LD vs. those without formal identification of LD (with those without formal identification as the reference group). ADHD status compared those with ADHD vs. those without ADHD (with those without ADHD as the reference group). Mental health compared those with selected mental health symptoms vs. those without selected mental health symptoms (with no mental health symptoms as the reference group). Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.

### 5.4.2 Logistic Regression Results: LD Approach 2

Results for all three logistic regression models using LD Approach 2 are provided in Table 77. Results from the logistic regression model using graduating from high school as the outcome suggest young adults ages 18–24 with formal identification of LD for writing were 4.55 times (or 355%) more likely to graduate from high school than young adults ages 18–24 who do not have formal identification of LD. Results from the logistic regression model using enrolling at a postsecondary institution as the outcome suggest (1) young adults ages 18–24 with formal identification of LD for reading, math, and co-occurring types of LD were more likely to enroll at a postsecondary institution than young adults ages 18–24 who do not have formal identification of LD. Conversely, young adults ages 18–24 with formal identification of LD for writing were less likely to enroll at a postsecondary institution than young adults ages 18–24 who do not have formal identification of LD. Lastly, young adults ages 18–24 with LD and ADHD were more likely to enroll at a postsecondary institution than young adults ages 18–24 with LD and ADHD were more likely to enroll at a postsecondary institution than young adults ages 18–24 with LD and ADHD and no ADHD.

Results from the logistic regression model where being employed or seeking employment was the outcome suggest (1) young adults ages 18–24 with formal identification of LD in multiple areas, formal identification of LD for reading, and formal identification of LD for writing were less likely to be employed than young adults ages 18–24 with no formal identification of LD. Again, we note here this model only examined individuals who are currently employed or seeking employment and does not take into account the individuals that are currently enrolled at a postsecondary institution, even if they are employed. Given the percentage of the sample that is currently enrolled at a postsecondary institution (44.60%) and the priority within the



survey blocks that was placed on answering postsecondary enrollment items, results from the employment logistic regression model should be interpreted with caution.

#### Table 77. Logistic Regression: Outcome by Subgroup—LD Approach 2

| Model                             | Est.<br>(Log Odds) | Odds Ratio<br>(e^Est.) | SE   | t-value | p     |
|-----------------------------------|--------------------|------------------------|------|---------|-------|
| Model 1: High School Graduation   |                    |                        |      |         |       |
| Intercept                         | 3.40               | 29.84                  | 0.54 | 6.29    | 0.000 |
| Race                              | 0.62               | 1.87                   | 0.39 | 1.60    | 0.111 |
| Gender                            | 0.15               | 1.16                   | 0.42 | 0.36    | 0.718 |
| LD Type: LD for Co-occurring      | 2.02               | 7.55                   | 1.06 | 1.90    | 0.058 |
| LD Type: LD for Math              | 0.25               | 1.29                   | 0.59 | 0.43    | 0.670 |
| LD Type: LD for Reading           | 0.21               | 1.23                   | 0.45 | 0.47    | 0.639 |
| LD Type: LD for Writing           | 1.52               | 4.56                   | 0.77 | 1.97    | 0.049 |
| ADHD                              | 0.21               | 1.24                   | 0.51 | 0.42    | 0.673 |
| Mental Health                     | -0.80              | 0.45                   | 0.50 | -1.59   | 0.112 |
| Model 2: Postsecondary Enrollment |                    |                        |      |         |       |
| Intercept                         | 0.95               | 2.58                   | 0.20 | 4.68    | 0.000 |
| Race                              | 0.11               | 1.12                   | 0.15 | 0.77    | 0.444 |
| Gender                            | 0.22               | 1.24                   | 0.16 | 1.35    | 0.176 |
| LD Type: LD for Co-occurring      | 0.66               | 1.94                   | 0.23 | 2.89    | 0.004 |



| Model                        | Est.<br>(Log Odds) | Odds Ratio<br>(e^Est.) | SE   | t-value | p     |
|------------------------------|--------------------|------------------------|------|---------|-------|
| LD Type: LD for Math         | 1.18               | 3.26                   | 0.30 | 3.95    | 0.000 |
| LD Type: LD for Reading      | 0.81               | 2.24                   | 0.23 | 3.46    | 0.001 |
| LD Type: LD for Writing      | -0.49              | 0.61                   | 0.20 | -2.45   | 0.015 |
| ADHD                         | 0.47               | 1.60                   | 0.23 | 1.99    | 0.046 |
| Mental Health                | -0.26              | 0.77                   | 0.17 | -1.54   | 0.123 |
| Model 3: Employment Status   |                    |                        |      |         |       |
| Intercept                    | 2.71               | 15.00                  | 0.35 | 7.72    | 0.000 |
| Race                         | -0.23              | 0.80                   | 0.27 | -0.85   | 0.397 |
| Gender                       | 0.11               | 1.11                   | 0.26 | 0.40    | 0.689 |
| LD Type: LD for Co-occurring | -1.59              | 0.20                   | 0.36 | -4.35   | 0.000 |
| LD Type: LD for Math         | -0.63              | 0.53                   | 0.48 | -1.32   | 0.188 |
| LD Type: LD for Reading      | -1.32              | 0.27                   | 0.41 | -3.22   | 0.001 |
| LD Type: LD for Writing      | -1.14              | 0.32                   | 0.40 | -2.85   | 0.005 |
| ADHD                         | -0.38              | 0.68                   | 0.36 | -1.04   | 0.298 |
| Mental Health                | 0.36               | 1.44                   | 0.26 | 1.39    | 0.165 |

*Note.* LD = Learning Disability. ADHD = attention deficit hyperactivity disorder. Estimates in the Odds Ratio column were created by using the exp function in R (e.g., e^Estimate). Race compared White vs. non-White (with White as the reference group). Gender compared males vs. females (with male as the reference group). LD compared individuals with formal identification of LD vs. those without formal identification of LD (with those without formal identification as the reference group). ADHD status compared those with ADHD vs. those without ADHD (with those without ADHD as the reference group). Mental health compared those with selected mental health symptoms vs. those without selected mental health symptoms (with no mental health symptoms as the reference group). Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.



### **5.5 Structural Equation Modeling and Subgroup Analyses**

We used SEM to answer specific research questions about perceptions and experiences that might impact outcomes of interest: graduating from high school, enrolling at a postsecondary institution, being employed, and well-being (RQs 1–4).

Below we describe our process to estimate latent factors and present results for SEMs and subgroup analyses.

### 5.5.1 Model Generation

First, we examined the survey items to determine how the survey items conceptually and theoretically could represent relevant latent factors. To determine which survey items would correspond with constructs of interest, we first grouped survey items based on what is known in existing literature (see *State of Learning Disabilities*). We note here as a limitation that we were constrained by the depth and breadth of the survey items in our efforts to optimize data collection while balancing survey fatigue.

Once we grouped items based on existing theory, we then examined inter-item correlations to further guide construction and estimation of latent factors of interest, where inter-item correlations greater than or equal to the absolute value of 0.4 (i.e.,  $\geq$  [0.4]) indicated an adequate relationship between the items. In line with best practice, each latent construct had a minimum of three indicators (Kline, 2016). In some cases, we used dichotomous and categorical items to estimate the same latent factor. When inter-item correlations were below the 0.4 threshold, we examined (1) whether the dichotomous item could be replaced with a different survey item still theorized to represent the latent construct of interest and (2) whether the dichotomous item could be made into a categorical item. For example, we initially included utilizing public or private support (e.g., federal or state disability aid, unemployment benefits) as a dichotomous indicator. After examining inter-item correlations, we represented public/private aid as a categorical variable indicating the number of public/private supports from a constrained list containing federal or state disability aid; unemployment benefits; Medicaid, SNAP, or EBT benefits; and public housing vouchers. We hypothesized the following 12 potential constructs based on available survey items. Table 78 provides the title of each latent factor as well as its component items.



#### Table 78. Latent Factors

| Latent Factor   | Survey Items   |
|---|--|
| High School Climate:<br>Educator Acceptance           | <ul> <li>I had a teacher or another adult at my school who made me feel supported (Q5.13_1)</li> <li>My teachers believed I could succeed (Q5.13_2)</li> <li>I felt like my teachers wanted me in their classes (Q5.14_4)</li> </ul>   |
| High School Climate: Social<br>Inclusion <sup>a</sup> | <ul> <li>I was bullied by my peers because of my learning disability (Q5.13_5)</li> <li>I was bullied by my teachers because of my learning disability (Q5.13_6)</li> <li>I had to fight for my disability rights at my high school (Q5.14_3)</li> </ul>   |
| High School Climate:<br>Connectedness and Support     | <ul> <li>My high school was a supporting and inviting place for students to learn (Q5.13_4)</li> <li>The level of academic support I received from my high school prepared me for life after high school (Q5.14_1)</li> <li>My high school classes prepared me to advocate for my needs after high school (Q5.14_2)</li> <li>My school had adequate mental health resources for students (Q5.14_5)</li> </ul>  |
| Family Support  | <ul> <li>Growing up, my family understood how my disability impacted me (Q9.7_4)</li> <li>My family currently understands me as a person (Q9.8_1)</li> <li>My family currently understands how my disability impacts me (Q9.8_2)</li> </ul>  |
| Confidence with Daily Living<br>Skills                | <ul> <li>Using a map, GPS, or the public transportation system (Q8.13_1)</li> <li>Taking care of my physical health (e.g., eating healthy, going to the gym) (Q8.13_3)</li> <li>Using technology (e.g., using a computer or app to pay bills) (Q8.13_4)</li> <li>Using the healthcare system (e.g., going to the doctor) (Q8.13_5)</li> <li>Taking care of my personal finances (e.g., paying bills on time, managing a budget) (Q8.13_6)</li> </ul> |
| Support and<br>Accommodations in<br>Postsecondary     | <ul> <li>My instructors give me the accommodations I need (Q6.21_1)</li> <li>My instructors are positive about implementing my accommodations (Q6.21_2)</li> <li>I feel comfortable asking my instructors for the supports I need (Q6.21_3)</li> <li>I get the supports I need without feeling that I am different or a burden (Q6.21_4)</li> </ul>  |



| Latent Factor                                  | Survey Items  |
|--|---|
| Support and<br>Accommodations in<br>Employment | <ul> <li>I get the supports I need without feeling like I am different or a burden (Q7.17_2)</li> <li>I feel comfortable asking my employer for the supports I need (Q7.17_5)</li> <li>I feel socially accepted at my job (Q7.16_6)</li> </ul>  |
| LD Identity and Acceptance                     | <ul> <li>My learning disability has a positive impact on me (Q9.6_1)</li> <li>My learning disability is a part of who I am (Q9.6_2)</li> <li>I am proud to have a learning disability (Q9.6_3)</li> <li>I feel comfortable telling friends or romantic partners I have a learning disability (Q9.6_4)</li> <li>I feel connected to peers with disabilities (or peers who identify as neurodivergent) (Q9.6_6)</li> <li>I feel connected to peers without disabilities (Q9.6_7)</li> </ul>   |
| Societal View of Disability                    | <ul> <li>People without disabilities ignore people with disabilities (Q9.4_3)</li> <li>People become impatient with people with disabilities (Q9.4_4)</li> <li>Our society fails to accommodate people with disabilities (Q9.4_5)</li> <li>People with disabilities are discriminated against (Q9.4_6)</li> </ul>   |
| Awareness of Disability<br>Rights              | <ul> <li>I am aware that I have certain legal rights and protections because I am a person with a disability (Q9.5_1)</li> <li>I know where to access information about disability rights (Q9.5_2)</li> <li>I have talked to someone about my legal rights and protections about my disability (Q9.5_3)</li> <li>I am comfortable advocating for my rights under disability laws (Q9.5_4)</li> </ul>  |
| Well-being                                     | <ul> <li>How often do you feel good about your life? (Q11.3)</li> <li>How satisfied are you currently in the following areas? - Personal independence (Q11.4_7)</li> <li>How satisfied are you currently in the following areas? - Who I am (Q11.4_8)</li> <li>I am excited about my career (Q11.10_4)</li> <li>I am excited about my future (Q11.10_5)</li> <li>Taking care of my mental health (e.g., taking breaks, managing stress, seeing a therapist) (Q8.13_2)</li> <li>How satisfied are you currently in the following areas? - Mental health (Q11.4_5)</li> </ul> |

<sup>a</sup> Items for this latent factor were reverse coded, thus, instead of indicating social exclusion, indicate social inclusion.



Based on these potential, initial latent factors and broader literature, we created two models. Model 1 examined whether high school climate constructs—Educator Acceptance, Social Inclusion, Connectedness and Support—along with Family Support were associated with graduating from high school, enrolling at a postsecondary institution, or being employed. Model 2 examined whether Confidence with Daily Living Skills, Awareness of Disability Rights, LD Identity and Acceptance, and Societal View of Disability were associated with wellbeing for young adults ages 18–24 with LD in our sample.

Next, we used the lavaan package (version 0.6-18; Rosseel, 2012) in R (version R.4.3.2; R Core Team, 2024) to estimate and model latent factors. Typically, factor loadings or pattern coefficients are used to examine the direct effect of the latent factor on the survey item where factor loadings greater than or equal to 0.7 are considered adequate (Kline, 2016), greater than or equal to 0.5 are considered acceptable (Sharma et al., 2005), and less than 0.4 are considered poor (Matsunaga, 2010). Given the limitations stemming from the depth and breadth of survey items, we used factor loadings as a guide and made additional determinations based on group consensus and feedback and consultation from NCLD's Professional Advisory Board. WestEd, NCLD, and the NCLD Professional Advisory Board have more than 50 years of collective experience in social emotional learning and school climate, employment, mental health, and school-based services and supports specific to individuals with LD. When determining whether a particular item should belong on a specific latent construct, we first examined item correlations and factor loadings. Items with correlations and/or factor loadings less than 0.4 were removed, and items with factor loadings between 0.4 and 0.6 were further discussed. Final determinations were made using the collective expertise from WestEd, NCLD, and NCLD's Professional Advisory Board. All latent factors were reviewed by a subset of NCLD's Professional Advisory Board.

Below, findings are presented by model, where we first present the initial measurement model and estimation of latent factors, then the outcome model and additional subgroup comparisons.

### 5.5.2 Model 1

Model 1 hypothesized High School Climate—Educator Acceptance, High School Climate—Social Inclusion, High School Climate—Connectedness and Support, and Family Support would have direct effects on whether an individual with LD graduated from high school (Model 1A), enrolled at a postsecondary institution (Model 1B), or is currently employed (Model 1C). Three of these latent factors are intended to capture high school climate. Model 1 addresses RQs 1–3 and RQ 5.

#### 5.5.2.A Model 1: Model Estimation

We first estimated an initial measurement model with the latent factors depicted in Figure 7. Model fit for the initial measurement model was adequate, where CFI and TLI were near 0.95,



RMSEA was less than 0.06, and SRMR was less than 0.08 (see Table 79). Further, the initial measurement model suggests adequate estimation of the latent factors and confirms the four-factor model. Below, we briefly describe each of the latent factors for Model 1.

#### Figure 7. Model 1: Initial Measurement Model



#### Table 79. Model 1: Model Fit—Initial Measurement Model

| Model                           | df | χ2     | RMSEA<br>[90% CI]          | CFI   | ти    | SRMR  |
|---------------------------------|----|--------|----------------------------|-------|-------|-------|
| Initial<br>Measurement<br>Model | 59 | 215.62 | 0.058<br>[0.050,<br>0.067] | 0.942 | 0.924 | 0.052 |

*Note*. Model fit criteria considered adequate if CFI/TLI ≥ 0.95, RMSEA < 0.06, and SRMR < 0.08 (Hu & Bentler, 1999).

#### Latent Factor: High School Climate—Educator Acceptance

The High School Climate—Educator Acceptance latent factor was composed of three survey items (Table 80) that collectively represent perceptions of teacher-student relationships during high school: feeling supported by a teacher or school adult (Q5.13\_1), feeling that teachers believed they could be successful (Q5.13\_2), and feeling like teachers wanted them in their



classes (Q5.14\_4). All survey items for this latent factor were answered using a 5-point Likert scale for level of agreement (Strongly disagree, Disagree, Undecided, Agree, Strongly agree). As shown in Table 80, the *lavaan* package fixes the factor loading of the first indicator to 1 which fixes the scale of the latent variable (Kline, 2016). All standardized factor loadings were greater than 0.5.

#### Item Est. SE z-value Ρ Std. Est. I had a teacher or another 1.00 0.76 adult at my school who made me feel supported. (Q5.13\_1) My teachers believed I 1.01 0.05 20.69 .000 0.75 could succeed. (Q5.13\_2) I felt like my teachers 0.80 0.06 13.03 .000 0.61 wanted me in their classes. (Q5.14 4)

#### Table 80. Latent Factor: High School Climate—Educator Acceptance

*Note.* Items in this table were only provided to respondents who went to high school and were answered using a 5-point Likert scale for level of agreement.

#### Latent Factor: High School Climate—Social Inclusion

The High School Climate—Social Inclusion latent factor was composed of three survey items (Table 81) and represents perceptions of bullying from peers or teachers due to LD and advocating for needs and supports related to LD. While High School Climate—Educator Acceptance focuses on positive qualities of teacher-student relationships, High School Climate—Social Inclusion was intended to capture negative peer, teacher, and school interactions on the basis of LD. More specifically, the High School Climate—Social Inclusion factor captures peer interactions (Q5.13\_5), teacher interactions (Q5.13\_6) related to LD, and one additional item related to fighting for disability rights at the school-level (Q5.14\_3). All survey items for this latent factor were answered using a 5-point Likert scale for level of agreement (Strongly disagree, Disagree, Undecided, Agree, Strongly agree) and were reverse coded. As shown in Table 81, two of the three standardized factor loadings were less than 0.7. However, we decided to leave these three items together based on group consensus and review by the NCLD *State of Learning Disabilities* Review Committee and our collective belief



that these items—bullying by peers on the basis of LD, bullying by teachers on the basis of LD, and fighting for disability rights due to LD—represent social inclusion.

#### Table 81. Latent Factor: High School Climate—Social Inclusion

| ltemª  | Est. | SE   | z-value | p    | Std. Est. |
|--|------|------|---------|------|-----------|
| l was bullied by my peers<br>because of my LD.<br>(Q5.13_5)                | 1.00 |      |         |      | 0.61      |
| I was bullied by my<br>teachers because of my<br>LD. (Q5.13_6)             | 1.27 | 0.23 | 5.48    | .000 | 0.78      |
| I had to fight for my<br>disability rights at my high<br>school. (Q5.14_3) | 0.65 | 0.06 | 11.74   | .000 | 0.43      |

*Note.* Items in this table were only provided to respondents who went to high school and were answered using a 5-point Likert scale for level of agreement.

<sup>a</sup> Items were reverse coded, thus, instead of indicating social exclusion, will indicate social inclusion.

#### Latent Factor: High School Climate—Connectedness and Support

The High School Climate—Connectedness and Support latent factor was composed of four survey items and represents perceptions of school-based support for academics, mental health, and advocacy. Collectively, the items for this latent factor capture school belonging, including: general school atmosphere (Q5.13\_4), school resources (Q5.14\_5), and whether the skills and supports in high school were beneficial for their lives after high school (Q5.14\_1, Q5.14\_2; Table 82). All survey items for this latent factor were answered using a 5-point Likert scale for level of agreement (Strongly disagree, Disagree, Undecided, Agree, Strongly agree). As shown in Table 82, all factor loadings were above 0.5.

#### Table 82. Latent Factor: High School Climate—Connectedness & Support

| Item   | Est. | SE | z-value | Р | Std. Est. |
|--|------|----|---------|---|-----------|
| My high school was a<br>supportive and inviting<br>place for students to learn.<br>(Q5.13_4) | 1.00 |    |         |   | 0.65      |



| Item   | Est. | SE   | z-value | Р    | Std. Est. |
|--|------|------|---------|------|-----------|
| The level of academic<br>support I received from<br>my high school prepared<br>me for life after high<br>school. (Q5.14_1) | 1.21 | 0.08 | 14.98   | .000 | 0.77      |
| My high school classes<br>prepared me to advocate<br>for my needs after high<br>school. (Q5.14_2)                          | 1.13 | 0.09 | 12.96   | .000 | 0.66      |
| My school had adequate<br>mental health resources<br>for students. (Q5.14_5)   | 0.96 | 0.07 | 13.05   | .000 | 0.58      |

*Note.* Items in this table were only provided to respondents who went to high school and were answered using a 5-point Likert scale for level of agreement.

#### Latent Factor: Family Support

The Family Support latent factor included three survey items and represents perceptions of whether young adults' family understand their LD and its impacts (Table 83). All survey items for this latent factor were answered using a 5-point Likert scale for level of agreement (Strongly disagree, Disagree, Undecided, Agree, Strongly agree). As shown in Table 83, standardized factor loadings were above 0.5 for all items.

#### **Table 83. Latent Factor: Family Support**

| Item  | Est. | SE   | z-value | Р    | Std. Est. |
|---|------|------|---------|------|-----------|
| Growing up, my family<br>understood how my<br>disability impacted me.<br>(Q9.7_4) | 1.00 |      |         |      | 0.59      |
| My family currently<br>understands me as a<br>person. (Q9.8_1)                    | 1.27 | 0.10 | 13.07   | .000 | 0.77      |
| My family currently understands how my  | 1.18 | 0.09 | 13.46   | .000 | 0.76      |



| Item                               | Est. | SE | z-value | Ρ | Std. Est. |
|------------------------------------|------|----|---------|---|-----------|
| disability impacts me.<br>(Q9.8_2) |      |    |         |   |           |

*Note.* Items in this table were provided to all respondents and were answered using a 5-point Likert scale for level of agreement.

#### 5.5.2.B Model 1A: Graduating from High School

In Model 1A, four constructs—High School Climate: Educator Acceptance, High School Climate: Social Inclusion, High School Climate: Connectedness and Support, and Family Support—were modeled to predict whether an individual graduated from high school. We note as a limitation here that we are utilizing self-report data and did not collect school records or verify the information with additional parties (e.g., parents or caregivers).

#### Model 1A: Model Results

Model 1A compares (1) young adults ages 18–24 with LD who graduated from high school or graduated from high school but thought about leaving high school with (2) young adults ages 18–24 with LD who left high school before graduating. Figure 8 displays the SEM for Model 1A where we hypothesize a direct effect between each of the latent factors and our outcome of interest. We further note as a limitation that these models examined only direct effects and we did not hypothesize any correlations, covariances, or indirect effects. Model 1A was adequate (see Table 84), where CFI and TLI were near 0.95, RMSEA was less than 0.06, and SRMR was less than 0.08.



#### Figure 8. Model 1A: SEM Figure



#### Table 84. Model 1A: Model Fit—High School Graduation Status

| Model                   | df | χ2     | RMSEA<br>[90% CI]          | CFI   | ти    | SRMR  |
|-------------------------|----|--------|----------------------------|-------|-------|-------|
| Model 1A—High<br>School | 68 | 228.51 | 0.055<br>[0.047,<br>0.062] | 0.947 | 0.929 | 0.049 |

#### Note. Model fit criteria considered adequate if CFI/TLI ≥ 0.95, RMSEA < 0.06, and SRMR < 0.08 (Hu & Bentler, 1999).

Results for Model 1A are provided in Table 85 and suggest High School Climate: Social Inclusion is significantly related to whether an individual with LD graduates from high school (p < .05). We note here that items within the High School Climate: Social Inclusion factor were reverse coded so model results within Table 85 should be interpreted as such (i.e., higher means are better and indicate more social inclusion).



| Latent Construct                                  | Est. | SE   | z-value | p    | Std. Est. |
|---|------|------|---------|------|-----------|
| High School Climate: Educator<br>Acceptance       | 0.03 | 0.02 | 1.06    | .288 | 0.10      |
| High School Climate: Social<br>Inclusion          | 0.03 | 0.01 | 2.04    | .042 | 0.12      |
| High School Climate:<br>Connectedness and Support | 0.01 | 0.03 | 0.24    | .808 | 0.02      |
| Family Support                                    | 0.00 | 0.02 | 0.02    | .985 | 0.00      |

#### Table 85. Model 1A: Model Results—Graduating from High School

Further examination of the High School Climate: Social Inclusion factor is provided in Table 86, where means for the items within this latent factor are presented based on young adult group. Individuals who graduated high school, or who graduated but thought about leaving high school, had higher means on each survey item within the High School Climate: Social Inclusion factor. These results suggest these individuals were bullied less frequently by their peers and teachers and on average did not feel they had to fight for their disability rights in high school.

## Table 86. Model 1A: Model Results—Item Means for High School Social Inclusion byHigh School Graduation Status

| Young Adult Group  | I was bullied by my<br>peers because of my<br>LD (Q5.13_5) <sup>a</sup><br>M (SE) | I was bullied by my<br>teachers because of<br>my LD (Q5.13_6) <sup>a</sup><br>M (SE) | I had to fight for my<br>disability rights at my<br>high school (Q5.14_3) <sup>a</sup><br>M (SE) |
|--|---|--|--|
| Left high school   | 2.25 (0.20)   | 2.41 (0.22)  | 2.53 (0.24)  |
| Graduated high school or<br>graduated but thought<br>about leaving high school | 2.92 (0.04)   | 3.58 (0.04)  | 2.64 (0.04)  |

<sup>a</sup> Item was reverse coded, thus, instead of indicating social exclusion, will indicate social inclusion.

#### Model 1A: Subgroup Analyses—High School Social Inclusion

Based on Model 1A results where the High School Climate: Social Inclusion factor was significantly related to whether young adults ages 18–24 with LD graduate high school, we



examined whether subgroups of interest reported different instances of social inclusion in high school.

First, we created two new variables that added or averaged the values for each item on the High School Climate: Social Inclusion factor. Histograms, QQ plots, and skewness and kurtosis suggested the total and average of High School Climate: Social Inclusion factor approximated a normal distribution, where skewness was 0.09 and kurtosis was 2.40 for both variables. We used the totals as the distribution of the histogram appeared more normal and we believe the summation of the items is able to capture greater variability in response across the items.

Next, we included five interaction terms in the GLM between graduating from high school and (1) gender, (2) race/ethnicity, (3) LD, (4) ADHD status, and (5) mental health status. We did not include an interaction term with geographic location as the young adult's current location does not necessarily indicate the location where their high school was.

Model results are presented in two sections. The first uses LD (formal identification of LD vs. no formal identification of LD), and the second uses LD\_type (LD for reading, LD for math, LD for writing, LD for co-occurring types of LD, no formal LD). We note here that both approaches utilized the same sample.

Model results using LD are provided in Table 87. Because the purpose of the subgroup analyses was to examine whether selected demographic groups differed significantly on the latent factor of interest identified by the SEMs, we only interpreted the interaction terms. Of the individuals who self-reported formal identification of LD, those who graduated high school experienced more social inclusion compared to those who left high school before graduating. In other words, young adults ages 18–24 who self-reported formal identification of LD and graduated from high school experienced more social inclusion than young adults ages 18–24 who self-reported formal identification of LD and *did not* graduate high school. Similarly, individuals with ADHD that graduated from high school experienced more social inclusion than individuals who have ADHD that *did not* graduate high school. Means for the High School Climate: Social Inclusion factor by high school graduation status and subgroup are provided in Table 88.



## Table 87. Model 1A: Subgroup Analyses—High School Social Inclusion Using LD Approach 1

| Coefficient           | Std. Est. | SE   | t-value | p     |
|-----------------------|-----------|------|---------|-------|
| Intercept             | 0.57      | 0.44 | 1.30    | 0.196 |
| HS (HS = 1)           | -0.46     | 0.45 | -1.03   | 0.305 |
| Race (Non-White)      | -0.06     | 0.24 | -0.27   | 0.791 |
| Gender (Female)       | -0.41     | 0.27 | -1.52   | 0.129 |
| LD (Formal LD)        | -1.48     | 0.28 | -5.24   | 0.000 |
| ADHD Status           | -0.58     | 0.26 | -2.26   | 0.024 |
| Mental Health Status  | -0.22     | 0.37 | -0.60   | 0.552 |
| Interaction Terms     |           |      |         |       |
| HS*Race: Non-White    | 0.21      | 0.25 | 0.86    | 0.389 |
| HS*Gender: Female     | 0.42      | 0.28 | 1.52    | 0.130 |
| HS*LD: Formal LD      | 1.62      | 0.29 | 5.58    | 0.000 |
| HS*ADHD Status: Yes   | 0.68      | 0.27 | 2.49    | 0.013 |
| HS*Mental Health: Yes | -0.22     | 0.38 | -0.58   | 0.563 |

*Note.* HS indicates whether the individual left high school before graduating (0) or graduated from high school (1). Race compared White vs. non-White (with White as the reference group). Gender compared males vs. females (with male as the reference group). LD compared individuals with formal identification of LD vs. those without formal identification of LD (with those without formal identification as the reference group). ADHD status compared those with ADHD vs. those without ADHD (with those without ADHD as the reference group). Mental health compared those with selected mental health symptoms vs. those without selected mental health symptoms (with no mental health symptoms as the reference group). Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.



## Table 88. Model 1A: Subgroup Analyses—Means for High School Social Inclusion byHigh School Graduation Status and Subgroup Using LD Approach 1

|                         | High School Climate: Social Inclusion                          |   |  |  |  |  |  |
|-------------------------|--|---|--|--|--|--|--|
| Subgroup                | Did not graduate high school<br>(HS = 0)<br>Weighted Mean (SE) | Graduated high school<br>(HS = 1)<br>Weighted Mean (SE) |  |  |  |  |  |
| Race                    |  |   |  |  |  |  |  |
| White                   | 7.56 (0.80)  | 8.91 (0.14)   |  |  |  |  |  |
| Non-White               | 6.72 (0.79)  | 9.31 (0.13)   |  |  |  |  |  |
| Gender                  |  |   |  |  |  |  |  |
| Male                    | 7.11 (0.79)  | 9.14 (0.12)   |  |  |  |  |  |
| Female                  | 7.32 (0.78)  | 9.15 (0.15)   |  |  |  |  |  |
| LD                      |  |   |  |  |  |  |  |
| No formal LD (Struggle) | 9.50 (0.67)  | 8.89 (0.16)   |  |  |  |  |  |
| Formal LD               | 5.10 (0.42)  | 9.25 (0.12)   |  |  |  |  |  |
| ADHD Status             |  |   |  |  |  |  |  |
| Does not have ADHD      | 7.66 (0.63)  | 9.12 (0.10)   |  |  |  |  |  |
| Has ADHD                | 4.51 (0.73)  | 9.28 (0.24)   |  |  |  |  |  |
| Mental Health Symptoms  |  |   |  |  |  |  |  |
| No                      | 8.43 (1.81)  | 9.97 (0.18)   |  |  |  |  |  |



|          | High School Climate: Social Inclusion                          |   |  |  |  |  |
|----------|--|---|--|--|--|--|
| Subgroup | Did not graduate high school<br>(HS = 0)<br>Weighted Mean (SE) | Graduated high school<br>(HS = 1)<br>Weighted Mean (SE) |  |  |  |  |
| Yes      | 6.91 (0.56)  | 8.77 (0.11)   |  |  |  |  |

Note. HS indicates whether the individual left high school before graduating (0) or graduated from high school (1).

Model results using LD\_type (LD Approach 2) are provided in Table 89. Results suggest that young adults ages 18–24 who graduated high school and self-reported co-occurring types of LD, LD for math, LD for reading, and LD for writing experienced more social inclusion when compared to young adults ages 18–24 who left high school before graduating and self-reported those same conditions. For example, young adults ages 18–24 who self-reported having LD for reading and graduated from high school experienced more social inclusion than young adults ages 18–24 who self-reported having LD for reading and graduated from high school experienced more social inclusion than young adults ages 18–24 who self-reported having LD for reading and *did not* graduate high school. Means for the High School Climate: Social Inclusion factor by high school graduation status and subgroup are provided in Table 90.

## Table 89. Model 1A: Subgroup Analyses—High School Social Inclusion Using LD\_type (LD Approach 2)

| Coefficient      | Std. Est. | SE   | t-value | p     |
|------------------|-----------|------|---------|-------|
| Intercept        | 0.61      | 0.45 | 1.35    | 0.176 |
| HS (HS = 1)      | -0.51     | 0.46 | -1.12   | 0.263 |
| Race (Non-White) | 0.06      | 0.31 | 0.20    | 0.841 |
| Gender (Female)  | -0.49     | 0.33 | -1.48   | 0.139 |
| LD Type          |           |      |         |       |
| Reading          | -1.48     | 0.33 | -4.52   | 0.000 |
| Writing          | -0.90     | 0.40 | -2.23   | 0.026 |



| Coefficient                  | Std. Est. | SE   | t-value | p     |
|------------------------------|-----------|------|---------|-------|
| Math                         | -1.62     | 0.34 | -4.76   | 0.000 |
| Co-occurring                 | -2.15     | 0.50 | -4.28   | 0.000 |
| ADHD Status                  | -0.80     | 0.45 | -1.76   | 0.079 |
| Mental Health Status         | -0.26     | 0.37 | -0.69   | 0.490 |
| Interaction Terms            |           |      |         |       |
| HS*Race: Non-White           | 0.09      | 0.31 | 0.30    | 0.766 |
| HS*Gender: Female            | 0.49      | 0.34 | 1.44    | 0.151 |
| HS*LD Type: Reading          | 1.55      | 0.34 | 4.57    | 0.000 |
| HS*LD Type: Writing          | 1.28      | 0.42 | 3.08    | 0.002 |
| HS*LD Type: Math             | 1.85      | 0.35 | 5.22    | 0.000 |
| HS*LD Type: Co-<br>Occurring | 2.10      | 0.51 | 4.11    | 0.000 |
| HS*ADHD Status: Yes          | 0.84      | 0.46 | 1.80    | 0.072 |
| HS*Mental Health: Yes        | -0.14     | 0.38 | -0.37   | 0.715 |

*Note.* HS indicates whether the individual left high school before graduating (0) or graduated from high school (1). Race compared White vs. non-White (with White as the reference group). Gender compared males vs. females (with male as the reference group). LD compared individuals with formal identification of LD vs. those without formal identification of LD (with those without formal identification as the reference group). ADHD status compared those with ADHD vs. those without ADHD (with those without ADHD as the reference group). Mental health compared those with selected mental health symptoms vs. those without selected mental health symptoms (with no mental health symptoms as the reference group). Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.



## Table 90. Model 1A: Subgroup Analyses—Means for High School Social Inclusion byHigh School Graduation Status and Subgroup Using LD\_type (LD Approach 2)

|                    | High School Clima  | te: Social Inclusion                                    |
|--------------------|--|---|
| Subgroup           | Did not graduate high school<br>(HS = 0)<br>Weighted Mean (SE) | Graduated high school<br>(HS = 1)<br>Weighted Mean (SE) |
| Race               |  |   |
| White              | 7.56 (0.80)  | 8.91 (0.14)   |
| Non-White          | 6.72 (0.79)  | 9.31 (0.13)   |
| Gender             |  |   |
| Male               | 7.11 (0.79)  | 9.14 (0.12)   |
| Female             | 7.32 (0.78)  | 9.15 (0.15)   |
| Type of LD         |  |   |
| Struggle           | 9.50 (0.67)  | 8.89 (0.16)   |
| Reading            | 4.69 (0.66)  | 8.97 (0.21)   |
| Writing            | 7.57 (0.35)  | 10.04 (0.25)  |
| Math               | 5.22 (0.55)  | 9.55 (0.24)   |
| Co-Occurring       | *  | 8.67 (0.24)   |
| ADHD Status        |  |   |
| Does not have ADHD | 7.66 (0.63)  | 9.12 (0.10)   |
| Has ADHD           | 4.51 (0.73)  | 9.28 (0.24)   |



|                        | High School Climate: Social Inclusion   |             |  |  |  |  |
|------------------------|---|-------------|--|--|--|--|
| Subgroup               | Did not graduate high school<br>(HS = 0)<br>Weighted Mean (SE)<br>Graduated high school<br>(HS = 1)<br>Weighted Mean (SE) |             |  |  |  |  |
| Mental Health Symptoms |   |             |  |  |  |  |
| No                     | 8.43 (1.81)   | 9.97 (0.18) |  |  |  |  |
| Yes                    | 6.91 (0.56)   | 8.77 (0.11) |  |  |  |  |

*Note.* \*Indicates fewer than 10 respondents. HS indicates whether the individual left high school before graduating (0) or graduated from high school (1).

#### 5.5.2.C Model 1B: Enrolling at a Postsecondary Institution

The same four constructs—High School Climate: Educator Acceptance, High School Climate: Social Inclusion, High School Climate: Connectedness and Support, and Family Support—were used in Model 1B, but the outcome was whether a young adult with LD enrolled at a postsecondary institution which included colleges, universities, and vocational, business, or technical schools. We compared (1) young adults ages 18–24 with LD who are currently enrolled at a postsecondary institution, graduated from a postsecondary institution, or who enrolled at a postsecondary institution but left with (2) young adults ages 18–24 with LD who never attended a postsecondary institution.

Figure 9 displays the SEM for Model 1B where we hypothesize a direct effect between each of the latent factors and our outcome of interest. We further note as a limitation that these models examined only direct effects and we did not hypothesize any correlations, covariances, or indirect effects. Model fit for Model 1B was adequate (see Table 91), where CFI and TLI were near 0.95, RMSEA was less than 0.06, and SRMR was less than 0.08.



#### Figure 9. Model 1B: SEM Figure



#### Table 91. Model 1B: Model Fit—Postsecondary Enrollment

| Model                      | df | χ2     | RMSEA<br>[90% CI]          | CFI   | ти    | SRMR  |
|----------------------------|----|--------|----------------------------|-------|-------|-------|
| Model 1B—<br>Postsecondary | 68 | 226.54 | 0.054<br>[0.047,<br>0.062] | 0.947 | 0.929 | 0.049 |



#### Model 1B: Model Results

Results for Model 1B are provided in Table 92 and suggest High School Climate: Educator Acceptance is significantly related to whether an individual with LD graduates from high school (p < .05).

Further examination of the High School Climate: Educator Acceptance factor is provided in Table 93, where means for the items within this latent factor are presented based on young adult group. Individuals who are currently enrolled at a postsecondary institution, graduated



from a postsecondary institution, or who enrolled but left had higher means on each survey item within the High School Climate: Educator Acceptance factor, suggesting that these individuals perceived adults at their high schools that supported them, wanted them in their classes, and believed they could succeed.

### Table 92. Model 1B: Model Results—Postsecondary Enrollment

| Latent Construct                                  | Est.  | SE   | z-value | p    | Std. Est. |
|---|-------|------|---------|------|-----------|
| High School Climate: Educator<br>Acceptance       | 0.12  | 0.06 | 2.07    | .039 | 0.23      |
| High School Climate: Social<br>Inclusion          | 0.00  | 0.02 | 0.20    | .843 | 0.01      |
| High School Climate:<br>Connectedness and Support | -0.08 | 0.07 | -1.25   | .212 | -0.14     |
| Family Support                                    | 0.06  | 0.04 | 1.55    | .120 | 0.09      |

Table 93. Model 1B: Model Results—Item Means for High School Educator Acceptanceby Postsecondary Enrollment Status



| Young Adult Group   | I had a teacher or<br>another adult at my<br>school who made me<br>feel supported.<br>(Q5.13_1)<br>Weighted Mean (SE) | My teachers believed I<br>could succeed.<br>(Q5.13_2)<br>Weighted Mean (SE) | I felt like my teachers<br>wanted me in their<br>classes. (Q5.14_4)<br>Weighted Mean (SE) |
|---|---|---|---|
| Never enrolled in postsecondary   | 3.75 (0.08)   | 3.84 (0.08)   | 3.72 (0.09)   |
| Currently enrolled in a<br>postsecondary institution,<br>enrolled but left, or<br>graduated | 4.10 (0.03)   | 4.12 (0.03)   | 3.98 (0.03)   |

#### Model 1B: Subgroup Analyses—Educator Acceptance

Based on Model 1B results where the High School Climate: Educator Acceptance factor was significantly related to whether young adults ages 18-24 with LD enroll at a postsecondary institution, we examined whether subgroups reported different instances of educator acceptance in high school. First, we created two new variables: (1) the first added the item values for each item within the High School Climate: Educator Acceptance factor and (2) the second averaged the item values. Histograms, QQ plots, and skewness and kurtosis suggested kurtotic distribution (skewness = -1.00, kurtosis = 4.47) when using the total or the average of the items. We applied transformations (i.e., square root, cube root, log) which did not improve the distribution (Table 94). We utilized the original variable representing the sum of the item values as these skewness and kurtosis estimates were closest to the -2.0 to 2.0 threshold.

## Table 94. Model 1B: Subgroup Analyses—Variable Transformations for High SchoolEducator Acceptance

| Transformation          | Transformation Skewness |       |
|-------------------------|-------------------------|-------|
| Original (sum of items) | -1.00                   | 4.47  |
| Log of sum              | -2.24                   | 11.30 |
| Square root of sum      | -1.51                   | 6.73  |
| Cube root of sum        | -1.72                   | 7.91  |



| Transformation              | Skewness | Kurtosis |
|-----------------------------|----------|----------|
| Original (average of items) | -1.00    | 4.47     |
| Log of average              | -2.24    | 11.30    |
| Square root of average      | -1.51    | 6.73     |
| Cube root of average        | -1.72    | 7.91     |

*Note*. Criteria for normality: skewness and kurtosis between –2.0 and 2.0.

Next, we included five interaction terms in the GLM between enrolling at a postsecondary institution and (1) gender, (2) race/ethnicity, (3) type of LD, (4) ADHD status, and (5) mental health status. Similar to Model 1A, we did not include an interaction term with geographic location as the young adult's current location does not necessarily indicate the location where their high school was.

Model results are presented in two sections. The first uses LD (formal identification of LD vs. no formal identification of LD), and the second uses LD\_type (LD for reading, LD for math, LD for writing, LD for co-occurring types of LD, no formal LD).

Model results using LD are provided in Table 95. Because the purpose of the subgroup analyses was to examine whether selected demographic groups differed significantly on the latent factor of interest identified by the SEMs, we only interpreted the interaction terms. Results suggest young adults ages 18–24 with LD who are non-White and enrolled at a postsecondary institution reported less educator acceptance than young adults ages 18–24 with LD who are White and enrolled at a postsecondary institution. Further, young adults ages 18–24 who reported formal identification of LD and enrolled at a postsecondary institution experienced more educator acceptance than their counterparts who have never enrolled at a postsecondary institution. Means for the High School Climate: Educator Acceptance factor by postsecondary enrollment status and subgroup are provided in Table 96.

## Table 95. Model 1B: Subgroup Analyses—High School Educator Acceptance Using LD Approach 1

| Coefficient | Std. Est. | SE   | t-value | p     |
|-------------|-----------|------|---------|-------|
| Intercept   | -1.06     | 0.18 | -5.90   | 0.000 |



| Coefficient           | Std. Est. | SE   | t-value | p     |
|-----------------------|-----------|------|---------|-------|
| PS (PS = 1)           | 1.29      | 0.20 | 6.52    | 0.000 |
| Race (Non-White)      | 0.53      | 0.19 | 2.87    | 0.004 |
| Gender (Female)       | -0.20     | 0.16 | -1.22   | 0.223 |
| LD (Formal LD)        | 0.80      | 0.17 | 4.74    | 0.000 |
| ADHD Status           | 0.04      | 0.20 | 0.22    | 0.826 |
| Mental Health Status  | -0.06     | 0.16 | -0.40   | 0.689 |
| Interaction Terms     |           |      |         |       |
| PS*Race: Non-White    | -0.71     | 0.20 | -3.62   | 0.000 |
| PS*Gender: Female     | 0.20      | 0.18 | 1.13    | 0.258 |
| PS*LD: Formal LD      | -0.66     | 0.18 | -3.60   | 0.000 |
| PS*ADHD Status: Yes   | -0.28     | 0.22 | -1.25   | 0.210 |
| PS*Mental Health: Yes | -0.10     | 0.17 | -0.59   | 0.554 |

*Note.* PS indicates whether the individual never enrolled in a postsecondary institution (0) or ever enrolled in a postsecondary institution (1). The following reference groups were used: White for race, Male for gender/ethnicity, no ADHD for ADHD status, no mental health symptoms for mental health status, and struggle but no formal identification of LD for LD Type. Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.

Table 96. Model 1B: Subgroup Analyses—Means for High School Educator Acceptanceby Postsecondary Enrollment Status and Subgroup Using LD Approach 1



|                         | High School Climate:  | Educator Acceptance  |
|-------------------------|---|--|
| Subgroup                | Never enrolled in postsecondary<br>(PS = 0)<br>Weighted Mean (SE) | Ever enrolled in postsecondary<br>(PS = 1)<br>Weighted Mean (SE) |
| Race                    |   |  |
| White                   | 10.49 (0.36)  | 12.44 (0.10)   |
| Non-White               | 11.78 (0.21)  | 12.02 (0.10)   |
| Gender                  |   |  |
| Male                    | 11.37 (0.25)  | 12.22 (0.09)   |
| Female                  | 11.17 (0.34)  | 12.17 (0.12)   |
| LD                      |   |  |
| No formal LD (Struggle) | 10.16 (0.31)  | 12.00 (0.13)   |
| Formal LD               | 12.04 (0.22)  | 12.27 (0.09)   |
| ADHD Status             |   |  |
| Does not have ADHD      | 11.16 (0.22)  | 12.31 (0.07)   |
| Has ADHD                | 12.10 (0.40)  | 11.76 (0.22)   |
| Mental Health Symptoms  |   |  |
| No                      | 11.21 (0.29)  | 12.52 (0.12)   |
| Yes                     | 11.35 (0.26)  | 12.06 (0.09)   |



*Note.* PS indicates whether the individual never enrolled in a postsecondary institution (0) or ever enrolled in a postsecondary institution (1).

Model results using LD\_type (LD Approach 2) are provided in Table 97. Results suggest young adults ages 18–24 with LD who are non-White and enrolled at a postsecondary institution reported less educator acceptance than young adults ages 18–24 with LD who are White and enrolled at a postsecondary institution. Further, individuals who reported LD for mathematics, reading, and writing and enrolled at a postsecondary institution experienced more educator acceptance than their counterparts who have never enrolled at a postsecondary institution. Means for the High School Climate: Educator Acceptance factor by postsecondary enrollment status and subgroup are provided in Table 98.

# Table 97. Model 1B: Subgroup Analyses—High School Educator Acceptance Using LD\_type (LD Approach 2)

| Coefficient      | Std. Est. | SE   | t-value | p     |
|------------------|-----------|------|---------|-------|
| Intercept        | -1.03     | 0.18 | -5.83   | 0.000 |
| PS (PS = 1)      | 1.30      | 0.20 | 6.61    | 0.000 |
| Race (Non-White) | 0.57      | 0.19 | 2.97    | 0.003 |
| Gender (Female)  | -0.21     | 0.17 | -1.27   | 0.205 |
| LD Type          |           |      |         |       |
| Reading          | 0.94      | 0.22 | 4.21    | 0.000 |
| Writing          | 0.83      | 0.23 | 3.64    | 0.000 |
| Math             | 0.61      | 0.32 | 1.91    | 0.057 |



| Coefficient                  | Std. Est. | SE   | t-value | p     |
|------------------------------|-----------|------|---------|-------|
| Co-occurring                 | 0.74      | 0.26 | 2.84    | 0.005 |
| ADHD Status                  | 0.01      | 0.20 | 0.06    | 0.955 |
| Mental Health Status         | -0.12     | 0.17 | -0.74   | 0.459 |
| Interaction Terms            |           |      |         |       |
| PS*Race: Non-White           | -0.77     | 0.20 | -3.81   | 0.000 |
| PS*Gender: Female            | 0.16      | 0.18 | 0.88    | 0.382 |
| PS*LD Type: Reading          | -0.76     | 0.24 | -3.11   | 0.002 |
| PS*LD Type: Writing          | -0.78     | 0.26 | -3.03   | 0.002 |
| PS*LD Type: Math             | -0.71     | 0.34 | -2.13   | 0.034 |
| PS*LD Type: Co-<br>Occurring | -0.50     | 0.27 | -1.81   | 0.071 |
| PS*ADHD Status: Yes          | -0.29     | 0.23 | -1.28   | 0.202 |
| PS*Mental Health: Yes        | -0.03     | 0.18 | -0.19   | 0.847 |

*Note.* PS indicates whether the individual never enrolled in a postsecondary institution (0) or ever enrolled in a postsecondary institution (1). The following reference groups were used: White for race, Male for gender/ethnicity, no ADHD for ADHD status, no mental health symptoms for mental health status, and struggle but no formal identification of LD for LD Type. Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.

Table 98. Model 1B: Subgroup Analyses—Means for High School Educator Acceptanceby Postsecondary Enrollment Status and Subgroup Using LD\_type (LD Approach 2)



|                        | High School Climate: Educator Acceptance                          |  |
|------------------------|---|--|
| Subgroup               | Never enrolled in postsecondary<br>(PS = 0)<br>Weighted Mean (SE) | Ever enrolled in postsecondary<br>(PS = 1)<br>Weighted Mean (SE) |
| Race                   |   |  |
| White                  | 10.49 (0.36)  | 12.44 (0.10)   |
| Non-White              | 11.78 (0.21)  | 12.02 (0.10)   |
| Gender                 |   |  |
| Male                   | 11.37 (0.25)  | 12.22 (0.09)   |
| Female                 | 11.17 (0.34)  | 12.17 (0.12)   |
| Type of LD             |   |  |
| Struggle               | 10.16 (0.31)  | 12.00 (0.13)   |
| Reading                | 12.21 (0.40)  | 12.34 (0.17)   |
| Writing                | 12.28 (0.43)  | 12.15 (0.23)   |
| Math                   | 11.45 (0.54)  | 11.73 (0.19)   |
| Co-Occurring           | 11.89 (0.47)  | 12.48 (0.15)   |
| ADHD Status            |   |  |
| Does not have ADHD     | 11.16 (0.22)  | 12.31 (0.07)   |
| Has ADHD               | 12.10 (0.40)  | 11.76 (0.22)   |
| Mental Health Symptoms |   |  |


|          | High School Climate: Educator Acceptance                          |  |  |  |  |  |  |
|----------|---|--|--|--|--|--|--|
| Subgroup | Never enrolled in postsecondary<br>(PS = 0)<br>Weighted Mean (SE) | Ever enrolled in postsecondary<br>(PS = 1)<br>Weighted Mean (SE) |  |  |  |  |  |
| No       | 11.21 (0.29)  | 12.52 (0.12)   |  |  |  |  |  |
| Yes      | 11.35 (0.26)  | 12.06 (0.09)   |  |  |  |  |  |

*Note.* PS indicates whether the individual never enrolled in a postsecondary institution (0) or ever enrolled in a postsecondary institution (1).

#### 5.5.2.D Model 1C: Employment Status

The last model used the same four constructs—High School Climate: Educator Acceptance, High School Climate: Social Inclusion, High School Climate: Connectedness and Support, and Family Support—to predict employment. We compared (1) young adults ages 18–24 with LD who are currently employed or who are unemployed but looking with (2) young adults ages 18–24 with LD who are currently unemployed and not looking for a job. While both groups contain individuals who are unemployed, we grouped individuals who are unemployed but looking for a job with individuals who are currently employed to account for the transition between graduating from a postsecondary institution and finding a job. Young adults in our age range will likely be seeking jobs to simply make a living or supplement their quality of life while others may be seeking jobs to establish their careers.

Figure 10 displays the SEM for Model 1C where we hypothesize a direct effect between each of the latent factors and our outcome of interest. We further note as a limitation that these models examined only direct effects and we did not hypothesize any correlations, covariances, or indirect effects. Model fit for Model 1C was adequate (see Table 99), where CFI and TLI were near 0.95, RMSEA was less than 0.06, and SRMR was less than 0.08.

Results for Model 1C are provided in Table 100 and suggest all four latent factors are not significantly related to whether an individual with LD is currently employed. No subgroup analyses were conducted as no latent factors were significantly related to employment status.

#### Figure 10. Model 1C: SEM Figure





### Table 99. Model 1C: Model Fit—Employment Status

| Model                   | df | χ2     | RMSEA<br>[90% CI]          | CFI   | ти    | SRMR  |
|-------------------------|----|--------|----------------------------|-------|-------|-------|
| Model 1C—<br>Employment | 68 | 222.77 | 0.070<br>[0.060,<br>0.080] | 0.912 | 0.883 | 0.064 |

*Note*. Model fit criteria considered adequate if CFI/TLI ≥ 0.95, RMSEA < 0.06, and SRMR < 0.08 (Hu & Bentler, 1999).

### Table 100. Model 1C: Model Results—Employment Status



| Latent Construct                                  | Est.  | SE   | z-value | p     | Std. Est. |
|---|-------|------|---------|-------|-----------|
| High School Climate: Educator<br>Acceptance       | 0.00  | 0.11 | 0.03    | 0.980 | 0.01      |
| High School Climate: Social<br>Inclusion          | -0.04 | 0.04 | -1.15   | 0.251 | -0.10     |
| High School Climate:<br>Connectedness and Support | -0.01 | 0.14 | -0.04   | 0.965 | -0.01     |
| Family Support                                    | 0.07  | 0.07 | 0.97    | 0.334 | 0.10      |

### 5.5.3 Model 2

Model 2 hypothesized Confidence with Daily Living Skills, Awareness of Disability Rights, LD Identity and Acceptance, and Societal View of Disability would have direct effects on Well-being (RQ 4). We also compared subgroups of interest (RQ 5). These latent factors were intended to capture elements that can contribute to well-being.

#### 5.5.3.A Model 2: Model Estimation

We first estimated an initial measurement model with the latent factors depicted in Figure 11. This initial measurement model had adequate fit, where CFI and TLI were near 0.95, RMSEA was less than 0.06, and SRMR was less than 0.08 (see Table 102). Examination of results from the revised measurement model suggests adequate estimation of the latent factors and confirms the five-factor model. Additionally, all factor loadings were greater than 0.5. Given the adequate fit on the revised measurement model, we estimated an initial outcome model where well-being was being predicted by the other four latent factors (Well-being). Then, we added a categorical variable for age into the SEM so well-being was also being predicted by young adults' age in addition to the four latent factors (Well-being + Age). Below, we briefly describe each of the latent factors for Model 2, then describe results for the final outcome model. Model fit for all models is provided in Table 102.

#### Figure 11. Model 2: Initial Measurement Model





### Table 101. Model 2: Model Fit

| Model                           | df  | χ2     | RMSEA<br>[90% CI]          | CFI   | ти    | SRMR  |
|---------------------------------|-----|--------|----------------------------|-------|-------|-------|
| Initial<br>Measurement<br>Model | 289 | 993.40 | 0.052<br>[0.048,<br>0.055] | 0.908 | 0.896 | 0.046 |



| Model  | df  | χ2      | RMSEA<br>[90% Cl]          | CFI   | ти    | SRMR  |
|--|-----|---------|----------------------------|-------|-------|-------|
| Initial Outcome<br>Model (Well-<br>being)    | 289 | 993.40  | 0.052<br>[0.048,<br>0.055] | 0.908 | 0.896 | 0.046 |
| Final Outcome<br>Model (Well-being<br>+ Age) | 314 | 1077.01 | 0.051<br>[0.048,<br>0.055] | 0.902 | 0.891 | 0.049 |

*Note*. Model fit criteria considered adequate if CFI/TLI ≥ 0.95, RMSEA < 0.06, and SRMR < 0.08 (Hu & Bentler, 1999).

#### Latent Factor: Confidence with Daily Living Skills

The Confidence with Daily Living Skills latent factor contained five items that collectively represent confidence to complete a variety of tasks, including taking care of physical health (Q8.13\_3), using the health care system (Q8.13\_5), and taking care of personal finances (Q8.13\_6). All survey items for this latent factor were answered using a five-point Likert scale for level of confidence. All factor loadings for the Confidence with Daily Living Skills latent factor were above 0.5 (Table 102).

| Item  | Est. | SE   | z-value | p     | Std. Est. |
|---|------|------|---------|-------|-----------|
| Using a map, GPS, or the public transportation system (Q8.13_1)                               | 1.00 |      |         |       | 0.67      |
| Taking care of my physical<br>health (e.g., eating<br>healthy, going to the gym)<br>(Q8.13_3) | 1.09 | 0.06 | 18.46   | 0.000 | 0.72      |
| Using technology (e.g.,<br>using a computer or app to<br>pay bills) (Q8.13_4)                 | 0.93 | 0.05 | 19.21   | 0.000 | 0.63      |
| Using the healthcare<br>system (e.g., going to the<br>doctor) (Q8.13_5)                       | 1.01 | 0.06 | 17.86   | 0.000 | 0.70      |

### Table 102. Latent Factor: Confidence with Daily Living Skills



| ltem   | Est. | SE   | z-value | p     | Std. Est. |
|--|------|------|---------|-------|-----------|
| Taking care of my personal<br>finances (e.g., paying bills<br>on time, managing a<br>budget) (Q8.13_6) | 1.15 | 0.06 | 18.13   | 0.000 | 0.71      |

Note. Items in this table were provided to all respondents and were answered using a 5-point Likert scale for level of confidence. Across all Likert-type items, a higher value is better.

#### Latent Factor: Societal View of Disability

The Societal View of Disability latent factor contained four items about perceptions of how society views and treats individuals with disabilities, including ignoring (Q9.4\_3), becoming impatient (Q9.4\_4), and failing to accommodate (Q9.4\_5) individuals with disabilities. One final item asks about discrimination (Q9.4\_6). As shown in Table 103, all factor loadings are above or near 0.7.

| Item  | Est. | SE   | z-value | p     | Std. Est. |
|---|------|------|---------|-------|-----------|
| People without disabilities ignore people with disabilities. (Q9.4_3)     | 1.00 |      |         |       | 0.72      |
| People become impatient<br>with people with<br>disabilities. (Q9.4_4)     | 0.90 | 0.05 | 20.17   | 0.000 | 0.71      |
| Our society fails to<br>accommodate people with<br>disabilities. (Q9.4_5) | 0.96 | 0.05 | 19.61   | 0.000 | 0.70      |
| People with disabilities<br>are discriminated against.<br>(Q9.4_6)        | 0.86 | 0.05 | 16.93   | 0.000 | 0.68      |

### Table 103. Latent Factor: Societal View of Disability

*Note.* Items in this table were provided to all respondents and were answered using a 5-point Likert scale for level of agreement.

#### Latent Factor: LD Identity and Acceptance

The LD Identity and Acceptance latent factor captured how young adults with LD feel their LD affects them, including whether their LD has a positive impact on them generally (Q9.6\_1),



whether their LD is a part of who they are (Q9.6\_2), whether they are proud to have a LD (Q9.6\_3), whether they are comfortable telling friends or romantic partners they have LD (Q9.6\_4), and whether they feel connected to peers with (Q9.6\_6) and without disabilities (Q9.6\_7). All items were answered using a 5-point Likert scale for level of agreement. As shown in Table 104, all items had factor loadings greater than 0.5.

| Item  | Est. | SE   | z-value | p     | Std. Est. |
|---|------|------|---------|-------|-----------|
| My learning disability has<br>a positive impact on me.<br>(Q9.6_1)                                      | 1.00 |      |         |       | 0.66      |
| My learning disability is a part of who I am. (Q9.6_2)  | 0.60 | 0.05 | 12.94   | 0.000 | 0.47      |
| I am proud to have a<br>learning disability.<br>(Q9.6_3)  | 1.16 | 0.05 | 24.16   | 0.000 | 0.70      |
| I feel comfortable telling<br>friends or romantic<br>partners I have a learning<br>disability. (Q9.6_4) | 0.90 | 0.06 | 15.96   | 0.000 | 0.61      |
| I feel connected to peers with disabilities. (Q9.6_6)   | 0.63 | 0.05 | 12.59   | 0.000 | 0.52      |
| I feel connected to peers<br>without disabilities.<br>(Q9.6_7)  | 0.71 | 0.05 | 13.91   | 0.000 | 0.59      |

### Table 104. Latent Factor: LD Identity and Acceptance

*Note.* Items in this table were provided to all respondents and were answered using a 5-point Likert scale for level of agreement.

#### Latent Factor: Awareness of Disability Rights

The Awareness of Disability Rights latent factor contained four items that asked about awareness of legal rights due to being a person with a disability (Q9.5\_1) along with discussing their legal rights (Q9.5\_3) and advocating for their rights under disability laws (Q9.5\_4). All items were answered using a 5-point Likert scale for level of agreement, and one item was reverse-coded (Q9.5\_3). As shown in Table 105, all item factor loadings were near or above 0.7.



### Table 105. Latent Factor: Awareness of Disability Rights

| Item  | Est.  | SE   | z-value | Р     | Std. Est. |
|---|-------|------|---------|-------|-----------|
| I am aware that I have<br>certain legal rights and<br>protections because I am a<br>person with a disability.<br>(Q9.5_1) | 1.00  |      |         |       | 0.70      |
| I know where to access<br>information about<br>disability rights. (Q9.5_2)  | 1.07  | 0.05 | 22.28   | 0.000 | 0.70      |
| I have talked to someone<br>about my legal rights and<br>protections about my<br>disability. (Q9.5_3)                     | -1.06 | 0.06 | -18.71  | 0.000 | -0.69     |
| I am comfortable<br>advocating for my rights<br>under disability laws.<br>(Q9.5_4)  | 1.08  | 0.06 | 17.46   | 0.000 | 0.73      |

*Note.* Items in this table were provided to all respondents and were answered using a 5-point Likert scale for level of agreement.

#### Latent Factor: Well-being

The Well-being latent factor was intended to capture several aspects of well-being, including satisfaction with (Q11.4\_5) and confidence taking care of (Q8.13\_2) their mental health, satisfaction with their level of personal independence (Q11.4\_7) and who they are (Q11.4\_8), how often they feel good about their lives (Q11.3), and excitement for their futures (Q11.10\_5) and careers (Q11.10\_4). All items were answered using a 4- or 5-point Likert scale; however, Likert scales included level of agreement (Q11.10\_4, Q11.10\_5), satisfaction (Q11.4\_7, Q11.4\_8, Q11.4\_5), confidence (Q8.13\_2), and frequency (Q11.3). As shown in Table 106, all items had factor loadings greater than 0.5.

#### Table 106. Latent Factor: Well-being



| Item   | Est. | SE   | z-value | Р     | Std. Est. |
|--|------|------|---------|-------|-----------|
| How often do you feel<br>good about your life?<br>(Q11.3)                                  | 1.00 |      |         |       | 0.63      |
| Satisfaction with Personal Independence (Q11.4_7)  | 1.21 | 0.09 | 14.29   | 0.000 | 0.55      |
| Satisfaction with Who I am (Q11.4_8)   | 1.50 | 0.08 | 18.06   | 0.000 | 0.69      |
| I am excited about my career (Q11.10_4)  | 1.21 | 0.09 | 14.29   | 0.000 | 0.56      |
| I am excited about my<br>future (Q11.10_5)   | 1.20 | 0.09 | 13.81   | 0.000 | 0.60      |
| Rate your level of<br>confidence in Taking care<br>of my mental health<br>(Q8.13_2)        | 1.39 | 0.10 | 13.83   | 0.000 | 0.58      |
| How satisfied are you<br>currently in the following<br>areas? - Mental health<br>(Q11.4_5) | 1.47 | 0.09 | 16.46   | 0.000 | 0.62      |

*Note.* Items in this table were provided to all respondents and were answered using a 5-point Likert scale for level of agreement.

#### 5.5.3.B Model 2: Model Results

Model 2 examined whether Confidence with Daily Living Skills, Societal View of Disability, LD Identity and Acceptance, and Awareness of Disability Rights had a direct effect on the wellbeing of young adults ages 18–24 with LD. Additionally, Model 2 included a variable for age (see Figure 12). Model 2 for the final outcome model (Well-being + Age) was adequate (see Table 101).

Model results are presented in Table 107 and suggest all four latent factors have a significant effect on the well-being of young adults with LD (p < .05).

#### Figure 12. Model 2: SEM Figure





## Table 107. Model 2: Model Results—Well-being

| Coefficient                            | Est. | SE   | z-value | p     | Std. Est. |
|--|------|------|---------|-------|-----------|
| Age                                    | 0.01 | 0.01 | 1.34    | 0.179 | 0.03      |
| Latent Construct                       |      |      |         |       |           |
| Confidence with Daily<br>Living Skills | 0.33 | 0.03 | 10.73   | 0.000 | 0.51      |



| Coefficient                       | Est. | SE   | z-value | p     | Std. Est. |
|-----------------------------------|------|------|---------|-------|-----------|
| Awareness of Disability<br>Rights | 0.07 | 0.02 | 2.95    | 0.003 | 0.13      |
| Societal View of<br>Disability    | 0.07 | 0.02 | 4.34    | 0.000 | 0.12      |
| LD Identity and<br>Acceptance     | 0.24 | 0.03 | 8.52    | 0.000 | 0.40      |

#### 5.5.3.C Model 2: Subgroup Analyses

Based on Model 2 results, we conducted subgroup analyses on all four latent factors included in the SEM: Confidence with Daily Living Skills, Societal View of Disability, LD Identity and Acceptance, and Awareness of Disability Rights.

Within each of the latent factors below, model results are presented in two sections. The first uses LD (formal identification of LD vs. no formal identification of LD), and the second uses LD\_type (LD for reading, LD for math, LD for writing, LD for co-occurring types of LD, no formal LD).

#### Model 2: Subgroup Analyses—Confidence with Daily Living Skills

We examined whether subgroups were differed on the Confidence with Daily Living Skills latent factor. First, we created two new variables: (1) the first added the item values for each item within Confidence with Daily Living Skills factor and (2) the second averaged the item values. Histograms, QQ plots, and skewness and kurtosis suggested a slightly kurtotic distribution (kurtosis = 2.66) when using the total or the average of the items. Given that transformations (i.e., square root, cube root, log) did not improve the distribution (Table 108), we utilized the original variable representing the sum of the item values as these skewness and kurtosis estimates were closest to the -2.0 to 2.0 threshold. We repeated this same process for the Well-being latent factor, where items were summed and averaged. Skewness and kurtosis estimates suggest a slightly kurtotic distribution (skewness = -0.51, kurtosis = 2.88) for both the sum and the average of the items. We utilized the sum of the items in the outcome model. The Well-being latent factor was also standardized to have a mean of 0 and standard deviation of 1.

# Table 108. Model 2: Subgroup Analyses—Variable Transformations for Confidencewith Daily Living Skills



| Transformation              | Skewness | Kurtosis |
|-----------------------------|----------|----------|
| Original (sum of items)     | -0.43    | 2.66     |
| Log of sum                  | -1.13    | 4.79     |
| Square root of sum          | -0.74    | 3.39     |
| Cube root of sum            | -0.85    | 3.76     |
| Original (average of items) | -0.43    | 2.66     |
| Log of average              | -1.13    | 4.79     |
| Square root of average      | -0.74    | 3.39     |
| Cube root of average        | -0.85    | 3.76     |

*Note*. Criteria for normality: skewness and kurtosis between –2.0 and 2.0.

Next, we included categorical variables in the GLM for the subgroups of interest: (1) gender, (2) race/ethnicity, (3) type of LD, (4) ADHD status, (5) mental health status, and (6) region.

Model results using LD are provided in Table 109 and suggest differences on the Confidence with Daily Living Skills latent factor between (1) males and females, where females report lower levels, (2) types of LD, where individuals who self-report formal LD report higher levels compared to individuals with no formal identification of LD, and (3) mental health statuses, where individuals who self-reported selected mental health symptoms reported lower levels than individuals who did not self-report selected mental health symptoms. Means for the Confidence with Daily Living Skills factor by subgroup are provided in Table 110.

Table 109. Model 2: Subgroup Analyses—Confidence with Daily Living Skills Using LDApproach 1



| Coefficient          | Std. Est. | SE   | t-value | p     |
|----------------------|-----------|------|---------|-------|
| Intercept            | 0.17      | 0.10 | 1.74    | 0.082 |
| Race (Non-White)     | -0.06     | 0.06 | -0.97   | 0.331 |
| Gender (Female)      | -0.15     | 0.06 | -2.47   | 0.014 |
| LD (Formal LD)       | 0.36      | 0.06 | 5.58    | 0.000 |
| ADHD Status (ADHD)   | 0.01      | 0.08 | 0.09    | 0.932 |
| Mental Health Status | -0.44     | 0.06 | -7.07   | 0.000 |
| U.S. Region          |           |      |         |       |
| Midwest              | -0.09     | 0.09 | -1.02   | 0.310 |
| Northeast            | 0.09      | 0.09 | 0.97    | 0.332 |
| South                | -0.03     | 0.07 | -0.40   | 0.690 |

*Note.* The following reference groups were used: White for race, Male for gender/ethnicity, no ADHD for ADHD status, no mental health symptoms for mental health status, struggle but no formal identification of LD for LD, and West for U.S. region. Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.

# Table 110. Model 2: Subgroup Analyses—Means for Confidence with Daily Living Skillsby Subgroup Using LD Approach 1

| Subgroup  | Confidence with Daily Living Skills<br>Weighted Mean (SE) |
|-----------|---|
| Race      |   |
| White     | 19.28 (0.18)  |
| Non-White | 18.85 (0.16)  |



| Subgroup                | Confidence with Daily Living Skills<br>Weighted Mean (SE) |
|-------------------------|---|
| Gender                  |   |
| Male                    | 19.30 (0.15)  |
| Female                  | 18.62 (0.20)  |
| LD                      |   |
| No formal LD (Struggle) | 18.07 (0.22)  |
| Formal LD               | 19.45 (0.14)  |
| ADHD Status             |   |
| Does not have ADHD      | 19.06 (0.13)  |
| Has ADHD                | 18.91 (0.31)  |
| Mental Health Symptoms  |   |
| No                      | 20.26 (0.20)  |
| Yes                     | 18.52 (0.15)  |
| U.S. Region             |   |
| West                    | 19.20 (0.22)  |
| Midwest                 | 18.74 (0.28)  |
| Northeast               | 19.52 (0.30)  |
| South                   | 18.81 (0.19)  |



Model results using LD\_type (LD Approach 2) are provided in Table 111 and suggest differences on the Confidence with Daily Living Skills latent factors between (1) males and females, where females report lower levels, (2) types of LD, where individuals who self-report formal LD for reading, math, writing, and co-occurring types of LD report higher levels compared to individuals with no formal identification of LD, and (3) mental health statuses, where individuals who self-reported selected mental health symptoms reported lower levels than individuals who did not self-report selected mental health symptoms. Means for the Confidence with Daily Living Skills factor by subgroup are provided in Table 112.

# Table 111. Model 2: Subgroup Analyses—Confidence with Daily Living Skills Using LD\_type (LD Approach 2)

| Coefficient          | Std. Est. | SE   | t-value | p     |
|----------------------|-----------|------|---------|-------|
| Intercept            | 0.22      | 0.10 | 2.14    | 0.033 |
| Race (Non-White)     | -0.09     | 0.06 | -1.54   | 0.125 |
| Gender (Female)      | -0.16     | 0.06 | -2.51   | 0.012 |
| LD Type              |           |      |         |       |
| Reading              | 0.29      | 0.09 | 3.41    | 0.001 |
| Writing              | 0.34      | 0.09 | 3.62    | 0.000 |
| Math                 | 0.41      | 0.09 | 4.38    | 0.000 |
| Co-occurring         | 0.387     | 0.09 | 4.37    | 0.000 |
| ADHD Status (ADHD)   | -0.003    | 0.09 | -0.04   | 0.968 |
| Mental Health Status | -0.46     | 0.06 | -7.11   | 0.000 |
| U.S. Region          |           |      |         |       |
| Midwest              | -0.11     | 0.09 | -1.21   | 0.226 |



| Coefficient | Std. Est. | SE   | t-value | p     |
|-------------|-----------|------|---------|-------|
| Northeast   | 0.07      | 0.09 | 0.78    | 0.439 |
| South       | -0.02     | 0.07 | -0.32   | 0.750 |

*Note*. The following reference groups were used: White for race, Male for gender/ethnicity, no ADHD for ADHD status, no mental health symptoms for mental health status, struggle but no formal identification of LD for LD Type, and West for U.S. region. Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.

# Table 112. Model 2: Subgroup Analyses—Means for Confidence with Daily Living Skills by Subgroup Using LD\_type (LD Approach 2)

| Subgroup   | Confidence with Daily Living Skills<br>Weighted Mean (SE) |
|------------|---|
| Race       |   |
| White      | 19.28 (0.18)  |
| Non-White  | 18.85 (0.16)  |
| Gender     |   |
| Male       | 19.30 (0.15)  |
| Female     | 18.62 (0.20)  |
| Type of LD |   |
| Struggle   | 18.07 (0.22)  |
| Reading    | 19.10 (0.27)  |
| Writing    | 19.50 (0.31)  |
| Math       | 19.74 (0.32)  |



| Subgroup               | Confidence with Daily Living Skills<br>Weighted Mean (SE) |
|------------------------|---|
| Co-Occurring           | 19.52 (0.29)  |
| ADHD Status            |   |
| Does not have ADHD     | 19.06 (0.13)  |
| Has ADHD               | 18.91 (0.31)  |
| Mental Health Symptoms |   |
| No                     | 20.26 (0.20)  |
| Yes                    | 18.52 (0.15)  |
| U.S. Region            |   |
| West                   | 19.20 (0.22)  |
| Midwest                | 18.74 (0.28)  |
| Northeast              | 19.52 (0.30)  |
| South                  | 18.81 (0.19)  |

#### Model 2: Subgroup Analyses—Societal View of Disability

Next, we examined whether subgroups reported significantly different perceptions of how society views and treats individuals with disabilities. We created two new variables based on the Societal View of Disability latent factor: (1) the first added the item values for each item within the Societal View of Disability factor and (2) the second averaged the item values. Histograms, QQ plots, and skewness and kurtosis suggested a slightly kurtotic distribution (kurtosis = 3.20) when using the total or the average of the items. Transformations (i.e., square root, cube root, log) did improve the distribution (Table 113); however, skewness and kurtosis estimates were still outside the -2 to 2 ideal criteria so we utilized the original variable representing the sum of the item values as the sum allows for more meaningful interpretation, though results were interpreted with caution.



# Table 113. Model 2: Subgroup Analyses—Variable Transformations for Societal View of Disability

| Transformation              | Skewness | Kurtosis |
|-----------------------------|----------|----------|
| Original (sum of items)     | 0.65     | 3.20     |
| Log of sum                  | -0.24    | 2.77     |
| Square root of sum          | 0.21     | 2.74     |
| Cube root of sum            | 0.06     | 2.69     |
| Original (average of items) | 0.65     | 3.20     |
| Log of average              | -0.24    | 2.77     |
| Square root of average      | 0.21     | 2.74     |
| Cube root of average        | 0.06     | 2.69     |

#### *Note*. Criteria for normality: skewness and kurtosis between –2.0 and 2.0.

Next, we included categorical variables in the GLM for the subgroups of interest: (1) gender, (2) race/ethnicity, (3) LD, (4) ADHD status, (5) mental health status, and (6) region.

Model results using LD are provided in Table 114. Results suggest differences on the Societal View of Disability based on (1) LD, where individuals who self-report LD for reading had lower levels on the Societal View of Disability latent factor than individuals who did not self-report formal identification of LD, (2) mental health status, where individuals who self-reported selected mental health symptoms had lower levels on the Societal View of Disability latent factor than individuals who did not self-report selected mental health symptoms, and (3) U.S. region where individuals living in Northeast states reported lower levels on the Societal View of Disability latent factor than individuals living in Western states.

Means for the Societal View of Disability factor by subgroup are provided in Table 115.



# Table 114. Model 2: Subgroup Analyses—Societal View of Disability Using LD Approach 1

| Coefficient          | Std. Est. | SE   | t-value | p     |
|----------------------|-----------|------|---------|-------|
| Intercept            | 0.47      | 0.10 | 4.75    | 0.000 |
| Race (Non-White)     | 0.07      | 0.06 | 1.18    | 0.240 |
| Gender (Female)      | -0.13     | 0.06 | -2.21   | 0.027 |
| LD (Formal LD)       | -0.15     | 0.06 | -2.40   | 0.017 |
| ADHD Status (ADHD)   | 0.01      | 0.08 | 0.18    | 0.858 |
| Mental Health Status | -0.44     | 0.07 | -6.51   | 0.000 |
| U.S. Region          |           |      |         |       |
| Midwest              | 0.13      | 0.09 | 1.37    | 0.170 |
| Northeast            | -0.17     | 0.09 | -1.91   | 0.056 |
| South                | -0.11     | 0.07 | -1.56   | 0.119 |

*Note.* The following reference groups were used: White for race, Male for gender/ethnicity, no ADHD for ADHD status, no mental health symptoms for mental health status, struggle but no formal identification of LD for LD, and West for U.S. region. Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.

Table 115. Model 2: Subgroup Analyses—Means for Societal View of Disability bySubgroup Using LD Approach 1



| Subgroup                | Societal View of Disability<br>Weighted Mean (SE) |
|-------------------------|---|
| Race                    |   |
| White                   | 9.53 (0.15)                                       |
| Non-White               | 9.75 (0.14)                                       |
| Gender                  |   |
| Male                    | 9.85 (0.13)                                       |
| Female                  | 9.37 (0.16)                                       |
| LD                      |   |
| No formal LD (Struggle) | 10.03 (0.16)                                      |
| Formal LD               | 9.49 (0.13)                                       |
| ADHD Status             |   |
| Does not have ADHD      | 9.71 (0.11)                                       |
| Has ADHD                | 9.43 (0.27)                                       |
| Mental Health Symptoms  |   |
| No                      | 10.72 (0.20)                                      |
| Yes                     | 9.21 (0.12)                                       |
| U.S. Region             |   |
| West                    | 9.80 (0.19)                                       |



| Subgroup  | Societal View of Disability<br>Weighted Mean (SE) |
|-----------|---|
| Midwest   | 10.25 (0.27)                                      |
| Northeast | 9.33 (0.24)                                       |
| South     | 9.40 (0.15)                                       |

Model results using LD\_type are provided in Table 116. Results suggest differences on the Societal View of Disability based on (1) type of LD, where individuals who self-report LD for reading had lower levels on the Societal View of Disability latent factor than individuals who did not self-report formal identification of LD, (2) mental health status, where individuals who self-reported selected mental health symptoms had lower levels on the Societal View of Disability latent factor than individuals who did not self-report selected mental health symptoms, and (3) U.S. region where individuals living in Northeast states reported lower levels on the Societal View of Disability latent factor than individuals who live in Western states. Means for the Societal View of Disability factor by subgroup are provided in Table 117.

# Table 116. Model 2: Subgroup Analyses—Societal View of Disability Using LD\_type (LD Approach 2)

| Coefficient      | Std. Est. | SE   | t-value | p     |
|------------------|-----------|------|---------|-------|
| Intercept        | 0.43      | 0.10 | 4.22    | 0.000 |
| Race (Non-White) | 0.09      | 0.06 | 1.50    | 0.134 |
| Gender (Female)  | -0.09     | 0.06 | -1.40   | 0.162 |
| LD Type          |           |      |         |       |
| Reading          | -0.25     | 0.09 | -2.77   | 0.006 |
| Writing          | -0.14     | 0.10 | -1.40   | 0.161 |
| Math             | -0.07     | 0.09 | -0.82   | 0.411 |



| Coefficient          | Std. Est. | SE   | t-value | p     |
|----------------------|-----------|------|---------|-------|
| Co-occurring         | -0.16     | 0.09 | -1.83   | 0.068 |
| ADHD Status (ADHD)   | 0.03      | 0.09 | 0.32    | 0.748 |
| Mental Health Status | -0.42     | 0.07 | -5.99   | 0.000 |
| U.S. Region          |           |      |         |       |
| Midwest              | 0.15      | 0.10 | 1.54    | 0.125 |
| Northeast            | -0.22     | 0.09 | -2.38   | 0.018 |
| South                | -0.10     | 0.07 | -1.37   | 0.170 |

*Note.* The following reference groups were used: White for race, Male for gender/ethnicity, no ADHD for ADHD status, no mental health symptoms for mental health status, struggle but no formal identification of LD for LD Type, and West for U.S. region. Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.

# Table 117. Model 2: Subgroup Analyses—Means for Societal View of Disability by Subgroup Using LD\_type (LD Approach 2)

| Subgroup  | Societal View of Disability<br>Weighted Mean (SE) |
|-----------|---|
| Race      |   |
| White     | 9.53 (0.15)                                       |
| Non-White | 9.75 (0.14)                                       |
| Gender    |   |
| Male      | 9.85 (0.13)                                       |
| Female    | 9.37 (0.16)                                       |



| Subgroup               | Societal View of Disability<br>Weighted Mean (SE) |
|------------------------|---|
| Type of LD             |   |
| Struggle               | 10.03 (0.16)                                      |
| Reading                | 9.14 (0.26)                                       |
| Writing                | 9.60 (0.29)                                       |
| Math                   | 9.84 (0.25)                                       |
| Co-Occurring           | 9.38 (0.26)                                       |
| ADHD Status            |   |
| Does not have ADHD     | 9.71 (0.11)                                       |
| Has ADHD               | 9.43 (0.27)                                       |
| Mental Health Symptoms |   |
| No                     | 10.72 (0.20)                                      |
| Yes                    | 9.21 (0.12)                                       |
| U.S. Region            |   |
| West                   | 9.80 (0.19)                                       |
| Midwest                | 10.25 (0.27)                                      |
| Northeast              | 9.33 (0.24)                                       |
| South                  | 9.40 (0.15)                                       |



#### Model 2: Subgroup Analyses - LD Identity and Acceptance

We next examined the LD Identity and Acceptance latent factor. We created two new variables: (1) the first added the item values for each item within the LD Identity and Acceptance factor and (2) the second averaged the item values. Histograms, QQ plots, and skewness and kurtosis suggested a slightly kurtotic distribution (kurtosis = 3.01) when using the total or the average of the items. Transformations (i.e., square root, cube root, log) did not improve the distribution (Table 118) so we utilized the original variable representing the sum of the item values as this variable most approximated a normal distribution.

# Table 118. Model 2: Subgroup Analyses—Variable Transformations for LD Identity and Acceptance

| Transformation              | Skewness | Kurtosis |
|-----------------------------|----------|----------|
| Original (sum of items)     | -0.42    | 3.01     |
| Log of sum                  | -1.16    | 4.92     |
| Square root of sum          | -0.76    | 3.71     |
| Cube root of sum            | -0.88    | 4.04     |
| Original (average of items) | -0.42    | 3.01     |
| Log of average              | -1.16    | 4.92     |
| Square root of average      | -0.76    | 3.71     |
| Cube root of average        | -0.88    | 4.04     |

*Note*. Criteria for normality: skewness and kurtosis between –2.0 and 2.0.

Next, we included categorical variables in the GLM for the subgroups of interest: (1) gender, (2) race/ethnicity, (3) type of LD, (4) ADHD status, (5) mental health status, and (6) region.

Model results using LD are provided in Table 119. Results suggest differences on the LD Identity and Acceptance latent factor based on (1) LD, where individuals who self-report formal identification of LD had lower levels on the LD Identity and Acceptance factor than individuals who did not self-report formal identification of LD and (2) mental health status, where individuals who self-reported selected mental health symptoms had lower levels on the LD



Identity and Acceptance factor than individuals who did not self-report selected mental health symptoms. Means for the LD Identity and Acceptance factor by subgroup are provided in Table 120.

# Table 119. Model 2: Subgroup Analyses— LD Identity and Acceptance Using LDApproach 1

| Coefficient          | Std. Est. | SE   | t-value | p     |
|----------------------|-----------|------|---------|-------|
| Intercept            | -0.08     | 0.09 | -0.92   | 0.357 |
| Race (Non-White)     | 0.07      | 0.06 | 1.24    | 0.217 |
| Gender (Female)      | -0.09     | 0.06 | -1.54   | 0.125 |
| LD Type (Formal LD)  | 0.39      | 0.06 | 6.11    | 0.000 |
| ADHD Status (ADHD)   | -0.12     | 0.07 | -1.67   | 0.095 |
| Mental Health Status | -0.23     | 0.06 | -3.69   | 0.000 |
| U.S. Region          |           |      |         |       |
| Midwest              | -0.10     | 0.08 | -1.20   | 0.232 |
| Northeast            | 0.04      | 0.09 | 0.46    | 0.649 |
| South                | 0.02      | 0.07 | 0.29    | 0.769 |

*Note.* The following reference groups were used: White for race, Male for gender/ethnicity, no ADHD for ADHD status, no mental health symptoms for mental health status, struggle but no formal identification of LD for LD, and West for U.S. region. Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.

# Table 120. Model 2: Subgroup Analyses—Means for LD Identity and Acceptance bySubgroup Using LD Approach 1



| Subgroup                | LD Identity and Acceptance<br>Weighted Mean (SE) |
|-------------------------|--|
| Race                    |  |
| White                   | 21.62 (0.20)                                     |
| Non-White               | 21.75 (0.17)                                     |
| Gender                  |  |
| Male                    | 21.89 (0.16)                                     |
| Female                  | 21.40 (0.21)                                     |
| Type of LD              |  |
| No formal LD (Struggle) | 20.62 (0.23)                                     |
| Formal LD               | 22.16 (0.15)                                     |
| ADHD Status             |  |
| Does not have ADHD      | 21.78 (0.14)                                     |
| Has ADHD                | 21.28 (0.29)                                     |
| Mental Health Symptoms  |  |
| No                      | 22.37 (0.22)                                     |
| Yes                     | 21.41 (0.16)                                     |
| U.S. Region             |  |
| West                    | 21.82 (0.23)                                     |



| Subgroup  | LD Identity and Acceptance<br>Weighted Mean (SE) |
|-----------|--|
| Midwest   | 21.33 (0.29)                                     |
| Northeast | 21.93 (0.35)                                     |
| South     | 21.68 (0.21)                                     |

Model results using LD\_type are provided in Table 121. Results suggest differences on the LD Identity and Acceptance latent factor based on (1) type of LD, where individuals who self-report formal identification of LD for reading, math, writing, and co-occurring types of LD had lower levels on the LD Identity and Acceptance factor than individuals who did not self-report formal identification of LD and (2) mental health status, where individuals who self-reported selected mental health symptoms had lower levels on the LD Identity and Acceptance factor than individuals who self-report formal individuals who did not self-report selected mental health symptoms. Means for the LD Identity and Acceptance factor by subgroup are provided in Table 122.

# Table 121. Model 2: Subgroup Analyses— LD Identity and Acceptance Using LD\_type (LD Approach 2)

| Coefficient      | Std. Est. | SE   | t-value | p     |
|------------------|-----------|------|---------|-------|
| Intercept        | -0.08     | 0.09 | -0.85   | 0.394 |
| Race (Non-White) | 0.08      | 0.06 | 1.23    | 0.218 |
| Gender (Female)  | -0.069    | 0.06 | -1.11   | 0.269 |
| LD Type          |           |      |         |       |
| Reading          | 0.44      | 0.08 | 5.23    | 0.000 |
| Writing          | 0.38      | 0.09 | 4.12    | 0.000 |
| Math             | 0.29      | 0.09 | 3.18    | 0.002 |



| Coefficient          | Std. Est. | SE   | t-value | p     |
|----------------------|-----------|------|---------|-------|
| Co-occurring         | 0.45      | 0.09 | 4.92    | 0.000 |
| ADHD Status (ADHD)   | -0.11     | 0.08 | -1.43   | 0.153 |
| Mental Health Status | -0.24     | 0.06 | -3.77   | 0.000 |
| U.S. Region          |           |      |         |       |
| Midwest              | -0.12     | 0.09 | -1.46   | 0.146 |
| Northeast            | 0.05      | 0.10 | 0.55    | 0.582 |
| South                | 0.01      | 0.07 | 0.13    | 0.899 |

*Note.* The following reference groups were used: White for race, Male for gender/ethnicity, no ADHD for ADHD status, no mental health symptoms for mental health status, struggle but no formal identification of LD for LD, and West for U.S. region. Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.

# Table 122. Model 2: Subgroup Analyses—Means for LD Identity and Acceptance by Subgroup Using LD\_type (LD Approach 2)

| Subgroup  | LD Identity and Acceptance<br>Weighted Mean (SE) |
|-----------|--|
| Race      |  |
| White     | 21.62 (0.20)                                     |
| Non-White | 21.75 (0.17)                                     |
| Gender    |  |
| Male      | 21.89 (0.16)                                     |
| Female    | 21.40 (0.21)                                     |



| Subgroup               | LD Identity and Acceptance<br>Weighted Mean (SE) |
|------------------------|--|
| Type of LD             |  |
| Struggle               | 20.62 (0.23)                                     |
| Reading                | 22.32 (0.29)                                     |
| Writing                | 22.24 (0.33)                                     |
| Math                   | 21.85 (0.35)                                     |
| Co-Occurring           | 22.45 (0.33)                                     |
| ADHD Status            |  |
| Does not have ADHD     | 21.78 (0.14)                                     |
| Has ADHD               | 21.28 (0.29)                                     |
| Mental Health Symptoms |  |
| No                     | 22.37 (0.22)                                     |
| Yes                    | 21.41 (0.16)                                     |
| U.S. Region            |  |
| West                   | 21.82 (0.23)                                     |
| Midwest                | 21.33 (0.29)                                     |
| Northeast              | 21.93 (0.35)                                     |
| South                  | 21.68 (0.21)                                     |



#### Model 2: Subgroup Analyses - Awareness of Disability Rights

We examined whether subgroups reported significantly different levels of awareness of their disability rights. First, we created two new variables: (1) the first added the item values for each item within the Awareness of Disability Rights factor and (2) the second averaged the item values. Histograms, QQ plots, and skewness and kurtosis suggested a kurtotic distribution (kurtosis = 5.26) when using the total or the average of the items. Given that transformations (i.e., square root, cube root, log) did not improve the distribution (Table 123), we utilized the original variable representing the sum of the item values as these skewness and kurtosis estimates were closest to the -2.0 to 2.0 threshold, though skewness and kurtosis between -10 and 10).

# Table 123. Model 2: Subgroup Analyses—Variable Transformations for Awareness ofDisability Rights

| Transformation              | Skewness | Kurtosis |
|-----------------------------|----------|----------|
| Original (sum of items)     | -1.21    | 5.26     |
| Log of sum                  | -1.98    | 8.30     |
| Square root of sum          | -1.57    | 6.48     |
| Cube root of sum            | -1.70    | 7.01     |
| Original (average of items) | -1.21    | 5.26     |
| Log of average              | -1.98    | 8.30     |
| Square root of average      | -1.57    | 6.48     |
| Cube root of average        | -1.70    | 7.01     |

*Note*. Criteria for normality: skewness and kurtosis between –2.0 and 2.0.

Next, we included categorical variables in the GLM for the subgroups of interest: (1) gender, (2) race/ethnicity, (3) type of LD, (4) ADHD status, (5) mental health status, and (6) region.

Model results using LD are provided in Table 124. Results suggest differences on the Awareness of Disability Rights latent factor based on (1) race/ethnicity, where non-white individuals have



lower means on the Awareness of Disability Rights latent factor, (2) type of LD, where individuals with a formal identification of LD have higher means on this latent factor than individuals who do not report formal LD, (3) ADHD status, where individuals with ADHD have lower means than individuals who do not have ADHD, (4) mental health status, where individuals who self-report selected mental health symptoms have lower means than individuals who do not self-report selected mental health symptoms, and (5) U.S. region where individuals living in Midwest states report lower means on the Awareness of Disability Rights latent factor than individuals living in Western states. Means for the Awareness of Disability Rights factor by subgroup are provided in Table 125.

# Table 124. Model 2: Subgroup Analyses— Awareness of Disability Rights Using LDApproach 1

| Coefficient          | Std. Est. | SE   | t-value | p     |
|----------------------|-----------|------|---------|-------|
| Intercept            | 0.20      | 0.11 | 1.84    | 0.064 |
| Race (Non-White)     | -0.19     | 0.06 | -3.15   | 0.002 |
| Gender (Female)      | -0.16     | 0.07 | -2.37   | 0.018 |
| LD Type (Formal LD)  | 0.37      | 0.07 | 5.51    | 0.000 |
| ADHD Status (ADHD)   | -0.39     | 0.11 | -3.66   | 0.000 |
| Mental Health Status | -0.22     | 0.06 | -3.39   | 0.001 |
| U.S. Region          |           |      |         |       |
| Midwest              | -0.20     | 0.10 | -2.06   | 0.040 |
| Northeast            | -0.06     | 0.10 | -0.64   | 0.525 |
| South                | -0.11     | 0.07 | -1.57   | 0.117 |

*Note.* The following reference groups were used: White for race, Male for gender/ethnicity, no ADHD for ADHD status, no mental health symptoms for mental health status, struggle but no formal identification of LD for LD, and West for U.S. region. Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.



# Table 125. Model 2: Subgroup Analyses—Means for Awareness of Disability Rights bySubgroup Using LD Approach 1

| Subgroup                | Awareness of Disability Rights<br>Weighted Mean (SE) |
|-------------------------|--|
| Race                    |  |
| White                   | 17.22 (0.10)   |
| Non-White               | 16.61 (0.12)   |
| Gender                  |  |
| Male                    | 17.08 (0.08)   |
| Female                  | 16.56 (0.16)   |
| Type of LD              |  |
| No formal LD (Struggle) | 16.28 (0.14)   |
| Formal LD               | 17.13 (0.10)   |
| ADHD Status             |  |
| Does not have ADHD      | 17.04 (0.08)   |
| Has ADHD                | 16.06 (0.27)   |
| Mental Health Symptoms  |  |
| No                      | 17.32 (0.13)   |
| Yes                     | 16.68 (0.10)   |
| U.S. Region             |  |



| Subgroup  | Awareness of Disability Rights<br>Weighted Mean (SE) |
|-----------|--|
| West      | 17.15 (0.12)   |
| Midwest   | 16.60 (0.22)   |
| Northeast | 16.99 (0.22)   |
| South     | 16.76 (0.13)   |

Model results using LD\_type (LD Approach 2) are provided in Table 126. Results suggest differences on the Awareness of Disability Rights latent factor based on (1) race/ethnicity, where non-white individuals have lower means on the Awareness of Disability Rights latent factor, (2) type of LD, where individuals with a formal identification of LD for reading, LD for math, LD for writing, and co-occurring types of LD have higher means on this latent factor than individuals who do not report formal LD, (3) ADHD status, where individuals with ADHD have lower means than individuals who do not have ADHD, (4) mental health status, where individuals who self-report selected mental health symptoms have lower means than individuals who do not self-report selected mental health symptoms, and (5) U.S. region where individuals living in Southern states report lower means on the Awareness of Disability Rights latent factor than individuals living in Western states. Means for the Awareness of Disability Rights Rights factor by subgroup are provided in Table 127.

| Coefficient      | Std. Est. | SE   | t-value | p     |
|------------------|-----------|------|---------|-------|
| Intercept        | 0.23      | 0.10 | 2.20    | 0.028 |
| Race (Non-White) | -0.21     | 0.06 | -3.50   | 0.000 |
| Gender (Female)  | -0.12     | 0.07 | -1.85   | 0.064 |
| LD Type          |           |      |         |       |

# Table 126. Model 2: Subgroup Analyses— Awareness of Disability Rights UsingLD\_type (LD Approach 2)



| Coefficient          | Std. Est. | SE   | t-value | p     |
|----------------------|-----------|------|---------|-------|
| Reading              | 0.36      | 0.10 | 3.75    | 0.000 |
| Writing              | 0.48      | 0.09 | 5.37    | 0.000 |
| Math                 | 0.37      | 0.09 | 4.19    | 0.000 |
| Co-occurring         | 0.37      | 0.10 | 3.73    | 0.000 |
| ADHD Status (ADHD)   | -0.27     | 0.11 | -2.51   | 0.012 |
| Mental Health Status | -0.26     | 0.06 | -3.93   | 0.000 |
| U.S. Region          |           |      |         |       |
| Midwest              | -0.17     | 0.09 | -1.96   | 0.051 |
| Northeast            | -0.10     | 0.10 | -0.96   | 0.338 |
| South                | -0.14     | 0.07 | -2.00   | 0.046 |

*Note.* The following reference groups were used: White for race, Male for gender/ethnicity, no ADHD for ADHD status, no mental health symptoms for mental health status, struggle but no formal identification of LD for LD, and West for U.S. region. Both LD Approach 1 and LD Approach 2 utilized the same sample of respondents.

# Table 127. Model 2: Subgroup Analyses—Means for Awareness of Disability Rights by Subgroup Using LD\_type (LD Approach 2)

| Subgroup  | Awareness of Disability Rights<br>Weighted Mean (SE) |
|-----------|--|
| Race      |  |
| White     | 17.22 (0.10)   |
| Non-White | 16.61 (0.12)   |



| Subgroup               | Awareness of Disability Rights<br>Weighted Mean (SE) |
|------------------------|--|
| Gender                 |  |
| Male                   | 17.08 (0.08)   |
| Female                 | 16.56 (0.16)   |
| Type of LD             |  |
| Struggle               | 16.28 (0.14)   |
| Reading                | 17.09 (0.21)   |
| Writing                | 17.52 (0.18)   |
| Math                   | 17.19 (0.16)   |
| Co-Occurring           | 17.14 (0.20)   |
| ADHD Status            |  |
| Does not have ADHD     | 17.04 (0.08)   |
| Has ADHD               | 16.06 (0.27)   |
| Mental Health Symptoms |  |
| No                     | 17.32 (0.13)   |
| Yes                    | 16.68 (0.10)   |
| U.S. Region            |  |
| West                   | 17.15 (0.12)   |



| Subgroup  | Awareness of Disability Rights<br>Weighted Mean (SE) |
|-----------|--|
| Midwest   | 16.60 (0.22)   |
| Northeast | 16.99 (0.22)   |
| South     | 16.76 (0.13)   |


### 6. Limitations

There are several limitations to these findings. First, all data was self-reported. Most important, participants self-reported whether they were formally identified with LD or struggled with reading, mathematics, or writing in ways that affected their daily lives. Individuals who responded to the survey may believe they have LD but actually have something else (e.g., ADHD). Without additional information from participants, we cannot definitively say whether survey respondents within our sample are indeed young adults ages 18–24 with LD. Further, because all data was self-reported, we cannot confirm or cross-check information (e.g., whether certain transition supports or services were offered at a young adult's high school) or control for key variables often included in analyses of obtaining a high school diploma, enrolling in postsecondary education, and obtaining gainful employment (e.g., academic achievement, attendance in high school, parents' highest level of education; Fraysier et al., 2020; John W. Gardner Center for Youth and Their Communities, Stanford University, 2014). Additionally, given regional differences in education policy, similar programs, services, or supports may be referred to differently, meaning there is inherent noise in our data.

Second, nonprobability sampling was used, and participants opted to take the survey. While the survey was weighted to be nationally representative in terms of race/ethnicity, gender, and geographic location, it is important to acknowledge that our sample was in essence a convenience sample recruited from potentially biased sources. Because we recruited survey participants from social media–including groups whose families or caregivers are connected to parent advocacy groups or organizations and groups whose members are involved in disability-related organizations or associations–as well as postsecondary institutions, our sample is likely biased toward young adults with LD with engaged families, who are engaged in the disability community themselves, and/or who are enrolled in postsecondary education.

Third, while our sample size is one of the largest in recent years to capture national experiences, perspectives, and beliefs of young adults with LD, the weights applied in the analysis are based on IDEA Section 618 data for K–12 students and do not necessarily accurately reflect national estimates for young adults ages 18–24 with LD. We can reasonably assume national estimates for LD by gender and race/ethnicity using IDEA Section 618 data, as these traits are typically invariable, but cannot be certain that individuals counted in a particular state during K–12 currently live there and thus received the appropriate geographic weight. Further, the IDEA Section 618 data provide categories only for male and female, while our survey included additional options for sex/gender (e.g., non-binary, transgender woman or transgender man, other, prefer not to answer). Additionally, while we have a reasonable spread of survey respondents across each of the nine U.S. Census divisions, we did not have any respondents from New Hampshire.



Fourth, though we established and applied extensive criteria to remove survey responses from human and nonhuman bots, there is a possibility faulty survey data from participants who do not fit our sample of interest was included in our analyses.

Fifth, there are limitations to the survey data we collected. The Young Adult Survey did not ask all respondents about income or socioeconomic status as young adults may not be able to accurately report this. Since young adults often experience varied stages of financial and personal independence, reports of individual or household income would not have necessarily provided accurate information, omitting a variable from our survey and analysis that we know is important. Further, all survey items were asked at the same time, meaning we are not able to make causal claims as we have not established temporal precedence (Kline, 2016). It is possible that young adults' current perceptions of their experiences in high school may differ from their actual experiences when they were in high school.

Despite these limitations, results from this survey are a critical first step in exploring relationships among high school experiences and postsecondary and employment outcomes. In part of this theory-building process, there is a potential that reflections on high school experiences and their associations with current postsecondary or employment status may not hold when these constructs are examined longitudinally (e.g., asking the same group of individuals while in high school and after high school). Additionally, future analyses should explore potential differential impacts where all genders and race/ethnicities are included in subgroup analyses.



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### Appendix A: Cognitive Interview Protocol—Think Aloud

\*\*\* This protocol is semi-structured and is participant driven. In other words, the protocol will change and be adapted based on what the participant says and where they lead. It will use a mixture of concurrent probing, proactive verbal probes, reactive verbal probes, and think-aloud interviewing. \*\*\*

#### Introduction

#### [Start conversation with rapport building.]

Thank you so much for agreeing to have a conversation with me about this survey. In this interview, I will be asking you to think out loud while taking the survey. I will explain more about how to do that in a minute. You are free not to answer any question for any reason, and you are welcome to leave the interview at any point. This interview will take between 1 and 2 hours of your time. I will not record your name but instead assign you a participant number. The conversation will be recorded by Zoom and stored on a secure server. The recordings will not be shared with anyone, and all information will be de-identified. Thank you for signing the consent form already. Before we begin, I wanted to make sure you are still okay with participating and having the interview recorded. If so, please say yes. Thank you. Do you have any questions before we begin?

Great! Let's begin. I am going to ask you to share your screen while you take the survey. I am going to record our conversation so that I can go back later and make adjustments to the survey based on your feedback. I am also going to talk to several other individuals like you. I am interested in what is going on in your head while you answer these questions. There is no right or wrong response, nor is there a right or wrong way to think aloud. I am interested in your honest, gut reactions and how you feel about these questions. Specifically, I am looking to understand how you understand each question, how you think about how to answer it, how you decide which answer choice to choose, and how you ultimately respond. Do you have any questions so far?

We are going to be using a think-aloud procedure. This means I am going to ask a few questions, but mainly am going to follow your lead. This can feel a little strange at first, and if there is something I can do to help it feel less that way, please let me know. I am going to demonstrate:

[Demonstrate think-aloud procedure with the following question:]



How do you feel about mint chocolate chip ice cream?

- a. Very positively
- b. Positively
- c. Neither positively nor negatively
- d. Negatively
- e. Very negatively

I am going to ask you to do the same for each question of the survey. Do you have any questions or concerns? I may ask additional questions during your think-aloud if I have them or ask you to explain something further. To begin, please read the first question-and-answer set. If you have any questions along the way, please let me know.



# Appendix B: Cognitive Interview Protocol—Verbal Probing

\*\*\* This protocol is semi-structured and is participant driven. In other words, the protocol will change and be adapted based on what the participant says and where they lead. It will use a mixture of concurrent probing, proactive verbal probes, reactive verbal probes, and think-aloud interviewing. \*\*\*

#### Introduction

#### [Start conversation with rapport building.]

Thank you so much for agreeing to have a conversation with me about this survey. In this interview, I will be asking you to think out loud while taking the survey. I will explain more about how to do that in a minute. You are free not to answer any question for any reason, and you are welcome to leave the interview at any point. This interview will take between 1 and 2 hours of your time. I will not record your name but instead assign you a participant number. The conversation will be recorded by Zoom and stored on a secure server. The recordings will not be shared with anyone, and all information will be de-identified. Thank you for signing the consent form already. Before we begin, I wanted to make sure you are still okay with participating and having the interview recorded. If so, please say yes. Thank you. Do you have any questions before we begin?

Great! Let's begin. I am going to ask you to share your screen while you take the survey. I am going to record our conversation so that I can go back later and make adjustments to the survey based on your feedback. I am also going to talk to several other individuals like you. I am interested in what is going on in your head while you answer these questions. There is no right or wrong response, nor is there a right or wrong way to think aloud. I am interested in your honest, gut reactions and how you feel about these questions. Specifically, I am looking to understand how you understand each question, how you think about how to answer it, how you decide which answer choice to choose, and how you ultimately respond. Do you have any questions so far?

We are going to be using a verbal probe procedure. This means I am going to ask specific questions about your thinking and reactions to the questions presented. I am going to first ask you to read each question and the answer choices aloud. Then, I would like you to explain what you think the question means and why you ultimately choose a particular answer choice. I will also ask additional questions about how you understand the question, why you chose the answer you did, how you feel about the question, and how it could be improved or made



clearer. This can feel a little strange at first, and if there is something I can do to help it feel less that way, please let me know. I am going to demonstrate:

[Demonstrate think-aloud procedure with the following question:]

How do you feel about mint chocolate chip ice cream?

- a. Very positively
- b. Positively
- c. Neither positively nor negatively
- d. Negatively
- e. Very negatively

I am going to ask you to do the same for each question of the survey. Do you have any questions or concerns? I may ask additional questions during your think-aloud if I have them or ask you to explain something further. To begin, please read the first question-and-answer set. If you have any questions along the way, please let me know.

Potential verbal probes to be used:

- What did that question mean to you?
- Why did you choose that response?
- You paused before answering—can you tell me why?
- Why didn't you choose the other response?
- What does \_\_\_\_\_ mean to you?
- How might you word that differently?
- What led you to pick that answer?
- Was this question easy or hard to answer?
- What do you mean by that?
- Tell me more about that.
- How did you come up with that answer?
- Can you repeat that question in your own words?
- What might make answering this question difficult for someone?



- What feels easy about how the survey is laid out?
- What feels hard about how the survey is laid out?



# Appendix C: Final Young Adult Survey

#### **EmbeddedData**

sourceValue will be set from Panel or URL.

Standard: Introductory Block (6 Questions)

**Branch: New Branch** 

lf

If Electronic Signature Consent I AGREE to provide an electronic signature to document my consent Is Selected

And Electronic Study Consent I AGREE to participate in the research study described above Is Selected

**Block: Inclusion Criteria (7 Questions)** 

**Branch: New Branch** 

lf

If What is your current age? Other Is Selected And Are you currently in high school? No Is Selected And What portion of your K-12 education was in the United States? None Is Not Selected And Do you currently live in the United States? Yes Is Selected And Which best describes you? None of the above. Is Not Selected

#### **EndSurvey: Advanced**

#### **Branch: New Branch**

lf

If What is your current age? Other Is Not Selected

And Are you currently in high school? No Is Selected

And What portion of your K-12 education was in the United States? None Is Not Selected

And Do you currently live in the United States? Yes Is Selected

And Which best describes you? None of the above. Is Not Selected

Branch: New Branch

lf

If Are you currently in high school? Yes Is Selected Or What portion of your K-12 education was in the United States? None Is Selected Or Do you currently live in the United States? No Is Selected Or Which best describes you? None of the above. Is Selected



#### **EndSurvey: Advanced**

Standard: Meet Inclusion Criteria (1 Question) Standard: Demographics (8 Questions)

**Branch: New Branch** 

lf

If What is your race/ethnicity? Hispanic or Latino Is Not Selected

**EndSurvey: Advanced** 

Branch: New Branch

lf

If What is your race/ethnicity? Hispanic or Latino Is Selected

Standard: Experiences in High School (20 Questions) Standard: Postsecondary Education (21 Questions) Standard: Current Employment (19 Questions)

BlockRandomizer: 3 -

Standard: Adaptive and Daily Living Skills (13 Questions) Standard: Community, Social, and Financial Supports (8 Questions) Standard: Mental Health (7 Questions)

Standard: Surviving/Thriving (12 Questions)

**Branch: New Branch** 

lf

If Electronic Signature Consent I DO NOT agree to provide an electronic signature to document my consent Is Selected

Or Electronic Study Consent I DO NOT agree to participate in the research study described above Is Selected

EndSurvey: Advanced

**Start of Block: Introductory Block** 

Q1.1 NCLD & WestEd Young Adult Survey

Q1.2 Thank you for taking the time to complete this survey. Your opinion matters! This survey is part of a partnership between the National Center for Learning Disabilities and WestEd. We are interested to know about your experiences in high school and beyond. Results will be used to guide NCLD's efforts in policy, advocacy, and outreach.



We believe this survey will take about 20 minutes to complete.

Your responses will be saved each time you click the arrow button at the bottom of each page. The survey will be submitted after you click the arrow button on the last page. If you accidentally exit the survey or would like to complete the rest of the survey at another time, you can come back and finish later.

Participants who complete the survey will receive a \$20 Amazon.com Gift Card. There will be a section at the end of the survey for your contact information to record that you have completed the survey. This list will be kept separate from your survey responses and will only be used to send the electronic Amazon.com Gift Card.

Q1.3 Before beginning the survey, please read and indicate your response to the following consent information. The purpose of this consent agreement is to give your consent to participate in a survey in the study. Please read this consent agreement carefully before you decide to participate in the study.

Study Title: National Center for Learning Disabilities – Survey Research

**Purpose**: This study is funded by the National Center for Learning Disabilities. The purpose of this project is to learn about the perceptions, opinions, and experiences of young adults (aged 18-24) who have a learning disability. Results will be used to guide NCLD's efforts in policy, advocacy, and outreach.

What you will do in the study: In this survey, you will be asked questions related to your experiences in high school, postsecondary education, employment, and mental health. Participants will be eligible to receive a \$20 Amazon.com Gift Card. Amazon.com Gift Cards are (1) one per person and (2) dependent on meeting measures of data quality (e.g., no bots, IP addresses within the United States).

**Time Required**: The survey should take about 15-30 minutes of your time.

**Risks**: There are no anticipated risks from participating in this survey.

**Benefits**: There are no direct benefits to you for participating in this research study. The study may help us better understand where policy and advocacy efforts should be directed.

**Confidentiality**: The information that you provide in this study will be handled confidentially. Any identifying information that we collect will be immediately de-identified, assigned an identification number, and stored in a secure server. Identities could theoretically be deduced of some participants based on the demographic information they submit, but we will not do so and all data will be reported only in aggregate. Individual responses will not be shared with any person or entity.



**Identifying information**: Personally identifiable information will be collected as a part of this research. We will remove these personal identifiers from any data we collect, and neither the identifiers nor the data will be used or distributed for future research studies.

**Voluntary Participation**: Your participation in the study is completely voluntary. A decision not to participate will have no effect on your school or employment.

**Right to withdraw from the study**: You have the right to withdraw from the study at any time without penalty. Because the data are not connected to your identity, you cannot withdraw after you submit your data.

**How to withdraw from the study**: Simply exit out of the survey or close your browser. Withdrawing after you submit your survey is not possible, since identities of participants are not collected.

If you have questions about the study, contact:

Lauren Wong, Ph.D. Research Associate WestEd Iwong2@wested.org

Nicholas Gage, Ph.D. Senior Researcher in Special Education WestEd ngage@wested.org

If you have any questions or concerns regarding your rights as a participant in this research project, please contact WestEd's Institutional Review Board (IRB) at 1 (844) 472-5437 or subjects@wested.org.

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#### Q1.4 Electronic Signature Consent

○ I AGREE to provide an electronic signature to document my consent (1)

I DO NOT agree to provide an electronic signature to document my consent (2)

#### Q1.5 Electronic Study Consent

I AGREE to participate in the research study described above (1)



○ I DO NOT agree to participate in the research study described above (2)

### Q1.6

Before you proceed to the survey, please complete the CAPTCHA below.

End of Block: Introductory Block

**Start of Block: Inclusion Criteria** 

Q2.1 The questions in this section will determine whether you meet eligibility criteria for our survey.

#### Q2.2 Do you currently live in the United States?

O Yes (1)

O No (2)

#### Q2.3 What is your current age?

0 18 (1)

O 19 (2)

- O 20 (3)
- O 21 (4)
- O 22 (5)
- 23 (6)
- O 24 (7)

🔘 Other (8)

Q2.4 Are you currently in high school?



O Yes (1)

🔿 No (2)

Q2.5 What portion of your K-12 education was in the United States?

All (1)
Part (2)
None (3)
Q2.6 Which best describes you?
I have a documented learning disability. Notes that "documented" refers to identification following a formal evaluation from a licensed practitioner (e.g., school psychologist). (3)
I struggle with reading, writing, and/or math in ways that affect my daily life, but I do not have a documented learning disability (4)
None of the above. (5)

#### Display This Question:

If Q2.6 = I have a documented learning disability. Notes that "documented" refers to identification following a formal evaluation from a licensed practitioner (e.g., school psychologist).

Q2.7 Which describes you? Select all that apply.

| Reading disability (e.g., dyslexia) (1)   |
|---|
| Math disability (e.g., dyscalculia) (2)   |
| Writing disability (e.g., dysgraphia) (3) |





Q3.1 Please click the arrow below to continue. If you accidentally exit the survey or would like to complete the rest of the survey at another time, you can come back and finish later.

**End of Block: Meet Inclusion Criteria** 

**Start of Block: Demographics** 

Q4.1 The questions in this section are about your demographics.

#### Q4.2 Where do you currently live?

▼ Alabama (1) ... Wyoming (51)

Q4.3 What is your gender identity?

O Male (1)

• Female (2)

O Non-binary (3)

Transgender woman or transgender man (4)

Other (5)

Prefer not to answer (6)

Q4.4 What is your race/ethnicity?

American Indian or Alaska Native (1)



| O Asian American or Asian (2)  |
|--|
| O Black or African American (3)                                      |
| O Hispanic or Latino (4)   |
| O Native Hawaiian or Pacific Islander (5)                            |
| O White (6)  |
| ○ Two or More (7)  |
| Other (8)  |
| O Prefer not to answer (9)   |
| Q4.5 Which of the following best describes you?                      |
| O Straight (not gay) (1)   |
| O Lesbian or gay (2)   |
| O Bisexual (3)   |
| O Something else (4)   |
| O Not sure (5)   |
| O Prefer not to answer (6)   |
| Q4.6 What is the highest level of education that you have completed? |
| O Primary school (1)   |
| ○ GED or equivalent (3)  |



High school diploma (2)
Vocational or technical certificate or license (4)
Associate's degree (5)
Bachelor's degree (6)
Master's degree (7)
Doctoral degree (8)

Q4.7 In addition to a learning disability, have you been formally diagnosed with any of the following? Select all that apply.

|     | Attention Deficit Hyperactivity Disorder (1)                                  |
|-----|---|
|     | Mental health disability (2)  |
|     | Speech or language impairment (3)   |
|     | Autism spectrum disorder (4)  |
| (5) | Hearing impairment, deafness, deaf-blindness, visual impairment, or blindness |
|     | Physical or orthopedic impairment (e.g., cerebral palsy) (6)                  |
|     | Traumatic brain injury (7)  |
|     | Gifted or twice exceptional (10)  |



| Other medical condition (e.g., diabetes, asthma, sickle cell anemia) (8) |
|--|
| None of the above (9)  |
| <br>   |

Q4.8 Do any of the following have a negative impact on your quality of life (e.g., social, emotional, financial, professional)? Select all that apply.

| Managing my emotions (e.g., anger, sadness, anxiety) (1) |
|--|
| Self-control (e.g., controlling impulses) (2)            |
| Staying motivated (3)                                    |
| Staying organized (4)                                    |
| Remembering things (5)                                   |
| Staying focused (6)                                      |
| Managing my time (e.g., procrastinating) (7)             |
| None of the above (8)                                    |

End of Block: Demographics

**Start of Block: Experiences in High School** 

Q5.1 The questions in this next section are about your experiences in the K-12 school system.

Q5.2 Did you ever repeat a grade? Select all that apply.



Yes, I repeated a grade in K-5. (1)



|                      | Yes, I repeated a grade in 6-8. (2)  |  |  |  |
|----------------------|--|--|--|--|
|                      | Yes, I repeated a grade in 9-12. (3)   |  |  |  |
|                      | I did not repeat any grades (4)  |  |  |  |
| Q5.3 When v          | were you formally identified with a learning disability?   |  |  |  |
| O Befor              | re kindergarten (1)  |  |  |  |
| ⊖ к-5tł              | grade (2)  |  |  |  |
| ○ 6th-8              | Sth grade (3)  |  |  |  |
| • 9th-12th grade (4) |  |  |  |  |
| ◯ l'm n              | ot sure (5)  |  |  |  |
| O I don<br>in ways t | 't have a documented learning disability but struggle with reading, writing, or math<br>hat affect my daily life (6) |  |  |  |
| Q5.4 Did you         | receive special education services in K-12 for a learning disability?  |  |  |  |
| ○ Yes (              | 1)   |  |  |  |
| ○ No (2              | 2)   |  |  |  |
| O I'm not sure (3)   |  |  |  |  |
| Q5.5 These o         | questions in this section are about your experiences in high school.   |  |  |  |
| Q5.6 Did you         | ı go to high school?   |  |  |  |
| ○ Yes (1)            |  |  |  |  |



O No (2)

Display This Question:

If Q5.6 = No

Q5.7 What prevented you from going to high school? Select all that apply.

|                 | Needed money (1)  |
|-----------------|---|
|                 | To pursue a job opportunity (2)                                   |
|                 | Enlisted in the military (3)                                      |
|                 | School was too hard (4)   |
|                 | Didn't like school (5)  |
|                 | Health problems (e.g., physical, mental, substance abuse) (6)     |
|                 | Didn't feel safe at school or going to and from school (7)        |
|                 | Didn't feel supported by my high school (8)                       |
|                 | Didn't get needed disability services (9)                         |
|                 | Family obligations (e.g., taking care of family or children) (10) |
|                 | Other (11)  |
| )isplav This Oı | Jestion:  |

If Q5.6 = No

Ľ



Q5.8 What did you do instead of going to high school?

Enrolled in vocational, business, or technical school (1)

Enrolled at a community college or university (2)

Entered the workforce (3)

Completed a gap year (4)

• Enlisted in the military (5)

• Volunteer or mission work (e.g., Peace Corps) (6)

Other (7)

| Display This Question: |  |  |
|------------------------|--|--|
| lf Q5.6 = No           |  |  |
|                        |  |  |

Q5.9 Select all that occurred before turning 18 years old.

I was stopped and questioned by police for something other than a traffic violation (1)



I spent a night in jail or juvenile detention center (2)

| I was arrested (3) | ) |
|--------------------|---|
|--------------------|---|

I was charged as a minor (4)

I was charged as an adult (5)

I was on probation or parole (6)



Display This Question: If Q5.6 = Yes

Q5.10 Which types of schools did you attend in <u>high school</u>? Select all that apply.

|          | Public school (including online) (1)  |
|----------|---|
|          | Charter school (including online) (2)   |
|          | Montessori school (3)   |
|          | Private school (4)  |
|          | Private school for children with disabilities (5)   |
| behavior | Alternative school or center (e.g., juvenile justice schools, school or center for<br>) (6) |
|          | Homeschool (7)  |
|          | Department of Defense school or school on a military base (8)                               |
|          | Military academy (9)  |
|          | Other (10)  |
|          | I don't know (11)   |

Display This Question:



#### lf Q5.6 = Yes

### Q5.11 Did your high school have any of the following?

|  | Yes (1)    | No (2)     | Not sure (3) |
|--|------------|------------|--------------|
| Career and technical<br>education (e.g.,<br>courses focused on<br>an occupation or job<br>sector) (1)          | 0          | 0          | 0            |
| Pre-employment<br>transition services (2)  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$   |
| TRIO program (e.g.,<br>AVID, Upward Bound,<br>Talent Search,<br>Student Support<br>Services) (3)               | $\bigcirc$ | $\bigcirc$ | $\bigcirc$   |
| Career counseling (4)  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$   |
| College counseling (9)   | $\bigcirc$ | $\bigcirc$ | 0            |
| Academic counseling<br>to complete high<br>school (11)   | 0          | $\bigcirc$ | $\bigcirc$   |
| On the job training or<br>apprenticeship (5)   | $\bigcirc$ | $\bigcirc$ | $\bigcirc$   |
| Class period(s)<br>dedicated to study<br>skills, self-advocacy,<br>social skills, or<br>independent living (6) | $\bigcirc$ | 0          | $\bigcirc$   |
| Military outreach<br>(e.g., campus<br>recruitment visit) (7)   | 0          | $\bigcirc$ | 0            |
| Advanced Placement,<br>International<br>Baccalaureate, or  | $\bigcirc$ | 0          | $\bigcirc$   |



|  | Yes (1)   | No (2)                      | Not sure (3)             |  |  |
|--|---|-----------------------------|--------------------------|--|--|
| dual enrollment<br>classes (10)  |   |                             |                          |  |  |
| Display This Question:   |   |                             |                          |  |  |
| x  |   |                             |                          |  |  |
| Q5.12 Which did you par  | rticipate in? Select all th   | at apply.                   |                          |  |  |
| Display This Choice:<br>If Q5.11 = Career and tea                                    | chnical education (e.g., cours  | ses focused on an occupatio | n or job sector) [ Yes ] |  |  |
| Career an sector) (5)  | Career and technical education (e.g., courses focused on an occupation or job sector) (5) |                             |                          |  |  |
| Display This Choice:<br>If Q5.11 = Pre-employme                                      | ent transition services [ Yes ]   |                             |                          |  |  |
| Pre-emple  | oyment transition servio  | ces (6)                     |                          |  |  |
| Display This Choice:<br>If Q5.11 = TRIO program                                      | (e.g., AVID, Upward Bound,  | Talent Search, Student Sup  | oort Services) [ Yes ]   |  |  |
| TRIO program (e.g., AVID, Upward Bound, Talent Search, Student Support Services) (7) |   |                             |                          |  |  |
| Display This Choice:<br>If Q5.11 = Career counse                                     | ling [ Yes ]  |                             |                          |  |  |
| Career co  | unseling (8)  |                             |                          |  |  |
| Display This Choice:   |   |                             |                          |  |  |
| If Q5.11 = College counse  | eling [ Yes ]   |                             |                          |  |  |
| College co   | ounseling (9)   |                             |                          |  |  |
| Display This Choice:<br>If Q5.11 = Academic cou                                      | nseling to complete high sch  | ool [ Yes ]                 |                          |  |  |


|                               | Academic counseling to complete high school (17)  |
|-------------------------------|---|
| Display This Ch               | oice:   |
| lf Q5.11 =                    | On the job training or apprenticeship [ Yes ]   |
|                               | On the job training or apprenticeship (10)  |
| Display This Ch<br>If Q5.11 = | oice:<br>Class period(s) dedicated to study skills, self-advocacy, social skills, or independent living [ Yes ] |
|                               | Class period dedicated to study skills (11)   |
| Display This Ch               | oice:   |
| lf Q5.11 =                    | Class period(s) dedicated to study skills, self-advocacy, social skills, or independent living [ Yes ]          |
|                               | Class period dedicated to self-advocacy (12)  |
| Display This Ch               | oice:   |
| <i>If Q5.11 =</i>             | Class period(s) dedicated to study skills, self-advocacy, social skills, or independent living [ Yes ]          |
|                               | Class period dedicated to social skills (13)  |
| Display This Ch               | oice:   |
| lf Q5.11 =                    | Class period(s) dedicated to study skills, self-advocacy, social skills, or independent living [ Yes ]          |
|                               | Class period dedicated to independent living (14)   |
| Display This Ch               | oice:   |
| lf Q5.11 =                    | Military outreach (e.g., campus recruitment visit) [ Yes ]  |
|                               | Military outreach (e.g., campus recruitment visit) (15)   |
| Display This Ch               | oice:   |
| lf Q5.11 =                    | Advanced Placement, International Baccalaureate, or dual enrollment classes [ Yes ]                             |
| (16)                          | Advanced Placement, International Baccalaureate, or dual enrollment classes                                     |



None of the above (4)

Display This Question: If Q5.6 = Yes

Q5.13 Rate your level of agreement with each of the following statements <u>thinking about your</u> <u>time in high school</u>.

|  | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4)  | Strongly<br>agree (5) |
|--|--------------------------|--------------|------------------|------------|-----------------------|
| I had a<br>teacher or<br>another adult<br>at my school<br>who made<br>me feel<br>supported (1) | 0                        | 0            | 0                | $\bigcirc$ | 0                     |
| My teachers<br>believed I<br>could<br>succeed (2)  | $\bigcirc$               | $\bigcirc$   | $\bigcirc$       | $\bigcirc$ | 0                     |
| l was<br>interested in<br>my<br>schoolwork<br>in high school<br>(3)                            | 0                        | 0            | 0                | 0          | 0                     |
| My high<br>school was a<br>supporting<br>and inviting<br>place for<br>students to<br>learn (4) | $\bigcirc$               | 0            | 0                | 0          | $\bigcirc$            |
| I was bullied<br>by my peers<br>because of<br>my learning<br>disability (5)                    | 0                        | $\bigcirc$   | $\bigcirc$       | $\bigcirc$ | $\bigcirc$            |



|   | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4) | Strongly<br>agree (5) |
|---|--------------------------|--------------|------------------|-----------|-----------------------|
| I was bullied<br>by my<br>teachers<br>because of<br>my learning<br>disability (6) | 0                        | 0            | 0                | 0         | 0                     |

# Display This Question: If Q5.6 = Yes

Q5.14 Rate your level of agreement with each of the following statements <u>thinking about your</u> <u>time in high school</u>.

|  | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4)  | Strongly<br>agree (5) |
|--|--------------------------|--------------|------------------|------------|-----------------------|
| The level of<br>academic<br>support I<br>received<br>from my high<br>school<br>prepared me<br>for life after<br>high school<br>(8) | 0                        | 0            | 0                | 0          | 0                     |
| My high<br>school<br>classes<br>prepared me<br>to advocate<br>for my needs<br>after high<br>school (9)                             | 0                        | $\bigcirc$   | $\bigcirc$       | $\bigcirc$ | 0                     |
| I had to fight<br>for my<br>disability<br>rights at my<br>high school<br>(10)  | 0                        | $\bigcirc$   | $\bigcirc$       | 0          | $\bigcirc$            |



|  | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4) | Strongly<br>agree (5) |
|--|--------------------------|--------------|------------------|-----------|-----------------------|
| l felt like my<br>teachers<br>wanted me<br>in their<br>classes (11)                | 0                        | 0            | 0                | 0         | 0                     |
| My school<br>had<br>adequate<br>mental<br>health<br>resources for<br>students (12) | 0                        | 0            | 0                | 0         | 0                     |
| Display This Questio   | on:                      |              |                  |           |                       |

lf Q5.6 = Yes

Q5.15 I was able to take elective courses in high school

Yes (1)No (2)

| Display This Question: |  |  |
|------------------------|--|--|
| If Q5.6 = Yes          |  |  |

Q5.16 Select all that occurred in high school.

I was stopped and questioned by police for something other than a traffic violation (1)

I spent a night in jail or juvenile detention center (2)



I was arrested (3)

I was charged as a minor (4)



|                                      | was charged as an adult (5)   |
|--------------------------------------|---|
|                                      | was on probation or parole (6)  |
|                                      | None of the above (7)   |
| Display This Questi<br>If Q5.6 = Yes | on:   |
| Q5.17 Which be                       | est describes you?  |
| 🔿 I droppe                           | d out of high school (5)  |
| 🔿 I gradua                           | ted high school, but thought about dropping out (7)                             |
| O I gradua                           | ted high school and never thought about dropping out (8)                        |
| Display This Questi                  | on:   |
| If Q5.17 = I dro                     | opped out of high school  |
| Or Q5.17 = I g                       | raduated high school, but thought about dropping out                            |
| Q5.18 Why did                        | you drop out or think about dropping out of high school? Select all that apply. |
|                                      | leeded money (1)  |

To pursue a job opportunity (11)

Enlisted in the military (2)

School was too hard (3)

Didn't like school (4)



|     | If Q5.17 = I<br>Or Q5.17 = | dropped out of high school<br>I araduated hiah school. but thouaht about droppina out |
|-----|----------------------------|---|
| Dis | play This Que              | stion:  |
|     |                            | Other (9)   |
|     |                            | Family obligations (e.g., taking care of family or children) (8)                      |
|     |                            | Didn't get needed disability services (12)  |
|     |                            | Didn't feel supported by my high school (10)  |
|     |                            | Didn't feel safe at school or going to and from school (6)                            |
|     |                            | Health problems (e.g., physical, mental, substance abuse) (5)                         |

Or Q5.6 = No

Or Q4.6 = Primary school

*Or Q4.6 = GED or equivalent* 

Q5.19 Are you interested in participating in additional opportunities with NCLD? With GRAD Partnership, NCLD and WestEd are looking for young adults aged 18-24 to ask about their experiences during high school. If you are interested, please enter your contact information using the following link.

Your contact information will be kept separate from your survey response.

| Display This Question: |      |  |  |
|------------------------|------|--|--|
| lf Q5.6 = Yes          |      |  |  |
|                        | <br> |  |  |

Q5.20 What did you do first after leaving high school?

• Enrolled in vocational, business, or technical school (1)

• Enrolled at a community college or university (2)



• Entered the workforce (3)

Completed a gap year (4)

Enlisted in the military (5)

Volunteer or mission work (e.g., Peace Corps) (6)

Other (7)

End of Block: Experiences in High School

**Start of Block: Postsecondary Education** 

Q6.1 The questions in this section are about your education after high school.

Q6.2 Which best describes you?

 I am currently going to a college, university, or vocational, business, or technical school (including graduate school) (1)

I attended a college, university, or vocational, business, or technical school or program but did not finish (3)

I graduated from a college, university, or vocational, business, or technical school or program (4)

I have never gone to a college, university, or vocational, business, or technical school or program (2)

Display This Question:

If Q6.2 = I graduated from a college, university, or vocational, business, or technical school or program

Q6.3 Was your school or program aware that you have a learning disability?

Yes (1)

🔾 No (2)



### Display This Question:

If Q6.2 = I attended a college, university, or vocational, business, or technical school or program but did not finish

Q6.4 These next questions are about why you left college or university.

Why did you leave? Select all that apply.

| School was too expensive (1)                                     |
|--|
| To pursue a job opportunity (2)                                  |
| Enlisted in the military (3)                                     |
| School was too hard (4)  |
| Didn't like school (5)   |
| Health problems (e.g., physical, mental, substance abuse) (6)    |
| Not enough time (11)   |
| Didn't feel safe at school or going to and from school (7)       |
| Didn't feel supported by my instructors (13)                     |
| Didn't get needed disability services (8)                        |
| Didn't get into desired program (12)                             |
| Family obligations (e.g., taking care of family or children) (9) |



| Other (10)  |
|---|
| Display This Question:<br>If Q6.2 = I attended a college, university, or vocational, business, or technical school or program but did not<br>finish |
| Q6.5 What did you do immediately after leaving your school or program?  |
| $\bigcirc$ Went to another school or program to continue my education to continue my education (1)  |
| O Entered the workforce (2)   |
| O Completed a gap year (3)  |
| O Entered the military (4)  |
| O Volunteer or mission work (e.g., Peace Corps) (5)   |
| O Other (6)   |
| Display This Question:  |
| If Q6.2 = I am currently going to a college, university, or vocational, business, or technical school (including graduate school)                   |
| Q6.6 What type of school or program are you currently attending?  |
| O Vocational, business, or technical school (1)   |
| O Community college (2)   |
| O College or university (including graduate school) (3)   |
| Display This Question:  |
| If Q6.2 = I am currently going to a college, university, or vocational, business, or technical school (including graduate school)                   |

Q6.7 What type of degree or certification are you **currently** working toward?



○ Vocational certificate, trade certificate, or license (e.g., mechanics, cosmetology, culinary arts, medical assistant) (1)

Associate's degree (2)

O Bachelor's degree (3)

O Master's degree (including combined Bachelor's and Master's programs) (4)

O Doctoral degree (5)

O Other (6) \_\_\_\_\_

### Display This Question:

If Q6.2 = I am currently going to a college, university, or vocational, business, or technical school (including graduate school)

Q6.8 What is your major or course of study?

Display This Question:

*If* Q6.2 = I am currently going to a college, university, or vocational, business, or technical school (including graduate school)

Q6.9 Are you a full-time or part-time student?

Full-time student (1)

| $\bigcirc$ | Part-time    | student | (2)        |
|------------|--------------|---------|------------|
| $\sim$     | i ui c ciine | Juacht  | <u>ر س</u> |

Display This Question:

If Q6.2 = I am currently going to a college, university, or vocational, business, or technical school (including graduate school)

Q6.10 Is your school or program aware that you have a learning disability?

O Yes (1)

🔾 No (2)



Display This Question: If Q6.10 = Yes

Q6.11 Why did you tell your school or program about your learning disability? Select all that apply.

| I was struggling academically (1)   |
|---|
| A family member encouraged me (2)   |
| Someone at my high school encouraged me (3)   |
| Someone at my university, college, or program encouraged me (4)                       |
| I wanted a safety net if I ever needed help (5)                                       |
| My mental health was negatively affecting my academic performance (6)                 |
| I thought I had to disclose, even if I did not want to (7)                            |
| I had to disclose to enter a disability-specific program or receive a scholarship (8) |
| It is an important part of who I am (10)  |
| Other (9)   |

Display This Question:

*If Q6.10 = Yes* 

Q6.12 Overall, how would you rate the disability disclosure process at your <u>current school or</u> <u>program</u>?

 $\bigcirc$  Very difficult (1)



| O Difficult (2)  |
|--|
| O Neither difficult nor easy (3)   |
| O Easy (4)   |
| O Very Easy (5)  |
| Display This Question:<br>If Q6.10 = Yes   |
| Q6.13 The next few questions ask about the documentation you had to provide to your current school or program. |
| When your <u>school or program</u> requested documentation, which best describes your experience?              |
| $\bigcirc$ The school or program accepted my IEP, 504 plan, or existing evaluation (1)                         |
| $\bigcirc$ I completed a new full evaluation (2)   |
| $\bigcirc$ The school or program required a new full evaluation, but I was not able to complete it (3)         |
| $\bigcirc$ None of the above (4)   |
| Display This Question:   |
| If Q6.13 = The school or program accepted my IEP, 504 plan, or existing evaluation                             |
| Q6.14 Was your IEP, 504 plan, or existing evaluation less than three years old?                                |
| O Yes (1)  |
| O No (2)   |
| O Not sure (3)   |
|  |

Display This Question:



| If Q6.13 = I completed a new full evaluation |
|--|
| Q6.15 Was that new evaluation:               |
|  |
| O Paid for out of pocket (1)                 |
|  |
| O Covered by insurance (2)                   |
|  |
| O Not sure (3)                               |
|  |
| Other (4)                                    |
|  |
| Display This Question:                       |
| If Q6.10 = Yes                               |

Q6.16 The next few questions ask about receiving accommodations from your <u>current school or</u> <u>program.</u>

Have you used any of the following from your **<u>current school or program</u>**? Select all that apply.

|     | Additional time for tests (1)   |
|-----|---|
|     | Tutor (2)   |
|     | Note taker (3)  |
| (4) | Technology (e.g., screen reader, LiveScribe Smart Pen, speech-to-text software) |
|     | Alternate format textbook or course materials (e.g., audio to text) (5)         |
|     | Learning or behavior management support (6)                                     |
|     | Reader, interpreter, or in-class aide (7)                                       |

Di



| Additional time or modified classwork (8)           |
|---|
| Different test setting (9)                          |
| Early registration for classes (10)                 |
| Independent living supports (11)                    |
| Physical changes to classroom (12)                  |
| Large print/books on tape or Braille materials (13) |
| Other accommodations or supports (14)               |
|   |

| Display This Question: |  |  |
|------------------------|--|--|
| lf Q6.10 = Yes         |  |  |

Q6.17 Overall, how well does your school or program implement your accommodations?

|        | O Poorly (1)   |
|--------|--|
|        | O Not very well (2)                                      |
|        | O Undecided (3)  |
|        | O Well (4)   |
|        | O Very well (5)  |
|        | $\bigcirc$ I have not asked to use my accommodations (6) |
| -<br>S | play This Question:                                      |
|        | If 06.10 = Yes   |



Q6.18 The next few questions ask about receiving accommodations from your instructors.

Have you requested accommodations from any of your instructors?

| $\bigcirc$ None of my instructors (1) |  |
|---------------------------------------|--|
| O Some of my instructors (2)          |  |
| O All of my instructors (3)           |  |
| Display This Question:                |  |
| <i>If Q6.10 = Yes</i>                 |  |
| And Q6.18 != None of my instructors   |  |

Q6.19 Which classes have you requested accommodations in? Select all that apply.

| All of my classes (1)  |
|--|
| English (12)   |
| Mathematics (e.g., calculus, liberal arts math) (2)                            |
| Science (e.g., engineering, biology, chemistry, anatomy, computer science) (3) |
| Business (e.g., accounting, finance) (4)                                       |
| Economics (5)  |
| Social Studies/History (e.g., government, civics) (6)                          |
| Social Sciences (e.g., psychology, sociology) (7)                              |
| Lab (e.g., Chemistry lab, Stats lab) (8)                                       |



|                 | Legal/Law (9)  |
|-----------------|--|
|                 | Skilled crafts (e.g., mechanics, plumbing, cosmetology) (10) |
|                 | Other (11)   |
| Display This Qu | iestion:   |

If Q6.10 = Yes And Q6.18 != None of my instructors

Q6.20 Select all the accommodations you have requested from your instructors.

| Extended deadlines on assignments (1)         |
|---|
| Extended time on tests, quizzes, or exams (2) |
| Reduced workload (3)                          |
| Note taker or scribe (4)                      |
| Voice to text (5)                             |
| Closed captioning (6)                         |
| Recorded lectures (7)                         |
| Separate testing environment (8)              |
| Alternative assignment options (9)            |



|                 | Verbal response to test questions (10)                                    |
|-----------------|---|
|                 | Material or technical adaptations (e.g., e-textbook, text to speech) (11) |
|                 | Flexible attendance policy (12)   |
|                 | Materials provided ahead of time (13)                                     |
|                 | Physical changes to classroom (14)  |
|                 | Other (15)  |
| Display This Qu | iestion:  |

lf Q6.10 = Yes

And Q6.18 != None of my instructors

### Q6.21 How often do each of the following occur?

|  | In none of<br>my classes<br>(1) | In some of<br>my classes<br>(2) | In most of<br>my classes<br>(3) | In all of my<br>classes (4) | My instructors<br>are not aware of<br>my<br>accommodations<br>(5) |
|--|---------------------------------|---------------------------------|---------------------------------|-----------------------------|---|
| My instructors<br>give me the<br>accommodations<br>I need (1)                          | 0                               | 0                               | 0                               | 0                           | 0   |
| My instructors<br>are positive<br>about<br>implementing<br>my<br>accommodations<br>(2) | 0                               | $\bigcirc$                      | $\bigcirc$                      | $\bigcirc$                  | $\bigcirc$  |



|  | In none of<br>my classes<br>(1) | In some of<br>my classes<br>(2) | In most of<br>my classes<br>(3) | In all of my<br>classes (4) | My instructors<br>are not aware of<br>my<br>accommodations<br>(5) |
|--|---------------------------------|---------------------------------|---------------------------------|-----------------------------|---|
| I feel<br>comfortable<br>asking my<br>instructors for<br>the supports I<br>need (3)          | 0                               | 0                               | 0                               | 0                           | 0   |
| I get the<br>supports I need<br>without feeling<br>that I am<br>different or a<br>burden (4) | 0                               | $\bigcirc$                      | 0                               | $\bigcirc$                  | $\bigcirc$  |

**End of Block: Postsecondary Education** 

```
Start of Block: Current Employment
```

Display This Question:

If Q6.2 != I am currently going to a college, university, or vocational, business, or technical school (including graduate school)

Q7.1 This next set of questions is about your current employment.

#### Display This Question:

If Q6.2 != I am currently going to a college, university, or vocational, business, or technical school (including graduate school)

Q7.2 Which best describes your current employment?

I have a job (1)

I do not have a job, but am looking (2)

 $\bigcirc$  I do not have a job and am not looking for a job (3)

Display This Question: If Q7.2 = I have a job



Q7.3 How many jobs do you currently have? Include internships, apprenticeships, babysitting, etc.

O 1 (1)

- O 2 (2)
- O 3 (3)
- O 4 (4)
- O 5+ (5)

| Display This Question: |  |  |  |
|------------------------|--|--|--|
| lf Q7.3 = 2            |  |  |  |
| Or Q7.3 = 3            |  |  |  |
| Or Q7.3 = 4            |  |  |  |
| Or Q7.3 = 5+           |  |  |  |

Q7.4 What is your **primary** job title?

|                        |            | <br> |  |
|------------------------|------------|------|--|
| Display This Question: |            |      |  |
| lf Q7.3 = 1            |            |      |  |
| Q7.5 What is your j    | job title? |      |  |
|                        |            |      |  |

Display This Question: If Q7.2 = I have <u>a job</u>

Q7.6 About how many hours per week do you work at this job?

O Less than 10 hours (1)

10 to 19 hours (2)

20 to 29 hours (3)



| ○ 30 to 39 hours (4)                                      |
|---|
| ○ 40 hours (5)  |
| O More than 40 hours (7)                                  |
| Display This Question:                                    |
| If Q7.2 = I have a job                                    |
| Q7.7 Do you receive a salary or hourly wage for this job? |
| O Salary (1)  |
| O Hourly (2)  |
| Display This Question:                                    |
| If Q7.7 = Salary  |
| Q7.8 Which best describes your salary for this job?       |
| ○ \$0 to \$20,999 (1)                                     |
| ○ \$21,000 to \$40,999 (2)                                |
| ○ \$41,000 to \$85,999 (3)                                |
| ○ \$86,000 to \$164,999 (4)                               |
| ○ \$165,000 to \$209,999 (5)                              |
| ○ \$210,000 to \$525,999 (6)                              |
| ○ \$526,000+ (7)  |
| Display This Question:                                    |
| If Q7.7 = Hourly  |

Q7.9 What is your hourly wage for this job? Please enter using dollars and cents (e.g., 7.50)



| Display This Question:   |
|--|
| If $Q7.2 = I$ have a job   |
| Q7.10 is your job aligned with your future goals?  |
| ○ Yes (1)  |
| O No (2)   |
| O Unsure (3)   |
| Display This Question:   |
| If Q7.2 = I have a job   |
| Q7.11 Does your employer know you have a learning disability?                                      |
| • Yes, I formally disclosed (1)  |
| $\bigcirc$ Yes, I disclosed but did not provide any documentation (3)                              |
| O No (2)   |
| Display This Question  |
| If Q7.11 = Yes, I formally disclosed   |
| Q7.12 What documentation did you have to provide?  |
| ○ IEP (1)  |
| O 504 Plan (2)   |
| O Doctor's note (3)  |
| $\bigcirc$ Formal evaluation from a licensed practitioner (e.g., licensed school psychologist) (4) |
| Other (5)  |



O None of the above (6)

Display This Question: If Q7.2 = I have a job

Q7.13 Have you received any formal or informal accommodations for your learning disability?

| Dis | play This Question:  |
|-----|--|
| _   | O I didn't know I could receive accommodations (12)  |
|     | O I don't think I need accommodations (11)   |
|     | $\bigcirc$ I didn't ask for accommodations because I thought it would burden the people I work with (10) |
|     | $\bigcirc$ I didn't ask for accommodations due to possible discrimination (9)                            |
|     | $\bigcirc$ I asked but was denied all accommodations (8)   |
|     | ○ Yes (7)  |

lf Q7.13 = Yes

Ľ

Q7.14 What accommodations or help have you received? Select all that apply.

| Materials or technical adaptations (1)            |
|---|
| Scheduling accommodations (2)                     |
| Assistance from a co-worker or another person (3) |
| Assignment or supervision accommodations (4)      |
| Other (5)   |



Display This Question:

*If Q7.13 = Yes* 

Q7.15 How useful have these accommodations been?

O Not very useful (1)

O Somewhat useful (2)

O Very useful (3)

 $\bigcirc$  Not applicable (4)

 $\bigcirc$  I do not have any workplace accommodations, but they would be helpful to me (5)

# Display This Question: If Q7.2 = I have a job

Q7.16 Rate your level of agreement with each of the following statements.

|  | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4)  | Strongly<br>Agree (5) |
|--|--------------------------|--------------|------------------|------------|-----------------------|
| My work is<br>manageable<br>(1)                          | 0                        | 0            | 0                | 0          | 0                     |
| l feel<br>supported at<br>my job (2)                     | 0                        | $\bigcirc$   | $\bigcirc$       | $\bigcirc$ | $\bigcirc$            |
| l feel<br>qualified for<br>this job (3)                  | 0                        | $\bigcirc$   | $\bigcirc$       | $\bigcirc$ | 0                     |
| My job pays<br>me enough<br>to support<br>myself (4)     | 0                        | 0            | $\bigcirc$       | 0          | 0                     |
| l can see<br>myself being<br>successful at<br>my job (5) | 0                        | $\bigcirc$   | $\bigcirc$       | 0          | 0                     |



|  | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4) | Strongly<br>Agree (5) |
|--|--------------------------|--------------|------------------|-----------|-----------------------|
| I feel socially<br>accepted at<br>my job (6) | 0                        | 0            | 0                | 0         | 0                     |
|  |                          |              |                  |           |                       |

|     | tion: | uest | Qı | This | lay  | Disp |
|-----|-------|------|----|------|------|------|
| joł | ive a | I ha | =  | 27.2 | If ( |      |

Q7.17 Rate your level of agreement with each of the following statements.

| Display This Choice: |          |           |          |
|----------------------|----------|-----------|----------|
| lf Q7.13 = Yes       |          |           |          |
| Display This Choice: |          |           |          |
| lf Q7.13 = Yes       |          |           |          |
|                      | Strongly | Undecided | Strongly |

|   | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4)  | Strongly<br>Agree (5) |
|---|--------------------------|--------------|------------------|------------|-----------------------|
| I know the<br>process or<br>procedures to<br>obtain<br>employment<br>accommodations<br>for a disability<br>(7)            | 0                        | 0            | 0                | 0          | 0                     |
| I get the<br>supports I need<br>without feeling<br>like I am<br>different or a<br>burden (8)                              | 0                        | $\bigcirc$   | $\bigcirc$       | $\bigcirc$ | $\bigcirc$            |
| Display This Choice:<br>If Q7.13 = Yes<br>My employer is<br>positive about<br>implementing<br>my<br>accommodations<br>(9) | 0                        | $\bigcirc$   | $\bigcirc$       | $\bigcirc$ | $\bigcirc$            |



|  | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4) | Strongly<br>Agree (5) |
|--|--------------------------|--------------|------------------|-----------|-----------------------|
| Display This Choice:<br>If Q7.13 = Yes<br>My employer<br>gives me the<br>accommodations<br>I need (10) | 0                        | 0            | $\bigcirc$       | 0         | $\bigcirc$            |
| I feel<br>comfortable<br>asking my<br>employer for the<br>supports I need<br>(11)                      | 0                        | 0            | 0                | 0         | 0                     |

Display This Question:

If Q7.2 = I do not have a job, but am looking

Q7.18 What is your primary reason for unemployment?

O I have never had a job before, but am currently looking (1)

- Scheduling or availability of shifts (2)
- O Transportation (3)
- The job was too hard or not a good fit (4)
- Family obligations (e.g., taking care of family or children) (5)
- O Health problems (e.g., physical, mental, substance abuse) (6)
- $\bigcirc$  The business closed, moved, or downsized (7)
- O The job was seasonal (8)
- Fired or laid off (9)



| Display This Question:  |  |
|---|--|
| If Q7.2 = I do not have a job, but am looking                 |  |
| Q7.19 About how long have you been looking for work?          |  |
| O Less than 2 months (1)                                      |  |
| O 2 to 6 months (2)   |  |
| ○ 6 to 12 months (3)  |  |
| $\bigcirc$ More than 12 months (4)                            |  |
| End of Block: Current Employment                              |  |
| Start of Block: Adaptive and Daily Living Skills              |  |
| Q8.1 The questions in this section are about your life today. |  |
| Q8.2 Which best describes the area where you live?            |  |
| ○ Rural area (1)  |  |
| 🔿 Urban area (2)  |  |
| ○ Suburban area (3)   |  |
| ○ I'm not sure (4)  |  |
| Q8.3 Which best describes your current living situation?      |  |
| O I live by myself (1)  |  |
|   |  |



| <ul> <li>I live with roommates (e.g., college dorm, shared apartment or house, or group home)</li> <li>(3)</li> </ul> |
|---|
| O I live with family (4)  |
| $\bigcirc$ I am currently experiencing homelessness (5)   |
| $\bigcirc$ None of the above (6)  |
| Q8.4 Are you currently:   |
| O Single (1)  |
| O Dating (8)  |
| O Engaged (2)   |
| O Married (3)   |
| $\bigcirc$ In a marriage-like relationship or committed partnership (4)   |
| O Separated (5)   |
| O Divorced (6)  |
| O Widowed (7)   |
| Q8.5 Do you have any children?  |
| O Yes (1)   |
| O No (2)  |
| Q8.6 Have you <u>ever</u> experienced homelessness?   |
| O Yes (1)   |



| ○ No (2)  |  |
|---|--|
| us<br>28.7 I was born in the 1700s.   |  |
| O Yes (1)   |  |
| ○ No (2)  |  |
| 08.8 Were you ever in the military?   |  |
| ○ Yes (1)   |  |
| ○ No (2)  |  |
| O Other (3)   |  |
|   |  |
| isplay This Question:   |  |
| Display This Question:<br>If Q8.8 = Yes<br>Q8.9 Which of the following was your primary reason for enlisting?   |  |
| Display This Question: If Q8.8 = Yes Q8.9 Which of the following was your primary reason for enlisting? To serve my country (1)   |  |
| <ul> <li>Display This Question:</li> <li>If Q8.8 = Yes</li> <li>Q8.9 Which of the following was your primary reason for enlisting?</li> <li>To serve my country (1)</li> <li>To have purpose (2)</li> </ul>   |  |
| <ul> <li>Display This Question:</li> <li>If Q8.8 = Yes</li> <li>Q8.9 Which of the following was your primary reason for enlisting?</li> <li>To serve my country (1)</li> <li>To have purpose (2)</li> <li>To continue family tradition (3)</li> </ul>   |  |
| <ul> <li>Display This Question:</li> <li>If Q8.8 = Yes</li> <li>Q8.9 Which of the following was your primary reason for enlisting?</li> <li>To serve my country (1)</li> <li>To have purpose (2)</li> <li>To continue family tradition (3)</li> <li>Medical benefits and/or housing (4)</li> </ul>  |  |
| <ul> <li>If Q8.8 = Yes</li> <li>Q8.9 Which of the following was your primary reason for enlisting?</li> <li>To serve my country (1)</li> <li>To have purpose (2)</li> <li>To continue family tradition (3)</li> <li>Medical benefits and/or housing (4)</li> <li>Alternative to college or employment (5)</li> </ul>                            |  |
| <ul> <li>If Q8.8 = Yes</li> <li>Q8.9 Which of the following was your primary reason for enlisting?</li> <li>To serve my country (1)</li> <li>To have purpose (2)</li> <li>To continue family tradition (3)</li> <li>Medical benefits and/or housing (4)</li> <li>Alternative to college or employment (5)</li> <li>To save money (6)</li> </ul> |  |



 $\bigcirc$  To receive training (8)

O Education benefits for after discharge (e.g., G.I. Bill) (9)

O Something else (10)

Q8.10 Which are you able to afford without public or private help (e.g., government, family, charity, scholarships)? Select all that apply.

| Housing (e.g., rent, mortgage) (1)  |
|---|
| Utilities (e.g., water, electric) (2)                                     |
| Cell phone bill (3)   |
| Internet (4)  |
| Car payments (5)  |
| Car insurance (6)   |
| Transportation costs (e.g., bus or metro pass, gas, car registration) (7) |
| Groceries (8)   |
| Healthcare (e.g., physical or mental health services, insurance) (10)     |
| None of the above (9)   |

Q8.11 Do you have health insurance?



| ○ Yes (1                      | 1)   |
|-------------------------------|--|
| 🔿 No (2                       | )  |
| Display This Qu<br>If Q8.11 = | estion:<br>Yes   |
| Q8.12 How d                   | o you have health insurance? Select all that apply.        |
|                               | Employer (1)   |
|                               | Spouse or domestic partner (2)                             |
|                               | Post-secondary institution (e.g., college, university) (3) |
|                               | Medicare or Medicaid (4)                                   |
|                               | Parents, family members, or care-givers (5)                |
|                               | Affordable Care Act or Healthcare marketplace (6)          |
|                               | Directly through an insurance company (7)                  |
|                               | Other (8)  |

Q8.13 Rate your level of confidence in doing each of the following activities.

|                                       | Unconfident<br>(1) | Slightly<br>confident (2) | Somewhat confident (3) | Fairly<br>confident (4) | Completely confident (5) |
|---------------------------------------|--------------------|---------------------------|------------------------|-------------------------|--------------------------|
| Using a map,<br>GPS, or the<br>public | 0                  | $\bigcirc$                | $\bigcirc$             | $\bigcirc$              | $\bigcirc$               |



|   | Unconfident<br>(1) | Slightly<br>confident (2) | Somewhat confident (3) | Fairly<br>confident (4) | Completely confident (5) |
|---|--------------------|---------------------------|------------------------|-------------------------|--------------------------|
| transportation system (1)   |                    |                           |                        |                         |                          |
| Taking care of<br>my mental<br>health (e.g.,<br>taking breaks,<br>managing<br>stress, seeing<br>a therapist)<br>(2) | $\bigcirc$         | $\bigcirc$                | $\bigcirc$             | $\bigcirc$              | 0                        |
| Taking care of<br>my physical<br>health (e.g.,<br>eating<br>healthy, going<br>to the gym)<br>(3)                    | $\bigcirc$         | $\bigcirc$                | $\bigcirc$             | $\bigcirc$              | 0                        |
| Using<br>technology<br>(e.g., using a<br>computer or<br>app to pay<br>bills) (4)                                    | $\bigcirc$         | $\bigcirc$                | $\bigcirc$             | $\bigcirc$              | 0                        |
| Using the<br>healthcare<br>system (e.g.,<br>going to the<br>doctor) (5)   | $\bigcirc$         | $\bigcirc$                | $\bigcirc$             | $\bigcirc$              | 0                        |
| Taking care of<br>my personal<br>finances (e.g.,<br>paying bills on<br>time,<br>managing a<br>budget) (6)           | $\bigcirc$         | $\bigcirc$                | $\bigcirc$             | $\bigcirc$              | 0                        |

End of Block: Adaptive and Daily Living Skills

Start of Block: Community, Social, and Financial Supports



Q9.1 This next section is about community, social, and financial supports.

Q9.2 Have you used any of the following since turning 18 years old? Select all that apply.

Federal or state disability aid (e.g., Supplemental Security Income, Social Security Disability Insurance) (1)

|                | Unemployment benefits (2)                                     |
|----------------|---|
|                | Medicaid, SNAP, or EBT benefits (3)                           |
|                | Public housing voucher (4)                                    |
|                | Financial aid from a religious or community organization (5)  |
|                | Vocational rehabilitation services (6)                        |
|                | Support for substance abuse (7)                               |
|                | Support groups for individuals with learning disabilities (8) |
|                | None of the above (9)   |
| JS             |   |
| Q9.3 I often e | at concrete.  |
| ○ Yes (1       | )   |
| 🔿 No (2)       |   |

Q9.4 Rate your level of agreement with each of the following statements.

. . . . . . . . . . .



|  | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4)  | Strongly<br>agree (5) |
|--|--------------------------|--------------|------------------|------------|-----------------------|
| Disability is a<br>natural part<br>of life (1)                                 | 0                        | 0            | 0                | 0          | 0                     |
| Disability has<br>a huge impact<br>on a person's<br>life (2)                   | $\bigcirc$               | 0            | 0                | $\bigcirc$ | 0                     |
| People<br>without<br>disabilities<br>ignore people<br>with<br>disabilities (3) | $\bigcirc$               | $\bigcirc$   | 0                | $\bigcirc$ | 0                     |
| People<br>become<br>impatient<br>with people<br>with<br>disabilities (5)       | 0                        | $\bigcirc$   | 0                | 0          | 0                     |
| Our society<br>fails to<br>accommodate<br>people with<br>disabilities (6)      | $\bigcirc$               | 0            | 0                | $\bigcirc$ | 0                     |
| People with<br>disabilities<br>are<br>discriminated<br>against (7)             | 0                        | $\bigcirc$   | $\bigcirc$       | $\bigcirc$ | 0                     |

Q9.5 Rate your level of agreement with each of the following statements.



|  | Strongly<br>disagree<br>(1) | Disagree<br>(2) | Undecided<br>(3) | Agree (4)  | Strongly<br>agree (5) | l am not<br>aware of<br>disability<br>laws (6) |
|--|-----------------------------|-----------------|------------------|------------|-----------------------|--|
| I am aware<br>that I have<br>certain legal<br>rights and<br>protections<br>because I<br>am a<br>person with<br>a disability<br>(2) | 0                           | 0               | 0                | 0          | 0                     | 0  |
| I know<br>where to<br>access<br>information<br>about<br>disability<br>rights (3)   | 0                           | $\bigcirc$      | $\bigcirc$       | 0          | $\bigcirc$            | $\bigcirc$                                     |
| I have<br>talked to<br>someone<br>about my<br>legal rights<br>and<br>protections<br>about my<br>disability (4)                     | 0                           | $\bigcirc$      | $\bigcirc$       | $\bigcirc$ | 0                     | $\bigcirc$                                     |
| l am<br>comfortable<br>advocating<br>for my<br>rights under<br>disability<br>laws (5)  | 0                           | $\bigcirc$      | 0                | 0          | 0                     | 0  |

Q9.6 Rate your level of agreement with the following statements.



|   | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4) | Strongly<br>agree (5) |
|---|--------------------------|--------------|------------------|-----------|-----------------------|
| My learning<br>disability has a<br>positive impact<br>on me (1)   | 0                        | 0            | 0                | 0         | 0                     |
| My learning<br>disability is a<br>part of who I<br>am (2)   | 0                        | $\bigcirc$   | 0                | 0         | $\bigcirc$            |
| I am proud to<br>have a learning<br>disability (3)  | 0                        | $\bigcirc$   | $\bigcirc$       | 0         | $\bigcirc$            |
| I feel<br>comfortable<br>telling friends<br>or romantic<br>partners I have<br>a learning<br>disability (4)  | 0                        | $\bigcirc$   | $\bigcirc$       | 0         | 0                     |
| I feel connected<br>to people in my<br>age group (5)  | 0                        | 0            | 0                | 0         | $\bigcirc$            |
| I feel connected<br>to peers with<br>disabilities (or<br>peers who<br>identify as<br>neurodivergent)<br>(6) | 0                        | $\bigcirc$   | $\bigcirc$       | 0         | $\bigcirc$            |
| I feel connected<br>to peers<br>without<br>disabilities (7)   | 0                        | $\bigcirc$   | $\bigcirc$       | 0         | $\bigcirc$            |

Q9.7 Rate your level of agreement with each of the following statements.



|  | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4)  | Strongly<br>agree (5) |
|--|--------------------------|--------------|------------------|------------|-----------------------|
| Growing up, I<br>had an<br>advocate for<br>my disability<br>(2)                                      | 0                        | 0            | 0                | 0          | 0                     |
| Growing up, I<br>had an adult<br>with a<br>disability that<br>I looked up to<br>(3)                  | $\bigcirc$               | $\bigcirc$   | 0                | 0          | $\bigcirc$            |
| Growing up, I<br>knew that a<br>person with a<br>disability<br>could be<br>successful in<br>life (4) | $\bigcirc$               | 0            | $\bigcirc$       | 0          | $\bigcirc$            |
| Growing up,<br>my family<br>understood<br>how my<br>disability<br>impacted me<br>(5)                 | 0                        | $\bigcirc$   | $\bigcirc$       | $\bigcirc$ | $\bigcirc$            |

## Q9.8 Rate your level of agreement with each of the following statements.

|  | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4)  | Strongly<br>agree (5) |
|--|--------------------------|--------------|------------------|------------|-----------------------|
| My family<br>currently<br>understands<br>me as a<br>person (1) | 0                        | 0            | 0                | 0          | 0                     |
| My family<br>currently   | $\bigcirc$               | $\bigcirc$   | $\bigcirc$       | $\bigcirc$ | $\bigcirc$            |


|   | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4)  | Strongly<br>agree (5) |
|---|--------------------------|--------------|------------------|------------|-----------------------|
| understands<br>how my<br>disability<br>impacts me<br>(6)              |                          |              |                  |            |                       |
| My friends<br>understand<br>how my<br>disability<br>impacts me<br>(7) | 0                        | $\bigcirc$   | $\bigcirc$       | $\bigcirc$ | $\bigcirc$            |

End of Block: Community, Social, and Financial Supports

**Start of Block: Mental Health** 

Q10.1 The questions in this next section are about your mental health.

Q10.2 Over the past **year**, have you experienced any of the following? Select all that apply.

|              | Feelings of fear, dread, or uneasiness around everyday situations (1)                          |
|--------------|--|
|              | Feeling sad or hopeless for long periods of time (e.g., for at least two weeks at a            |
|              | Loss of interest in people or activities that you used to enjoy (3)                            |
| weeks at a   | Feeling shame or worthlessness for long periods of time (e.g., for at least two<br>a time) (4) |
|              | None of the above (5)  |
| Q10.3 How of | ten do you use drugs or alcohol to cope with mental health challenges?                         |

 $\bigcirc$  5+ days per week (1)



| 🔿 2 to 4         | days per week (2)                                     |
|------------------|---|
| Once a           | a week (3)  |
| ○ A few          | times per month (4)                                   |
| O Never          | (5)   |
| Q10.4 Have y     | ou ever been diagnosed with a mental health disorder? |
| ○ Yes (1         | )   |
| ○ No (2)         |   |
| Display This Que | stion:  |
| Q10.5 Select a   | all that apply.                                       |
|                  | Anxiety (1)   |
|                  | Depression (2)  |
|                  | Post traumatic Stress Disorder (PTSD) (3)             |
|                  | Obsessive Compulsive Disorder (OCD) (4)               |
|                  | Other (5)   |
| Q10.6 Do you     | consider a mental health disorder to be a disability? |
| ○ Yes (1         | )   |
| 🔿 No (2)         |   |



| O Unsure (3)  |
|---|
| Q10.7 Which of the following best describes you?  |
| O My learning disability negatively affects my mental health (1)  |
| $\bigcirc$ My learning disability positively affects my mental health (2)   |
| $\bigcirc$ My learning disability does not have an effect on my mental health (3)                                 |
| O Unsure (4)  |
| End of Block: Mental Health   |
| Start of Block: Surviving/Thriving<br>Q11.1 The questions in this next section are about how you view life.       |
| Q11.2 What are three things that make someone successful in life? Please use words or phrases in the boxes below. |
| O Two (2)   |
| O Three (3)   |
| Q11.3 How often do you feel good about your life?   |
| O None of the time (1)  |
| O Some of the time (2)  |
| O Most of the time (3)  |
| O All of the time (4)   |



# 2\$

#### Q11.4 How satisfied are you currently in the following areas?

|                                    | Very<br>dissatisfied<br>(1) | Dissatisfied<br>(2) | Neither<br>satisfied nor<br>dissatisfied<br>(3) | Satisfied (4) | Very<br>satisfied (5) |
|------------------------------------|-----------------------------|---------------------|---|---------------|-----------------------|
| Personal finances (1)              | $\bigcirc$                  | $\bigcirc$          | $\bigcirc$                                      | $\bigcirc$    | $\bigcirc$            |
| Family<br>relationships<br>(2)     | 0                           | $\bigcirc$          | $\bigcirc$                                      | $\bigcirc$    | 0                     |
| Friendships (3)                    | $\bigcirc$                  | $\bigcirc$          | $\bigcirc$                                      | $\bigcirc$    | $\bigcirc$            |
| Romantic<br>relationships<br>(4)   | $\bigcirc$                  | $\bigcirc$          | $\bigcirc$                                      | $\bigcirc$    | $\bigcirc$            |
| Mental health<br>(5)               | $\bigcirc$                  | $\bigcirc$          | $\bigcirc$                                      | $\bigcirc$    | $\bigcirc$            |
| Physical health<br>(6)             | $\bigcirc$                  | $\bigcirc$          | $\bigcirc$                                      | $\bigcirc$    | $\bigcirc$            |
| Personal<br>independence<br>(7)    | 0                           | $\bigcirc$          | $\bigcirc$                                      | $\bigcirc$    | $\bigcirc$            |
| Who I am (8)                       | $\bigcirc$                  | $\bigcirc$          | $\bigcirc$                                      | $\bigcirc$    | $\bigcirc$            |
| Employment<br>(9)                  | $\bigcirc$                  | $\bigcirc$          | $\bigcirc$                                      | $\bigcirc$    | $\bigcirc$            |
| Connection to<br>community<br>(10) | $\bigcirc$                  | $\bigcirc$          | $\bigcirc$                                      | $\bigcirc$    | $\bigcirc$            |
| Transportation<br>(11)             | $\bigcirc$                  | $\bigcirc$          | $\bigcirc$                                      | $\bigcirc$    | $\bigcirc$            |
| Education or training (12)         | $\bigcirc$                  | $\bigcirc$          | $\bigcirc$                                      | $\bigcirc$    | $\bigcirc$            |



|              | Very<br>dissatisfied<br>(1) |            | Neither<br>satisfied nor<br>dissatisfied<br>(3) | Satisfied (4) | Very<br>satisfied (5) |
|--------------|-----------------------------|------------|---|---------------|-----------------------|
| Housing (13) | $\bigcirc$                  | $\bigcirc$ | $\bigcirc$                                      | $\bigcirc$    | 0                     |

Q11.5 Have any of the following happened **<u>since high school</u>**? Select all that apply.

I was stopped and questioned by police for something other than a traffic violation (1)

| I was in jail overnight (2)      |
|----------------------------------|
| I was arrested (3)               |
| I was convicted of a crime (4)   |
| I was on probation or parole (5) |
| None of the above (6)            |
|                                  |

Q11.6 Have you experienced any form of discrimination?

 Yes (1)
No (2)
Display This Question: If Q11.6 = Yes

Q11.7 What was this discrimination based on? Select all that apply.



Race or ethnicity (1)



| Language (2)                             |
|--|
| Religion (3)                             |
| Disability (4)                           |
| Gender identity or gender expression (5) |
| Sexuality (6)                            |
| Nationality (7)                          |
| Other (8)                                |

Q11.8 Have you experienced discrimination because of your <u>learning disability</u> in the following areas? Select all that apply.

| Friendships (1)            |
|----------------------------|
| Family (2)                 |
| Romantic relationships (3) |
| Work (4)                   |
| School (5)                 |
| Community (6)              |



| Other (7)             |
|-----------------------|
| None of the above (8) |
| <br>                  |

Q11.9 Rate your level of agreement with each of the following statements.

|  | Strongly<br>disagree<br>(1) | Disagree<br>(2) | Undecided<br>(3) | Agree (4)  | Strongly<br>agree (5) | Not<br>applicable<br>(6) |
|--|-----------------------------|-----------------|------------------|------------|-----------------------|--------------------------|
| I have<br>experienced<br>difficulties<br>getting a<br>job because<br>of my<br>learning<br>disability (1) | 0                           | $\bigcirc$      | 0                | 0          | $\bigcirc$            | $\bigcirc$               |
| I have<br>experienced<br>difficulties<br>keeping a<br>job because<br>of my<br>learning<br>disability (2) | 0                           | $\bigcirc$      | 0                | $\bigcirc$ | $\bigcirc$            | $\bigcirc$               |
| I can find<br>jobs that<br>match my<br>skill set (3)   | 0                           | $\bigcirc$      | 0                | 0          | $\bigcirc$            | $\bigcirc$               |

#### Q11.10 Rate your level of agreement with each of the following statements.

|                                      | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4) | Strongly<br>agree (5) |
|--------------------------------------|--------------------------|--------------|------------------|-----------|-----------------------|
| My<br>intelligence is<br>something I | 0                        | 0            | $\bigcirc$       | 0         | $\bigcirc$            |



|   | Strongly<br>disagree (1) | Disagree (2) | Undecided<br>(3) | Agree (4)  | Strongly<br>agree (5) |
|---|--------------------------|--------------|------------------|------------|-----------------------|
| have control<br>over (1)  |                          |              |                  |            |                       |
| I am capable<br>of learning<br>new things<br>(2)                            | 0                        | $\bigcirc$   | $\bigcirc$       | 0          | 0                     |
| I feel<br>understood<br>as a person<br>with a<br>learning<br>disability (3) | 0                        | $\bigcirc$   | 0                | 0          | $\bigcirc$            |
| I am excited<br>about my<br>career (4)                                      | $\bigcirc$               | $\bigcirc$   | $\bigcirc$       | 0          | 0                     |
| I am excited<br>about my<br>future (5)                                      | $\bigcirc$               | $\bigcirc$   | $\bigcirc$       | $\bigcirc$ | $\bigcirc$            |

Q11.11 Is there anything else about your experiences with your learning disability that you think we should know?



#### Q11.12

Thank you for completing our survey!

The <u>next page</u> will take you to a form to enter your contact information. Your contact information will be kept separate from your survey response and will only be used to send you an electronic gift card for completing this survey. We will not share your information.



# If you are having difficulty accessing the form or have any questions, please email Dr. Lauren Wong at <a href="https://www.lwong.accessing.com">www.lwong.accessing.com</a> the form or have any questions, please email Dr. Lauren

End of Block: Surviving/Thriving



# Appendix D: Social Media Toolkit

#### **Flyer**



#### ABOUT US NCLD and WestEd

The National Center for Learning Disabilities (NCLD) is one of the nation's leading organizations advancing the lives of individuals with learning disabilities through policy, innovation, practice and outreach.

WestEd is a national nonpartisan, nonprofit organization that works with education and other communities to promote excellence, achieve equity, and improve learning for children, youth, and adults.

#### OUR EFFORTS Looking for Participants

NCLD and WestEd would love to hear from young adults (18–24 years old) who have a learning disability.

Results from this survey will be used to guide outreach, policy, and advocacy efforts at NCLD.

Participants will be asked to take a 15-20 minute online survey and will receive a **\$20 electronic Gift Card to Amazon.com.** 

| Ares | /ou | elia | ible? |
|------|-----|------|-------|
| ALE  | you | eng  | IDIC: |



| Questions? Contact us: |
|------------------------|
| Lauren N. Wong, Ph.D.  |
| lwong2@wested.org      |
| Nicholas Gage, Ph.D.   |
| ngage@wested.org       |
|                        |

IRB: HE-2023-63 | Date approved: 10/11/2023 | Expiration Date: 10/11/2026



### Social Media Post: Twitter/X

Do you have a learning disability? WestEd and the National Center for Learning Disabilities would love to hear from you! Click the link if you are interested in participating: [*survey link*].

## Social Media Cards: Twitter/X



### Social Media Post: Facebook

Do you have a learning disability? WestEd and the National Center for Learning Disabilities would love to hear from young adults (ages 18–24) who have LD! Participants will take a survey about their experiences, perspectives, and opinions as they transitioned from high school to postsecondary and the workforce. Click the link if you are interested in participating: [survey link].



### Social Media Post: LinkedIn

Do you have a learning disability? WestEd and the National Center for Learning Disabilities would love to hear from young adults (ages 18–24) who have LD! Participants will take a survey about their experiences, perspectives, and opinions as they transitioned from high school to postsecondary and the workforce. Click the link if you are interested in participating: [*survey link*].

### Social Media Cards: Facebook and LinkedIn





#### **Newsletter or Email Blurb**

Subject: WestEd and National Center for Learning Disabilities Survey Study

WestEd and the National Center for Learning Disabilities would love to hear from learning disabled young adults (ages 18–24) about their experiences, perspectives, and opinions as they transitioned out of high school into postsecondary and the workforce. Results from this survey will be used to guide NCLD's efforts in outreach, policy, and advocacy. Participants will be asked to take a 15–20 minute online survey and will receive a \$20 Amazon.com Gift Card. Please click the following link (or copy/paste into your browser: [*survey link*]) if you are interested in completing the survey!

#### Email

From: Recruited Site

To: Young Adults

CC: Lauren Wong

RE: Research study participation regarding experiences from high school to the workforce

Date: XX,XX,2024

Dear <First Name> <Last Name>,

My name is Lauren Wong, and I am from WestEd, a nonpartisan, nonprofit organization engaged in educational technical support and research across the country. We are partnered with the National Center for Learning Disabilities, one of the nation's leading organizations advancing the lives of individuals with learning disabilities through policy, innovation, practice, and outreach. We are working together to learn about their experiences, perspectives, and opinions as they transitioned out of high school into postsecondary education and the workforce.

We are surveying young adults (18–24 years old) who have a learning disability. Your participation in this survey will help us understand your experiences as you transitioned from high school to postsecondary and the workforce. All information shared will be kept secure and will be de-identified to protect your privacy and confidentiality. Results from this survey will be used to guide NCLD's efforts in outreach, policy, and advocacy.

Participation is completely voluntary and would take about 20 minutes of your time. Participants who complete the survey will receive a \$20 Amazon.com Gift Card.



Please click the following link (or copy/paste into your browser: [*survey link*]) if you are interested in completing the survey!

Thank you for considering. We appreciate your willingness to share your knowledge and experiences with the research team. If you have any questions, please feel free to contact me.

Sincerely,

Lauren Wong, Ph.D.

Research Associate

WestEd



# Appendix E: Survey Consent Form

Before beginning the survey, please read and indicate your response to the following consent information. The purpose of this consent agreement is to give your consent to participate in a survey in the study. Please read this consent agreement carefully before you decide to participate in the study.

Study Title: National Center for Learning Disabilities—Survey Research

Purpose: This study is funded by the National Center for Learning Disabilities. The purpose of this project is to learn about the perceptions, opinions, and experiences of young adults (ages 18–24) who have a learning disability. Results will be used to guide NCLD's efforts in policy, advocacy, and outreach.

What you will do in the study: In this survey, you will be asked questions related to your experiences in high school, postsecondary education, employment, and mental health. Participants will be eligible to receive a \$20 Amazon.com Gift Card. Amazon.com Gift Cards are (1) one per person and (2) dependent on meeting measures of data quality (e.g., no bots, IP addresses within the United States).

Time Required: The survey should take about 15–30 minutes of your time.

Risks: There are no anticipated risks from participating in this survey.

Benefits: There are no direct benefits to you for participating in this research study. The study may help us better understand where policy and advocacy efforts should be directed.

Confidentiality: The information that you provide in this study will be handled confidentially. Any identifying information that we collect will be immediately de-identified, assigned an identification number, and stored in a secure server. Identities could theoretically be deduced of some participants based on the demographic information they submit, but we will not do so, and all data will be reported only in aggregate. Individual responses will not be shared with any person or entity.

Identifying information: Personally identifiable information will be collected as a part of this research. We will remove these personal identifiers from any data we collect, and neither the identifiers nor the data will be used or distributed for future research studies.



Voluntary Participation: Your participation in the study is completely voluntary. A decision not to participate will have no effect on your school or employment.

Right to Withdraw From the Study: You have the right to withdraw from the study at any time without penalty. Because the data are not connected to your identity, you cannot withdraw after you submit your data.

How to Withdraw From the Study: Simply exit out of the survey or close your browser. Withdrawing after you submit your survey is not possible, since identities of participants are not collected.

If you have questions about the study, contact:

Lauren Wong, Ph.D. Research Associate WestEd

Nicholas Gage, Ph.D. Senior Researcher in Special Education WestEd

If you have any questions or concerns regarding your rights as a participant in this research project, please contact WestEd's Institutional Review Board (IRB) at [email] or [phone number].

Electronic Signature Consent

- a. I AGREE to provide an electronic signature to document my consent.
- b. I DO NOT agree to provide an electronic signature to document my consent.

#### Electronic Study Consent

- a. I AGREE to participate in the research study described above.
- b. I DO NOT agree to participate in the research study described above.



# Appendix F: Survey Weights by Crossed Categories

| Gender                               | Race                                   | Division           | Raked<br>Weight |
|--------------------------------------|--|--------------------|-----------------|
| Non-binary                           | Hispanic or Latino                     | Pacific            | 0.36            |
| Non-binary                           | Hispanic or Latino                     | South Atlantic     | 0.46            |
| Non-binary                           | Black or African American              | West South Central | 0.46            |
| Male                                 | Prefer not to answer                   | Pacific            | 0.80            |
| Transgender woman or transgender man | Hispanic or Latino                     | South Atlantic     | 0.88            |
| Transgender woman or transgender man | Hispanic or Latino                     | West South Central | 0.90            |
| Other                                | White                                  | Mountain           | 0.91            |
| Other                                | White                                  | New England        | 0.96            |
| Transgender woman or transgender man | White                                  | Mountain           | 0.96            |
| Transgender woman or transgender man | White                                  | East South Central | 1.00            |
| Non-binary                           | Native Hawaiian or Pacific<br>Islander | Middle Atlantic    | 1.05            |
| Transgender woman or transgender man | White                                  | East North Central | 1.13            |
| Male                                 | Prefer not to answer                   | Mountain           | 1.16            |



| Gender                               | Race                                | Division           | Raked<br>Weight |
|--------------------------------------|-------------------------------------|--------------------|-----------------|
| Transgender woman or transgender man | Black or African American           | East North Central | 1.16            |
| Other                                | White                               | Middle Atlantic    | 1.19            |
| Non-binary                           | Two or More                         | Pacific            | 1.23            |
| Transgender woman or transgender man | White                               | West North Central | 1.26            |
| Transgender woman or transgender man | White                               | Middle Atlantic    | 1.26            |
| Transgender woman or transgender man | Hispanic or Latino                  | Middle Atlantic    | 1.32            |
| Non-binary                           | Two or More                         | South Atlantic     | 1.56            |
| Non-binary                           | Two or More                         | New England        | 1.88            |
| Female                               | Asian American or Asian             | Pacific            | 822.78          |
| Male                                 | Asian American or Asian             | Pacific            | 842.62          |
| Female                               | American Indian or Alaska<br>Native | Pacific            | 983.39          |
| Male                                 | American Indian or Alaska<br>Native | Pacific            | 1007.09         |
| Female                               | Asian American or Asian             | South Atlantic     | 1041.77         |
| Male                                 | Asian American or Asian             | South Atlantic     | 1066.88         |
| Male                                 | Asian American or Asian             | West South Central | 1089.94         |
| Female                               | Asian American or Asian             | Mountain           | 1184.84         |



| Gender | Race                                | Division           | Raked<br>Weight |
|--------|-------------------------------------|--------------------|-----------------|
| Male   | Asian American or Asian             | Mountain           | 1213.40         |
| Female | Asian American or Asian             | East South Central | 1229.29         |
| Female | Asian American or Asian             | New England        | 1253.26         |
| Female | White                               | Pacific            | 1260.27         |
| Female | American Indian or Alaska<br>Native | West South Central | 1272.04         |
| Male   | American Indian or Alaska<br>Native | South Atlantic     | 1275.13         |
| Male   | Asian American or Asian             | New England        | 1283.47         |
| Female | Black or African American           | Pacific            | 1287.48         |
| Male   | White                               | Pacific            | 1290.65         |
| Male   | American Indian or Alaska<br>Native | West South Central | 1302.70         |
| Female | Hispanic or Latino                  | Pacific            | 1312.65         |
| Male   | Black or African American           | Pacific            | 1318.51         |
| Male   | Hispanic or Latino                  | Pacific            | 1344.29         |
| Female | Asian American or Asian             | East North Central | 1398.48         |
| Male   | Asian American or Asian             | East North Central | 1432.19         |
| Female | American Indian or Alaska<br>Native | New England        | 1497.90         |



| Gender | Race                                | Division           | Raked<br>Weight |
|--------|-------------------------------------|--------------------|-----------------|
| Male   | American Indian or Alaska<br>Native | New England        | 1534.00         |
| Female | Asian American or Asian             | West North Central | 1551.73         |
| Female | White                               | South Atlantic     | 1595.70         |
| Male   | Asian American or Asian             | Middle Atlantic    | 1597.86         |
| Female | Black or African American           | South Atlantic     | 1630.14         |
| Female | White                               | West South Central | 1630.19         |
| Male   | White                               | South Atlantic     | 1634.16         |
| Female | Hispanic or Latino                  | South Atlantic     | 1662.02         |
| Female | Black or African American           | West South Central | 1665.38         |
| Male   | Black or African American           | South Atlantic     | 1669.44         |
| Male   | White                               | West South Central | 1669.48         |
| Female | American Indian or Alaska<br>Native | East North Central | 1671.47         |
| Female | Hispanic or Latino                  | West South Central | 1697.95         |
| Male   | Hispanic or Latino                  | South Atlantic     | 1702.08         |
| Male   | Black or African American           | West South Central | 1705.52         |
| Male   | American Indian or Alaska<br>Native | East North Central | 1711.75         |
| Male   | Hispanic or Latino                  | West South Central | 1738.87         |



| Gender | Race                                | Division           | Raked<br>Weight |
|--------|-------------------------------------|--------------------|-----------------|
| Female | White                               | Mountain           | 1814.83         |
| Female | Black or African American           | Mountain           | 1854.01         |
| Female | American Indian or Alaska<br>Native | West North Central | 1854.62         |
| Male   | White                               | Mountain           | 1858.58         |
| Female | White                               | East South Central | 1882.92         |
| Female | Hispanic or Latino                  | Mountain           | 1890.27         |
| Male   | Black or African American           | Mountain           | 1898.70         |
| Male   | American Indian or Alaska<br>Native | Middle Atlantic    | 1909.76         |
| Female | White                               | New England        | 1919.64         |
| Female | Black or African American           | East South Central | 1923.57         |
| Male   | White                               | East South Central | 1928.31         |
| Male   | Hispanic or Latino                  | Mountain           | 1935.83         |
| Female | Black or African American           | New England        | 1961.09         |
| Female | Hispanic or Latino                  | East South Central | 1961.19         |
| Male   | White                               | New England        | 1965.91         |
| Male   | Black or African American           | East South Central | 1969.94         |
| Female | Hispanic or Latino                  | New England        | 1999.43         |



| Gender | Race                                   | Division           | Raked<br>Weight |
|--------|--|--------------------|-----------------|
| Female | Native Hawaiian or Pacific<br>Islander | Pacific            | 2004.15         |
| Male   | Black or African American              | New England        | 2008.35         |
| Male   | Hispanic or Latino                     | East South Central | 2008.46         |
| Male   | Hispanic or Latino                     | New England        | 2047.63         |
| Male   | Native Hawaiian or Pacific<br>Islander | Pacific            | 2052.45         |
| Female | White                                  | East North Central | 2142.08         |
| Female | Black or African American              | East North Central | 2188.33         |
| Male   | White                                  | East North Central | 2193.71         |
| Female | Hispanic or Latino                     | East North Central | 2231.12         |
| Male   | Black or African American              | East North Central | 2241.07         |
| Male   | Hispanic or Latino                     | East North Central | 2284.89         |
| Female | White                                  | West North Central | 2376.81         |
| Female | White                                  | Middle Atlantic    | 2389.86         |
| Female | Black or African American              | West North Central | 2428.12         |
| Male   | White                                  | West North Central | 2434.10         |
| Female | Black or African American              | Middle Atlantic    | 2441.46         |
| Male   | White                                  | Middle Atlantic    | 2447.47         |



| Gender | Race                                   | Division           | Raked<br>Weight |
|--------|--|--------------------|-----------------|
| Female | Hispanic or Latino                     | West North Central | 2475.60         |
| Male   | Black or African American              | West North Central | 2486.65         |
| Female | Hispanic or Latino                     | Middle Atlantic    | 2489.20         |
| Male   | Black or African American              | Middle Atlantic    | 2500.30         |
| Male   | Hispanic or Latino                     | West North Central | 2535.27         |
| Male   | Hispanic or Latino                     | Middle Atlantic    | 2549.20         |
| Female | Native Hawaiian or Pacific<br>Islander | Mountain           | 2886.04         |
| Male   | Native Hawaiian or Pacific<br>Islander | West North Central | 3870.83         |
| Female | Two or More                            | South Atlantic     | 5624.67         |
| Female | Two or More                            | West South Central | 5746.25         |
| Male   | Two or More                            | South Atlantic     | 5760.24         |
| Male   | Two or More                            | West South Central | 5884.76         |
| Female | Two or More                            | Mountain           | 6397.11         |
| Female | Two or More                            | East South Central | 6637.12         |
| Female | Two or More                            | East North Central | 7550.63         |
| Female | Two or More                            | Middle Atlantic    | 8424.03         |
| Male   | Two or More                            | Middle Atlantic    | 8627.08         |



# Appendix G: Open-Response Themes—Three Things

# Theme: Resilience (n = 953)

| Code                                       | Frequency |
|--|-----------|
| Ability to move forward                    | 1         |
| Accept failure                             | 1         |
| Accept life challenges as they come to you | 1         |
| Acceptance of oneself                      | 1         |
| Accepting what one can't change            | 1         |
| Be consistent                              | 1         |
| Being able to overcome any obstacles       | 1         |
| Being determined                           | 2         |
| Being determined to succeed                | 1         |
| Being hardworking and dedicated            | 1         |
| Being persistent                           | 1         |
| Bravery                                    | 4         |
| Build resilience                           | 1         |
| Change                                     | 2         |



| Code                            | Frequency |
|---------------------------------|-----------|
| Commitment                      | 32        |
| Consistency                     | 96        |
| Continuity                      | 1         |
| Courage                         | 28        |
| Crushing resistance             | 1         |
| Dedication                      | 52        |
| Determination                   | 126       |
| Diligence                       | 13        |
| Don't give up                   | 1         |
| Don't stop because you failed   | 1         |
| Effort                          | 9         |
| Endurance                       | 4         |
| Good work                       | 1         |
| Good work ethic                 | 2         |
| Great hard work                 | 1         |
| Grit and Determination          | 2         |
| Hard work and being hardworking | 310       |
| Have willpower                  | 1         |



| Code   | Frequency |
|--|-----------|
| I achieve professional growth and personal goals by working hard and focusing on areas of personal interest. | 1         |
| I feel like accepting my differences and understanding that a learning disability doesn't mean incompetence. | 1         |
| Keep going   | 1         |
| Keep on moving   | 1         |
| Keep Practicing  | 1         |
| Keep pushing   | 1         |
| Keep pushing and don't stop on the way   | 1         |
| Learning From Failure  | 2         |
| Learning from people's mistakes  | 1         |
| Learning from your mistakes  | 3         |
| Mental toughness   | 2         |
| Must be committed  | 1         |
| Never giving up  | 3         |
| Perseverance   | 52        |
| Persistence  | 49        |
| Practicing resilience and pushing through challenges   | 1         |
| Putting in work  | 1         |
| Relentlessly   | 1         |



| Code                  | Frequency |
|-----------------------|-----------|
| Repetition            | 1         |
| Resilience            | 84        |
| Say no to failure     | 1         |
| Self-acceptance       | 1         |
| Showing up every time | 1         |
| Standing strong       | 1         |
| Staying on task       | 1         |
| Steadfastness         | 1         |
| Sticking to goals     | 1         |
| Strength              | 7         |
| Strive hard           | 1         |
| Strong will           | 1         |
| Sustained effort      | 2         |
| Tenacity              | 3         |
| Try hard              | 1         |
| Will                  | 3         |
| Will Power            | 5         |
| Work ethic            | 3         |



| Code            | Frequency |
|-----------------|-----------|
| Work smart      | 2         |
| Work towards it | 1         |
| Working smart   | 2         |



# Theme: Sense of self (n = 887)

| Code  | Frequency |
|---|-----------|
| A commitment to learn                             | 1         |
| Ability   | 4         |
| Ability to let go                                 | 1         |
| Ability to work                                   | 1         |
| Accept oneself                                    | 1         |
| Acceptance of feedback                            | 1         |
| Adaptability                                      | 36        |
| Advocating  | 1         |
| After the matter no one knows I believe in myself | 1         |
| Agility   | 2         |
| Always treat people right.                        | 1         |
| And ability to do things on your own              | 1         |
| And knowledge to discern logic                    | 1         |
| Assertiveness                                     | 1         |
| Assurance   | 1         |
| Attention to detail                               | 1         |
| Attitude  | 5         |



| Code  | Frequency |
|---|-----------|
| Attitude towards learning and growth                                  | 2         |
| Authenticity  | 1         |
| Avoiding other people's negative opinions                             | 1         |
| Awareness   | 1         |
| Be creativity   | 1         |
| Be grateful for every good moment in your life and everyone you meet. | 1         |
| Be guided by the ethics   | 2         |
| Be optimistic   | 1         |
| Be positive   | 2         |
| Be ready to do more   | 1         |
| Be strict with oneself  | 1         |
| Be truthful at all times  | 1         |
| Been vigilant   | 1         |
| Being able to adapt   | 1         |
| Being careful   | 1         |
| Being conscientious   | 2         |
| Being disciplined and focused   | 1         |
| Being Reliable  | 1         |



| Code                                | Frequency |
|-------------------------------------|-----------|
| By keep learning new things         | 1         |
| Calmness                            | 2         |
| Charisma                            | 2         |
| Committed to learning               | 1         |
| Compassion                          | 3         |
| Competency                          | 2         |
| Confidence                          | 41        |
| Continual education                 | 1         |
| Continuous effort to learn and grow | 3         |
| Continuous improvement              | 1         |
| Continuously learn and adapt        | 1         |
| Contributing to society             | 1         |
| Conviction                          | 1         |
| Creative problem-solving            | 1         |
| Creativity                          | 31        |
| Critical thinking                   | 2         |
| Cultural competence                 | 1         |
| Curiosity                           | 11        |



| Code   | Frequency |
|--|-----------|
| Decision-making skills   | 1         |
| Dependability  | 1         |
| Develop self-confidence and believe in your own abilities and potential. | 1         |
| Devoted  | 1         |
| Discipline   | 66        |
| Doing what's right   | 1         |
| Don't be scared of taking Risk   | 1         |
| Eagerness  | 1         |
| Earnest  | 1         |
| Efficacy   | 1         |
| Efficiency   | 1         |
| Embrace Change   | 1         |
| Embrace growth mindset   | 1         |
| Embracing innovation and staying curious about the world                 | 1         |
| Energetic  | 1         |
| Enlightened  | 1         |
| Enthusiasm   | 2         |
| Excellence   | 1         |



| Code           | Frequency |
|----------------|-----------|
| Feeling secure | 1         |
| Flexibility    | 11        |
| Generosity     | 2         |
| Good           | 1         |
| Good attitude. | 1         |
| Good behavior  | 3         |
| Good character | 2         |
| Good heart     | 1         |
| Good mindset   | 2         |
| Goodness       | 2         |
| Grace          | 4         |
| Gratitude      | 9         |
| Greatness      | 1         |
| Growth         | 4         |
| Growth Mindset | 4         |
| Have fun       | 1         |
| Honesty        | 28        |
| Humility       | 18        |



| Code   | Frequency |
|--|-----------|
| Ideas  | 2         |
| I'm saying don't worry about other people and be yourself                            | 1         |
| Imagination  | 3         |
| Increase knowledge   | 1         |
| Innovation   | 5         |
| Integrity  | 28        |
| Intelligence   | 15        |
| Interest   | 1         |
| Keep learning  | 1         |
| Kindness   | 12        |
| Lack of disability   | 1         |
| Learn to understand  | 1         |
| Learn tolerance and inclusion and respect for the differences and choices of others. | 1         |
| Lifelong Learning  | 26        |
| Like   | 1         |
| Living a humble life   | 1         |
| Logic  | 1         |
| Love for Learning  | 1         |



| Code                        | Frequency |
|-----------------------------|-----------|
| Loyalty                     | 2         |
| Managing time               | 3         |
| Meeting peoples need        | 1         |
| Mindset                     | 7         |
| Morals                      | 1         |
| Must be disciplined         | 1         |
| Obedience                   | 4         |
| Open to learning new things | 1         |
| Open-mindedness             | 4         |
| Optimism                    | 28        |
| Organization                | 4         |
| Originality                 | 1         |
| Participation               | 2         |
| Patience                    | 59        |
| Peace                       | 5         |
| Perception Management       | 1         |
| Personal growth             | 1         |
| Pleasure of work            | 1         |



| Code   | Frequency |
|--|-----------|
| Positive attitude  | 19        |
| Positive energy  | 2         |
| Positive mindset   | 23        |
| Positive outlook   | 1         |
| Positive thinking  | 6         |
| Positivity   | 13        |
| Proactivity  | 1         |
| Problem solving skills                                     | 5         |
| Providing for yourself and others in the ways you are able | 1         |
| Punctuality  | 1         |
| Quick understanding  | 1         |
| Resistance   | 1         |
| Resourcefulness  | 2         |
| Respect  | 13        |
| Respect for diversity                                      | 2         |
| Respect for others' perspectives and experiences           | 1         |
| Respect your friend  | 1         |
| Respectful   | 1         |


| Code  | Frequency |
|---|-----------|
| Respecting others                                 | 1         |
| Responsibility                                    | 12        |
| Rigidity  | 1         |
| Risk perception                                   | 1         |
| Risk tolerance                                    | 1         |
| Routine, order, and discipline                    | 1         |
| Sacrifice   | 3         |
| Satisfaction                                      | 1         |
| Seeking knowledge from various sources            | 1         |
| Seeking out diverse perspectives and experiences. | 1         |
| Self-advocacy                                     | 2         |
| Self-affection                                    | 1         |
| Self-awareness                                    | 9         |
| Self-confidence                                   | 18        |
| Self-conscious                                    | 2         |
| Self-control                                      | 4         |
| Self-determination                                | 3         |
| Self-development                                  | 1         |



| Code              | Frequency |
|-------------------|-----------|
| Self-discipline   | 39        |
| self-empowerment  | 1         |
| Self-esteem       | 4         |
| Self-growth       | 1         |
| Self-improvement  | 1         |
| Self-love         | 2         |
| Self-preservation | 1         |
| Self-reflection   | 2         |
| Self-reliance     | 1         |
| Self-respect      | 1         |
| Self-worth        | 1         |
| Serenity          | 1         |
| Seriousness       | 3         |
| Smart             | 7         |
| Smart work        | 3         |
| Smartness         | 5         |
| Solution focused  | 1         |
| Speed of Action   | 1         |



| Code   | Frequency |
|--|-----------|
| Spirit for working   | 1         |
| Spread positive energy and encourage and support others in their pursuit of success and happiness. | 1         |
| Staying positive   | 1         |
| Talent   | 7         |
| Tapping into creativity to find innovative solutions   | 1         |
| They are not affected by the opinions of third parties   | 1         |
| Thinking Positively  | 1         |
| Time conscious   | 3         |
| Tolerance  | 4         |
| Transparency   | 4         |
| Trustworthy  | 4         |
| Truthfulness   | 3         |
| Understanding  | 1         |
| Values   | 9         |
| We keep doing better   | 1         |
| Well-roundedness   | 1         |
| Willingness  | 2         |
| Wisdom   | 5         |



| Code   | Frequency |
|--|-----------|
| You must be honest in anything you are doing so as to be of someone trustworthy. | 1         |
| You must show respect to everyone above you.                                     | 1         |



# Theme: Foundation for flourishing (*n* = 834)

| Code   | Frequency |
|--|-----------|
| Ability to afford the cost of living                 | 1         |
| Ability to manage little resources                   | 1         |
| Academic   | 2         |
| Access (to education, healthcare, basic needs, etc.) | 1         |
| Accomplishment                                       | 1         |
| Achievement  | 5         |
| Always avoid procrastination                         | 1         |
| Analytical skills                                    | 1         |
| Authority  | 1         |
| Avoid procrastination                                | 2         |
| Avoiding distractions                                | 1         |
| Avoiding drug abuse                                  | 1         |
| Be business oriented                                 | 1         |
| Behavior   | 1         |
| Being able to afford necessities                     | 1         |
| Being able to do your hobbies                        | 1         |
| Being able to grow and explore their passions        | 1         |



| Code  | Frequency |
|---|-----------|
| Being able to live comfortably without outside intervention   | 1         |
| Being able to support themselves  | 1         |
| Being financially savvy is important. Managing your finances wisely and making smart investments can contribute to long-term success. | 1         |
| Being happy in wherever situation you find yourself   | 1         |
| Being stable mentally   | 2         |
| Business  | 6         |
| Capital   | 7         |
| Career  | 35        |
| Cars  | 10        |
| Clothing  | 2         |
| Contentment   | 9         |
| Cultivate their own artistic accomplishment and aesthetic ability, enrich the spiritual life.   | 1         |
| Debt free   | 1         |
| Develop hobbies   | 1         |
| Educated  | 103       |
| Emotional intelligence  | 11        |
| Emotional regulation  | 1         |
| Emotional well-being  | 1         |



| Code                   | Frequency |
|------------------------|-----------|
| Emotions               | 1         |
| Employment             | 3         |
| Enough money           | 2         |
| Entrepreneurship       | 2         |
| Exercises              | 3         |
| Experience             | 3         |
| Expertise              | 4         |
| Exposure               | 1         |
| Fame                   | 5         |
| Famous                 | 1         |
| Feeling secure         | 1         |
| Financial breakthrough | 1         |
| Financial freedom      | 1         |
| Financial literacy     | 4         |
| Financial management   | 1         |
| Financial planning     | 1         |
| Financial stability    | 15        |
| Financial support      | 1         |



| Code  | Frequency |
|---|-----------|
| Fitness   | 1         |
| Food  | 8         |
| For you to be successful you have to work smart | 1         |
| Freedom   | 2         |
| Fulfillment                                     | 4         |
| Generational wealth                             | 2         |
| Get money                                       | 2         |
| Get richer                                      | 1         |
| Going to the gym                                | 1         |
| Good decision making                            | 1         |
| Good education                                  | 8         |
| Good grades                                     | 2         |
| Good habits                                     | 1         |
| Good health                                     | 17        |
| Good investment                                 | 1         |
| Good job  | 8         |
| Good luck                                       | 2         |
| Good mental health                              | 3         |



| Code                                   | Frequency |
|--|-----------|
| Good performance in education          | 1         |
| Good physical health                   | 3         |
| Good skills                            | 2         |
| Good strategies of doing things        | 1         |
| Graduate                               | 1         |
| Happiness                              | 35        |
| Happy with one's career                | 1         |
| Have a booming business                | 1         |
| Having a balanced life                 | 1         |
| Having comfortable living arrangements | 1         |
| Having good strategies                 | 1         |
| Health                                 | 38        |
| Health care                            | 1         |
| Healthy diet                           | 1         |
| Healthy habits                         | 2         |
| High income                            | 1         |
| High paying career job                 | 1         |
| Housing                                | 13        |



| Code                                      | Frequency |
|---|-----------|
| Huge salary                               | 1         |
| Income                                    | 1         |
| Independence                              | 3         |
| Information                               | 4         |
| Investments                               | 6         |
| dof                                       | 18        |
| Job security                              | 2         |
| Job skills                                | 1         |
| yot                                       | 1         |
| Knowledge                                 | 23        |
| Learning how to manage stress and anxiety | 1         |
| Lifestyle                                 | 1         |
| Little to no debt                         | 1         |
| Living drug free                          | 1         |
| Living healthy                            | 1         |
| Luck                                      | 10        |
| Make study plan                           | 1         |
| Makes enough money to pay bills           | 1         |



| Code                               | Frequency |
|------------------------------------|-----------|
| Managing finances well             | 1         |
| Meeting expenses                   | 1         |
| Mental energy                      | 1         |
| Mental Health                      | 5         |
| Money                              | 108       |
| Money management                   | 1         |
| Multiple incomes                   | 2         |
| Music                              | 1         |
| Natural gift                       | 1         |
| Opportunities                      | 16        |
| Pay raise                          | 1         |
| Personal happiness                 | 1         |
| Phones                             | 1         |
| Physical energy                    | 1         |
| Physical wellness                  | 1         |
| Pick up all good opportunities     | 1         |
| Power                              | 9         |
| Profession that is well sought for | 1         |



| Code  | Frequency |
|---|-----------|
| Professional in your field  | 1         |
| Professional qualifications   | 1         |
| Professional training   | 1         |
| Promotions  | 1         |
| Quality education   | 3         |
| Reading   | 1         |
| Reading and learning  | 1         |
| Resources   | 4         |
| Rich  | 2         |
| Right information   | 1         |
| Running a business  | 1         |
| Savings   | 1         |
| Savings and working towards your goals  | 1         |
| Security  | 2         |
| Seek a professional assessment to get a more accurate understanding of the type and extent of your learning disability. | 1         |
| Self-care   | 1         |
| Shelter   | 3         |
| Skills  | 40        |



| Code  | Frequency |
|---|-----------|
| Stability   | 5         |
| Stable family   | 1         |
| Stable home   | 3         |
| Stable job  | 1         |
| Starting a Business   | 2         |
| Stay healthy  | 1         |
| Staying happy   | 1         |
| Striving for balance and harmony in life.   | 1         |
| Studying  | 10        |
| Studying seriously  | 1         |
| Success   | 3         |
| Technical knowledge   | 1         |
| The resources to start  | 1         |
| The thing that has made me successful is to discover and cultivate my own interests and talents | 1         |
| Think of happy things   | 1         |
| Time  | 2         |
| Time management skills  | 20        |
| Training  | 4         |



| Code                           | Frequency |
|--------------------------------|-----------|
| Transportation                 | 1         |
| Travel Experience              | 2         |
| Using what they have available | 1         |
| Wealth                         | 24        |
| Winnings                       | 1         |
| Work                           | 12        |
| Work-life balance              | 1         |



# Theme: Connectedness (n = 609)

| Code  | Frequency |
|---|-----------|
| A happy home  | 1         |
| A positive friends and families                     | 1         |
| Able to impact the life of others                   | 1         |
| Acceptance  | 1         |
| Accountability                                      | 3         |
| Allah   | 1         |
| Always seek help. No one can do it alone            | 1         |
| Be God fearing and prayerful                        | 1         |
| Be prayerful  | 1         |
| Being able to be yourself without fear of judgement | 1         |
| Being social  | 1         |
| Being surrounded by people they care about          | 1         |
| Being with loved ones                               | 1         |
| Belief  | 12        |
| Belief in God                                       | 2         |
| Believe in your family                              | 1         |
| Blessings   | 1         |



| Code  | Frequency |
|---|-----------|
| Boss's approval   | 1         |
| Building relationships  | 4         |
| Chastity  | 1         |
| Children  | 4         |
| Chosen, or biological Family  | 1         |
| Collaboration   | 11        |
| Communication   | 22        |
| Community   | 6         |
| Companionship   | 1         |
| Company   | 1         |
| Confidentiality   | 1         |
| Conflict resolution   | 1         |
| Connection  | 24        |
| Cultivating emotional intelligence for better interpersonal relationships | 1         |
| Customer service  | 1         |
| Develop empathy and understand the feelings and needs of others.          | 1         |
| Effective communication   | 4         |
| Emotional support   | 1         |



| Code                 | Frequency |
|----------------------|-----------|
| Empathy              | 7         |
| Empowerment          | 3         |
| Encouragement        | 4         |
| Faithfulness         | 1         |
| Faith                | 13        |
| Family               | 102       |
| Fearing God          | 2         |
| Find a Study Partner | 1         |
| Forgiveness          | 1         |
| Friendships          | 31        |
| Get married          | 2         |
| Getting along        | 1         |
| Global Marketing     | 1         |
| God                  | 15        |
| God's blessings      | 1         |
| God's grace          | 3         |
| God's help           | 1         |
| God's will           | 4         |



| Code                                     | Frequency |
|--|-----------|
| Good circle                              | 1         |
| Good company                             | 1         |
| Good connection                          | 2         |
| Good governance                          | 1         |
| Good managerial skills                   | 1         |
| Good mentors                             | 1         |
| Good relationship building skills        | 1         |
| Good relationship with God               | 1         |
| Good social network                      | 1         |
| Good spouse                              | 1         |
| Grassroots networking                    | 1         |
| Happy family                             | 1         |
| Happy relationship                       | 1         |
| Having people that impact you positively | 1         |
| Having people you trust by your side     | 1         |
| Having the heart to help one another     | 1         |
| Having the right contacts                | 1         |
| Having the right set of people           | 1         |



| Code                           | Frequency |
|--------------------------------|-----------|
| Healthy relationships          | 2         |
| Help from people               | 1         |
| Help others                    | 1         |
| Influence                      | 6         |
| Inspirations                   | 1         |
| Interpersonal interaction      | 1         |
| Interpersonal skills           | 1         |
| Knowing when to seek help      | 1         |
| Language proficiency           | 1         |
| Leadership                     | 18        |
| Likeminded people              | 1         |
| Liked by others                | 1         |
| Listening skills               | 3         |
| Love                           | 42        |
| Loving children                | 1         |
| Maintaining good relationships | 1         |
| Meditation                     | 1         |
| Meeting people and networking  | 1         |



| Code                            | Frequency |
|---------------------------------|-----------|
| Mentorship                      | 9         |
| Motivating others               | 1         |
| Motivation from family          | 1         |
| Negotiation skills              | 1         |
| Networking skills               | 31        |
| Parental love and care          | 3         |
| Parental support                | 1         |
| People                          | 3         |
| People that care about you      | 1         |
| Personal belonging              | 1         |
| Personal skills                 | 1         |
| Pets                            | 1         |
| Piousness                       | 1         |
| Praying to God                  | 25        |
| Presence of a supportive family | 1         |
| Proper guidance                 | 1         |
| Putting God first               | 1         |
| Quality friends                 | 1         |



| Code                                   | Frequency |
|--|-----------|
| Raise one's social status              | 1         |
| Receiving guidance                     | 1         |
| Relationships                          | 13        |
| Religion                               | 1         |
| Right Circle/Network                   | 1         |
| Right connection                       | 1         |
| Role models                            | 1         |
| Seek professional help                 | 1         |
| Seek support                           | 1         |
| Seeking help and resources when needed | 2         |
| Social influence                       | 2         |
| Social intelligence                    | 1         |
| Social life                            | 1         |
| Social responsibility                  | 1         |
| Social skills                          | 14        |
| Social Support                         | 2         |
| Status                                 | 1         |
| Stay prayerful                         | 1         |



| Code  | Frequency |
|---|-----------|
| Storytelling skills   | 1         |
| Strong Community  | 1         |
| Strong friend/familial connections  | 1         |
| Support   | 27        |
| Surrounding themselves with friends and family  | 1         |
| Talk to parents, teachers, and counselors and let them know about your learning needs | 1         |
| Team collaboration  | 4         |
| Team leadership   | 1         |
| Team spirit   | 3         |
| Teamwork  | 13        |
| The loyalty   | 1         |
| The people you know   | 1         |
| Trust   | 6         |
| Trust in one's family to support and achieve success                                  | 1         |
| Unceasing support   | 1         |
| Unity   | 1         |
| Useful Relationships  | 1         |
| Wife  | 1         |



# Theme: Vision for oneself (*n* = 487)

| Code                                   | Frequency |
|--|-----------|
| A burning desire                       | 2         |
| A clear sense of purpose or goals      | 1         |
| A good planner                         | 1         |
| Achieving desires                      | 1         |
| Action                                 | 3         |
| Ambition                               | 10        |
| Be a better version of yourself        | 1         |
| Be goal driven                         | 1         |
| Belief in oneself                      | 18        |
| Concentration                          | 3         |
| Desire to improve                      | 3         |
| Discovering your purpose in life       | 1         |
| Dreams                                 | 8         |
| Drive                                  | 10        |
| Focus                                  | 80        |
| Give full attention to what I am doing | 1         |
| Giving it your all                     | 1         |



| Code   | Frequency |
|--|-----------|
| Goals  | 79        |
| Have a plan for success                                  | 1         |
| Having a strong drive and enthusiasm for their pursuits. | 1         |
| Норе   | 14        |
| Hustle   | 1         |
| Initiative   | 6         |
| Internal and external motivations                        | 1         |
| Knowledge of oneself                                     | 1         |
| Living a life that is worth living                       | 1         |
| Motivation   | 47        |
| Not looking down on oneself                              | 1         |
| Obsession  | 1         |
| Passion  | 75        |
| Performance  | 1         |
| Plans  | 28        |
| Practice   | 3         |
| Preparation  | 7         |
| Prioritization   | 3         |



| Code                      | Frequency |
|---------------------------|-----------|
| Productive                | 1         |
| Purpose                   | 23        |
| Pursuit                   | 1         |
| Resolutions               | 1         |
| Risk taking               | 15        |
| Strategic thinking        | 7         |
| Taking deliberate actions | 1         |
| The work of your hands    | 1         |
| Vision                    | 15        |
| Zeal                      | 6         |



# Theme: Not applicable (*n* = 108)

| Code                    | Frequency |
|-------------------------|-----------|
| 1                       | 2         |
| 2                       | 2         |
| 3                       | 2         |
| Brief                   | 1         |
| Contempt                | 1         |
| Deceptive               | 1         |
| Fear                    | 1         |
| Forge                   | 1         |
| Government              | 1         |
| N/A                     | 90        |
| None                    | 1         |
| Nothing stumps me, okay | 1         |
| Research                | 2         |
| Up                      | 1         |
| Write it out            | 1         |



# Appendix H: Open-Response Themes—Anything Else We Should Know?<sup>1</sup>

### **Theme: Disability identity**

**Definition:** How one has come to understand their disability or aspects of their disability

#### Quotes (*n* = 84):

- A disability is not a curse.
- A learning disability is a gift.
- A learning disability isn't a major disability, and we can also work just like normal human beings.
- Accepting a learning disability is the first step, and working to overcome it is the most important.
- As a person living with learning disabilities, I have come to realize, my condition shouldn't limit me.
- Being a person with disabilities does [not] make me less human. The only difference is I just need to put in extra effort and attention to anything I need.
- By surmounting learning challenges, I've gained insight into the value of selfassessment and perpetually enhancing my learning techniques and abilities.
- Dealing with my learning challenges has prompted me to delve deeper into my learning process and how to unleash my full potential.
- Disability and neurodivergence are a part of people but do not define them but can have challenges that can help define their sense of self.
- Disability experience has improved my level of understanding in a more productive way.
- Disability is not the end of the world.
- Everyone is the best creation.

<sup>&</sup>lt;sup>1</sup> Responses have been lightly edited for spelling, grammar, and readability.



- Everyone is beautiful and perfect just the way they are. We've got something natural as a part of us.
- I acknowledge that each individual has their own learning style, so I've learned to value my learning preferences and discover methods that align with them.
- I am better adapted to learning from and by speech as a result of my disability and this has made me able to express myself better, which I enjoy doing anyways.
- I am fully aware of my state as a person with a disability and I appreciate myself.
- I believe my learning is never a barrier for me.
- I care less about my condition and try as much as possible to focus on the best part of me. This helps me achieve a lot in all my endeavors.
- I feel discouraged to do things easily. And I sometimes don't know if my disability is the cause of it.
- I feel good most times but a good number of times I wish I did not have this disability.
- I have come to discover that nothing is impossible.
- I have experienced both positive and negative reactions due to my learning disability and I am able to lead a fulfilled life regardless of my condition.
- I have learned that I can achieve anything as far as I set my heart to it.
- I have never looked at my learning differences in a negative way. I have always stood up for myself and took a stand for others when needed. My learning differences don't define me, they make me stronger.
- I love my life, but I feel I would've achieved more without my disability.
- I recognize that each person learns differently, so I've learned to honor my own learning style and explore strategies that cater to my needs.
- I think mine is kind of weird because it isn't crippling but definitely plays a role in my academic/social life.
- I think that learning disabilities do not mean low intelligence, I am as intelligent as anyone else.
- I think the learning disability doesn't mean I can't succeed, it just makes me take a different path in the learning process.
- I understand that everyone has a unique way of learning, so I've learned to respect my learning style and find strategies that suit me.
- I'm proud of being learning disabled, it makes me who I am.
- It gets better when one accepts his/her reality.
- It instilled in me a sense of self-acceptance and confidence.



- It is not good to have disabilities, it makes life more complex.
- It made me see life in a different way, that makes me appreciate others in this condition.
- It's shown me the power of perseverance and determination in achieving goals.
- I've become more adaptable and open-minded because of the challenges posed by my learning disability.
- I've discovered how to utilize my areas of proficiency to address my learning struggles.
- I've gained insights into the strengths and abilities of individuals with disabilities.
- Learning disabilities are not uncommon, and many people struggle to cope with their learning difficulties.
- Learning disabilities do not imply lack of intelligence; they simply mean having difficulties in specific areas of learning.
- Learning disabilities made me more aware of who I am.
- Learning disabilities made me more satisfied with myself.
- Learning disabilities makes one feel like a burden.
- Limits my ability to love school.
- Living with learning disabilities can be challenging, but it's important to remember that everyone's experience is unique.
- My disability has made me discover my makeup skills.
- My disability has shaped me in developing other alternatives to carrying out tasks and coming out well.
- My disability is not really a big deal to me.
- My experience with a learning disability is not something I'm ashamed of, it's something I'm proud of because I'm trying to overcome it.
- My experience with learning disabilities has shaped my unique learning style and way of thinking.
- My experience with my learning disability is that this disability is not a limitation to us as individuals. We can choose to become whatever we set our heart to achieve.
- My learning disability doesn't limit me.
- My learning disability enables me to cope with life issues whichever way they come in.
- My learning disability experience has made me stronger and more determined to move forward in the face of difficulties.
- My learning disability gave me more ups to advance my skills for better opportunities.



- My learning disability has helped me accept myself for who I am. It has also helped me to mingle and relate well with people with other disabilities.
- My learning disability has helped me learn a lot about myself and the people around me.
- My learning disability has helped me understand myself and to know that disability is not a crime.
- My learning disability has impacted positively on me in that I have developed other measures of carrying out tasks.
- My learning disability has improved me positively in that I have developed other means of finding solutions to problems.
- My learning disability has made me more focused and motivated in pursuing my skills.
- My learning disability has shaped me to be the person that I am today.
- My learning disability is my fuel for great performance.
- My learning disability is not a reflection of my intelligence, and also me dealing with a learning disability does not mean I'm not capable of doing things myself, in fact I try to do new things that I can't.
- My learning disability made me more positive.
- My life is more than just my disability. It doesn't define me.
- Not officially diagnosed, but I have self-diagnosed as having dyscalculia.
- Once I stopped seeing ADHD simply as a barrier and used my different way of processing the world to my advantage, I was able to gain a deeper sense of accomplishment and perseverance.
- Over time, I have embraced my unique learning style of using visual aids and sought support from teachers and peers.
- Overcoming my learning hurdles has shifted my attention towards understanding my learning process and maximizing my potential.
- People with disabilities can still be outstanding.
- Self-confidence is key.
- Self-development requires learning, but with a learning disability, it can become very hard for an individual (e.g., myself, etc.) to flourish in areas we would like to see ourselves doing excellently well in.
- Self-awareness helps.
- Sometimes I wish I did not have this disorder, but I guess I just have to live with it.



- The challenges in my learning journey have heightened my focus on my learning process and optimizing my potential.
- The disability changes you and how you see things.
- The learning disability does not prevent me from becoming a valuable person, I still have my own dreams and pursuits.
- The learning disability has given me a greater appreciation for the beauty and simplicity of life.
- These attempts let me gradually find my own learning rhythm and way.
- They are a blessing and a curse at the same time to me as a person.
- We are ready to learn if given the opportunity to.
- You have to develop coping mechanisms.



## **Theme: Well-being**

**Definition:** Indications about how satisfied one feels about their life and life experiences, levels of happiness, and perceptions of self in relation to overall existence

#### Quotes (*n* = 59):

- A learning disability has a negative impact on one's personal development.
- A learning disability is a big problem to teens.
- After a long battle with disability in learning I can say things have improved with time.
- Along the line, I thought my life would never amount to anything great, but I am grateful that it has changed for good.
- By setting incremental goals and steadily achieving them, I've boosted my learning efficiency and achievements.
- Despite being disadvantaged, we still need a lot of help.
- Despite being discriminated against, I am able to accept reality and love myself the way I am.
- Feeling good about certain things.
- For now, I can say, life is too tough.
- I am a fighter, and I will live a good life.
- I am comfortable with my status and disabilities.
- I am coping fine with my learning disability.
- I am excited that dyspraxia didn't weigh me down.
- I am getting better since I graduated college.
- I am good.
- I am in a good place currently.
- I am okay.
- I don't feel motivated about doing anything.
- I enjoy the progress I am making with managing my disabilities with my day-to-day life.
- I feel better as a person.
- I feel good for who I am.
- I have a strong feeling that all will be well with me.
- I have grown so much with my disability, and I am so proud of myself for that.



- I have learned to accept the way I am and strive to be comfortable.
- I have learned to be able to manage it to some extent.
- I hope my future will be what I have already imagined.
- I hope that all goes well for my life.
- I may experience a language barrier, having difficulty learning a non-native language.
- I'm really happy.
- I'm optimistic about my disability.
- I'm satisfied with the experience with my learning disability.
- It's a life that is difficult.
- It's all good.
- It's been an amazing experience even though there are downs to it.
- It's been rough but has been a great journey.
- It's painful.
- I've realized that sharing my learning outcomes and accomplishments with others can fuel my confidence and drive.
- I've yet to discover my full capabilities within my condition.
- Life is generally good so let's enjoy it.
- Life is hard for the likes of me. I wish there was some change I could do.
- Life's tough.
- Living a disability life is very bad.
- Living a life of disabled is not easy.
- My learning disability didn't impact me in any way.
- My learning disability has not limited me in any way, and I am doing just fine.
- My learning disability has really taken a positive direction, it's improving day by day.
- My learning experience of disability has mostly been positive.
- Negatively impacted.
- Nothing really, I am good at what I do and that's good enough.
- Social life was not fun.
- Still working on myself.



- The damage is done. I have difficulty liking teachers to this day because of how often I was picked on by them in high school, so my college education took a toll as I tried to avoid classes with extensive writing involved. My options are very limited.
- There are so many things I want to accomplish, educationally and technologically, but [it] seems impossible due to my disability status.
- There have been times when I felt dissatisfied.
- Things are tough now but [I am] still trying.
- We should be loved.
- Well, it's hard coping but I'm trying.
- Well, sometimes the process is hard.
- Yes, things were really difficult for me, the government never cared.



## **Theme: Implications of disability**

**Definition:** Descriptions of ways disability impacts their life or how they experience their disability

#### Quotes (*n* = 45):

- As a person with disabilities, I just have to put in more effort to learn basic skills and knowledge.
- As someone with a learning disability, I often find that I need extra time to process information and instructions.
- As someone with LD, I often require extra time and patience to process information and instructions, which can sometimes be frustrating.
- Auditory and visual processing disorders
- Balancing strengths and weaknesses associated with the learning disability.
- Challenges with writing
- Difficulty understanding and retaining new information
- Expressing myself is difficult.
- I am a slow learner.
- I find it hard to understand what people are talking about.
- I get panic attacks when I have to read out loud or write anything.
- I may experience exam pressure, causing anxiety.
- I may experience lack of concentration, being easily distracted.
- I may experience memory difficulties, finding it hard to remember course content.
- I may experience poor public speaking skills, having difficulty expressing ideas.
- I may experience slow mathematical calculation speed.
- I may experience social anxiety, affecting classroom performance.
- I may have an issue of lack of participation in classroom discussions.
- I need to give myself more time to complete tasks and study goals.
- I often forget even the most important things in my life.
- I once encountered great difficulties in my studies, especially in subjects such as mathematics and physics that required logical and abstract thinking.
- I sometimes feel overwhelmed by the vastness of certain subjects, unsure where to begin or how to navigate the complexities.



- I sometimes feel overwhelmed when dealing with large amounts of information.
- I sometimes find it hard to stay focused during self-directed learning.
- I sometimes struggle with motivation, especially when faced with tasks or subjects that don't align with my interests or passions.
- I sometimes struggle with time management, failing to allocate sufficient time and resources to my learning endeavors.
- I struggle to learn new things quickly.
- I would struggle with study habits, such as lack of attention, being easily distracted, and unable to maintain focus.
- It gets frustrating when I am enthusiastic about something but can't proceed to work on it because of my disability.
- It's hard for me sometimes to differentiate words, and I don't recognize some letters sometimes.
- It's hard for me to always communicate with people.
- It's hard when you study.
- Learning demands additional time and effort from me.
- Learning disabilities can make routine tasks so difficult.
- Learning disabilities may affect areas such as reading, writing, spelling, math calculations, or attention span.
- Learning disability has to do with the way someone's brain works. It makes it harder for someone to learn, understand, or do things. [It] is a reduced intellectual ability and difficulty with everyday activities. For example, household tasks, socializing or managing money which affects someone for their whole life.
- My learning disability still affects me to this day, I literally have to use text to speech to be able to carry out reading activities, even taking this survey.
- People with learning disabilities may face difficulties in processing information, such as poor concentration or reduced memory.
- Reading would pose a challenge for me, making it difficult to comprehend intricate articles and textbooks.
- Slow information processing would result in struggles when dealing with extensive amounts of data.
- Sometimes I can write well, sometimes I just forget most of the words I know how to write. Like it comes and goes.
- The more repetition, the more I learn.


- Time management
- When given more time, I understand a lot of things.
- Writing would present challenges for me, especially when trying to convey my thoughts and perspectives.



# **Theme: Resilience**

**Definition:** Discussions of keeping going, not stopping or giving up, persisting when things are hard, and how one feels about these actions

### Quotes (*n* = 28):

- As I learned more about how my brain processed information, I began to adjust my learning approach. I had to consciously work harder to reach the same level of success as my peers. I was constantly taking notes, even on self-explanatory concepts, because I had a harder time retaining knowledge, and since it forced my brain to constantly focus. Once I had begun working alongside my brain, I not only found myself succeeding but excelling.
- Despite requiring additional time for comprehension and assimilation of new concepts, I've realized that by staying focused and persistent, I can overcome obstacles and achieve progress.
- Every challenge I face keeps me going towards my dreams.
- I am good at finding and using my strengths to overcome learning disabilities.
- I learned to adapt and develop strategies to cope with my learning disability. Today, I'm
  proud to say that I've overcome many obstacles and achieved success in my own
  unique way.
- I might be slow to learn but once I get it, I become a pro.
- I thought of dropping out but I'm glad I was able to finish high school. It wasn't easy, but I persevered.
- I work really hard to make up for [my disabilities], so they don't affect me. I take medicine and see a therapist also.
- In facing learning obstacles, I've learned that maintaining a positive outlook and optimistic demeanor is vital for overcoming adversity.
- It was difficult but I achieved goals.
- It's not actually been a smooth journey, but I just keep on pushing and believing that it will be fine.
- I've faced learning challenges, but I've overcome them with determination.
- I've learned to leverage my strengths to overcome my learning challenges.
- Learning disabilities should not limit personal pursuits; they can be overcome with effort and appropriate support.
- Learning hasn't always been easy for me, but I've found ways to succeed.



- Learning new skills or knowledge may be daunting for me, yet I can conquer obstacles by persistently learning and maintaining a positive mindset.
- Living with learning disabilities has taught me resilience and creativity in problem solving. It's important to recognize that everyone's experience is unique, but with understanding and support, individuals with learning disabilities can thrive and contribute in meaningful ways.
- My autism and disability weighed me down, but I didn't give up on myself.
- My learning disability has made it difficult for me to challenge people, but I never gave up.
- My learning disability has played a positive role in life as I have developed other ways of survival.
- My life was so frustrating at first because of the obstacles I faced, but I have been able to get myself together through resilience and determination.
- Overcoming these emotional hurdles has contributed to personal growth and resilience.
- Success stories of overcoming obstacles.
- Through conquering learning hurdles, I've become tougher and more resilient, and have gained the ability to persevere in the face of difficulties.
- Through surmounting learning challenges, I've become more resilient and determined, learning not to give up easily when confronted with difficulties.
- We need to rise above what we are.
- With my learning disability, I never give up on something, I'd rather learn more. My being disabled doesn't disturb me from learning.
- You should just keep focused and know your aim in life and not pay attention to what others are saying.



# **Theme: Networks of support**

**Definition:** Experiences with family, friends, relationships, and levels of support from one's community

### Quotes (*n* = 24):

- Community should respect people with disabilities.
- Growing up was hard, especially when I lost my main motivator, my mom. This scattered my life and made me drop school. Losing a loved one has a strong effect on how people with learning disabilities grow up.
- Having someone who keeps assuring me of what the future holds has kept me going despite my learning disability.
- I appreciate educators and mentors who have provided support and encouragement throughout my journey.
- I barely get enough support in the community to showcase my talent.
- I expect love and affection.
- I feel comfortable making connections with people like me.
- I get the least support. No one believes in me, no one supports me. Feels like I'm by myself. Zero friends.
- I have a role model that motivates me a lot, this helps my recovery journey.
- I have friends who care so much about me and believe in me.
- I learned to ask questions of teachers and mentors and to seek their advice and guidance.
- I sometimes get rejected and isolated by my friends.
- I was able to pull through the discrimination because of my family.
- I'm thankful for my family that supported me through all my struggles with my disability.
- It's tough sometimes but having family around has helped.
- Most people don't know I have one unless I tell them. In the past, it affected me more socially with same age peers. Not so much now. I chose friends in college that "get me" and vice versa and that works for me.
- My family and peers have been my backbone, they gave me a platform to navigate the world on my own terms and through that I have learned to embrace my unique abilities.
- My family encouragement is the best thing for me.



- My father would always want me to do what he wants and not what I want, not even once.
- Seek out support networks and share experiences and advice with others who have similar experiences.
- Sharing my academic accomplishments and successful experiences with others has helped enhance my self-confidence and drive.
- Sharing my experiences with others can help them understand learning obstacles and foster greater understanding and support among individuals.
- Telling friends about my learning disability helps me a lot. I get the support I need without feeling like it's a burden.
- The role of mentors or role models in personal development.



# **Theme: Discrimination**

**Definition:** Experiences with discrimination related to aspects of oneself as well as feelings related to discrimination

### Quotes (*n* = 24):

- Always left out of groups, told I come off too intense, physically bullied
- Because I am of Asian descent, I feel more prone to the stresses of the stereotype threat when it comes to my learning disability.
- Being disabled has resulted in discrimination.
- Community awareness in my town is very low; they are not aware of others in the community with learning/mental disabilities. As such, these members participate in acts that are discriminating against those who have disabilities, and when they are called out for disrespect toward these individuals, they become defensive and make the situation worse for the disabled by being outwardly uncooperative and hostile.
- Disabilities are often overlooked when a student is excelling, but that doesn't mean they aren't compensating for some struggle behind the scenes.
- Disability is a stigma.
- I am not really suffering from any discrimination.
- I feel like the minority.
- I have been discriminated [against] because of my ethnicity and learning disability.
- I have faced rejection by a girl I approached because of my learning disability.
- I am no longer bothered about discrimination.
- I no longer experience discrimination.
- I think it will be a nice thing if people with disabilities issues are not looked down on.
- It's really hard trying to exist in a society where disabilities are viewed as a bad thing.
- I've been neglected over my disability.
- Many people don't believe I have a disability because I don't act or look disabled which is insulting overall. I face a lot of discrimination because of it.
- Misconceptions or stereotypes faced and how to address them.
- Most people don't care about disabled people.
- Nobody should be discriminated on the basis of their disabilities as we should all be appreciated just the way we are. Nobody chooses to be born with a disability.



- One of the hardest things is people making jokes about mental disabilities. They'll
  misspeak or spell and then say, "Oh I must be dyslexic". I find it offensive but struggle
  sometimes to speak up and address it. People seem to not understand it and just look
  down on it. They treat it like what society calls "blonde moments" or a temporary
  mistake when in reality, it's an everyday, constant struggle.
- The discrimination towards [it] is heavy.
- The misconceptions about learning disabilities can be more hindering than the condition itself; awareness is key.
- Well, I think it's important to understand that learning disabilities are not always visible or obvious. Just because I don't "look" like I have a learning disability doesn't mean I don't have one. It can be really frustrating when people make assumptions about my abilities based on how I look or talk. I also think it's important to know that having a learning disability doesn't mean I'm not intelligent or capable. It just means I have a different way of learning and processing information.
- Yes, I've experienced a lot of bad things due to my learning disability. I was disgraced and discriminated against in places I go to, especially the school environment.



### **Theme: Accommodations and supports**

**Definition:** Access or denial to accommodations and supports as well as a discussion of what supports are beneficial

#### Quotes (*n* = 23):

- Accepting personalized education plans and support services can improve academic performance and confidence.
- Everyone's expression of learning disabilities is different, so personalized support and strategies are necessary.
- Find out what strategies and approaches have been adopted to deal with learning disabilities to overcome difficulties and achieve success.
- I believe that understanding an individual's interests, strengths, and goals, as well as their expectations and aspirations for the future, can help provide them with more effective support and resources.
- I benefit greatly from positive reinforcement and encouragement.
- I feel supported with my learning disability experience.
- I often rely on assistive tools and technologies to aid my learning.
- I think that my life has been immersed in having or supporting those who learn differently, based on the schools I went to, where I worked, and navigating it all.
- I wish more kids in school with my learning disability could be helped.
- Individuals with learning disabilities may need extra time to complete tasks; educators and employers should offer flexibility and understanding.
- It changed my ability to learn from readings completely when I learned about text-tospeech software.
- It is difficult for me to access the educational materials I need as well as accommodations because of my learning disability.
- It can be easy for us if we are exposed to AI.
- It's vital to recognize the diversity among individuals with learning disabilities: achievements, challenges faced, and the varying strategies employed to navigate daily tasks and long-term goals. Understanding and supporting these unique aspects can significantly enhance their experiences and successes.
- Leveraging technology, I've become adept at employing tools such as voice recognition software and educational applications to bolster my learning.
- My easy access to disability rights.



- Not getting all the supports I need in college without proper documentation.
- People with learning disabilities often require specialized educational support and accommodations to help them succeed academically and in other areas of life.
- People with learning disabilities should receive special accommodations at times.
- Providing clear, concise directions and allowing for accommodations like extended time on tasks can greatly help me succeed.
- Tutoring in my early years truly helped me shape my perspective and understanding on how to think about new things.
- With the advancement of technology my dysgraphia has gotten easier to manage.
- You need to ask about how we cope with dyslexia. What tools do we use to assist us with our disability.



# **Theme: Feeling different**

Definition: Experiences of feeling isolated or different from one's peers or community

Quotes (*n* =23):

- Besides exhausting myself, I also give my teacher a lot of work, (more classes). Spending more time in school while my mates get time for enjoyment and relaxation.
- Explaining to people how it works kills me.
- Growing up "twice exceptional" is hard because people don't take into consideration that you could be disabled. I thought I was just "bad at reading" for like my whole life until I realized I had a disability I could accommodate.
- Having a learning disability has, however, had some positive impacts because it has pushed me to putting some extra efforts so as to match with my peers and that has at most times brought positive results.
- Having a learning disability, I am constantly comparing myself to people who don't have one. I struggle with simple tasks that others seem to have no issue with.
- I feel extremely misunderstood often with peers.
- I feel ignored by people around me.
- I have difficulty asking for help when I don't understand something, fearing that it will make me appear incompetent.
- I have really struggled, long studying hours, long hours of repeating what other learners seem to grasp in seconds, but still I ended up doing better.
- I often feel like I'm constantly fighting to keep up with my peers.
- I often felt like an underdog fighting against stereotypes and assumptions about what I could achieve due to my disability.
- I think people do not understand my capabilities on how smart I am and push me because I have a disability.
- I want to face up to my learning disability, but people around me always look at me differently.
- I'm experiencing difficulties coping and proving myself to my peers.
- It has been a struggle my whole life to have ADHD in a world that doesn't.
- It is invisible, and that makes it more difficult sometimes. People will think you are stupid and unable to achieve. Not being able to spell and read at the proficiency level of most people affects my everyday life, not just my education.
- It's difficult for me to relate.



- It's difficult to try and explain to others how differently my brain processes information. Sometimes I feel people don't quite understand, but that's ok.
- It's not easy trying to explain to those who ain't.
- Learning disability makes you feel you are a problem.
- My experience is not universal, but it shows even though kids are young, they can figure out they are different and feel alienated and strange because of it. Being diagnosed gave a name for my experience, demystified it, and provided steps for how to improve my situation. The diagnosis and label of 'different' is not what made me feel different; I already felt that way. It is important to help kids understand what is happening and why they have different experiences from their classmates.
- People most often feel I am not smart enough.
- Sometimes, I feel isolated because I'm different.



# **Theme: Mental health**

**Definition:** Experiences related to emotional regulation, feelings, mental well-being, and mental health care

#### Quotes (*n* = 22):

- A learning disability can lead to low self-esteem.
- A learning disability is not easy to deal with and one should be cautious on how it affects their mental health.
- A learning disability lowers dignity and esteem. One wouldn't like to always disappoint your teacher, yet it happens.
- Depression disorder
- Having a learning disability may lead to loneliness and self-denial.
- I also began to pay attention to my mental health and learn to adjust my study status and emotions.
- I have been discriminated against many times and I don't really enjoy living.
- I indulged in drugs back in high school to make me feel better. I used to demean myself and feel that I was not able to excel.
- I sometimes experience anxiety or nervousness when faced with exams or assessments, which can impair my performance.
- I struggle with self-doubt, questioning whether I have what it takes to succeed in my chosen field of study or career path.
- I tend to get discouraged when I encounter difficulties or challenges, feeling tempted to give up rather than push through adversity.
- I tend to get discouraged when progress feels slow or non-existent, leading me to question whether my efforts are worthwhile.
- I usually have the feeling of low self-confidence due to my professional setbacks caused by my learning disability.
- It's essential to recognize the emotional impact of living with a learning disability. There have been moments of frustration, self-doubt, and even anxiety about how others perceive my abilities.
- It is still hard to feel good about myself because I struggle in school.
- It makes me anxious.
- It really makes me hopeless sometimes.
- It's makes life not worth living.



- My experiences with a learning disability have highlighted the significance of self-care and managing stress effectively.
- Proper counseling
- Psychological impact
- Strategies for managing stress and anxiety related to learning differences.



# **Theme: Societal change**

**Definition:** Discussions of changes one wishes to see in society and the world at large, attitudes, biases, and prejudices one wishes to see be changed

#### Quotes (*n* = 19):

- Disabilities are not something to judge someone with.
- Educators and parents should actively seek help and resources to better support individuals with learning disabilities.
- Finding friends was very hard at first. I wish there was a way parents could sensitize their kids towards others with learning disabilities.
- I hope more effort would be made on documenting people with disabilities, because many are enduring deep down and can't face the world because of their problems.
- I hope people will be more patient and tolerant of us with learning disabilities.
- I want people to see me as a better person and also know I am human.
- Importance of understanding and awareness about specific learning disabilities.
- More focus on disabled people should be encouraged in schools.
- Our society needs to create an enabling environment for disabled people.
- People should embrace people with disabilities.
- People with learning disabilities are part of the community and should be as valuable as people without disabilities.
- People with learning disabilities should be seen as normal people.
- Provision should be made for more psychological support for people with learning disabilities.
- Sometimes children should be taught not to make fun of other people who aren't as good as them.
- The government should put in more effort on how to assist people with learning disabilities, especially in schools.
- The world is not set up for neurodivergent people and I wish this was addressed more.
- There's a lot of things that people need to know.
- To provide more information to society about learning disabilities and to accept all.
- Understand the specific extent to which learning disabilities affect learning, work and daily life so that people can better understand my challenges.



### **Theme: School experiences**

Definition: Experiences across K-12 and postsecondary settings

#### Quotes (*n* = 17):

- Being homeschooled prolonged the time that I was not diagnosed, which made things very difficult for me in those years of school.
- College is a bit better than high school for me. Because here almost everyone is minding their business and they ain't got no time to discriminate.
- Due to my learning disability, it's really been a challenge for me in my education.
- Due to the trauma I endured during my childhood at school, I struggle with anything
  related to disability services. I tend to be short-tempered in settings where I am
  receiving help for my disabilities. For example, the people that work in disability
  services at my university are very kind, but I can't help but to be short tempered and
  quick to assume that they don't want to help me.
- Finding a course to major in was hard at first but I found a passion in me and decided to go for it.
- For my learning disability, I was diagnosed at 2 different points. Once in the second grade and the second one was in 12th grade.
- Having undiagnosed ADD until the age of 18 made school a nightmare but once I got on meds, I was pretty much fine.
- I did not do well in my academic performances due to disability.
- I was denied accommodations by my professor after getting approval by the DRC.
- In high school, I did not feel like my school gave me the support in my academic classes that I should have had. I went to vocational school for a half day each day, and that was the best part of my day.
- It was tough, I was bullied a lot in high school.
- It was very hard coping with a learning disability in high school, repeating grades, and scaling through high school, because my pace was slower than my mates. But with the support I got, I felt I was no less of a person and could do anything I set my mind to do, though it might take time.
- Low involvement in classroom activities would result in a lack of active participation in the learning material.
- Navigating the education system with a learning disability was like solving a puzzle every day.



- Non-accommodation students are very jealous of accommodation students and think it's unfair.
- Taking a longer time than usual in classes to capture basic content. Sometimes you despair academically. You feel that you were not meant for academics, and this deteriorates your focus by feeling less fortunate. I feel that people with disabilities should not be taken lightly because the daily challenges are enormous.
- When I was in high school, we were still writing essays by hand, and I would say that led to me having bad interactions with teachers who couldn't understand my writing. It's not perfect now; I often forget words in the middle of sentences, but with spell check, it's not much of an issue anymore.



### **Theme: Personality**

Definition: Descriptions of personality traits or aspects of themselves

#### Quotes (*n* = 17):

- Always shy
- Always think a lot
- Despite my learning disability, I am exceptional at creative thinking and problemsolving.
- I am not confident.
- I am resilient and determined, constantly adapting to overcome obstacles in pursuit of my goals.
- I am still a happy individual irrespective of my disabilities.
- I am trying to be more empathic with people.
- I am very intelligent and driven, despite my learning disabilities.
- I find it easy to learn new things.
- I get angry for nothing sometimes.
- I have a strong mindset.
- I rarely fail to make friends.
- I wish I could learn something someone with disabilities can become an expert on.
- I've always been myself right from time, and also, I love trying things. I also have unique perspectives, and I'm a creative problem solver.
- Self-involvement
- Sometimes I get angry.
- Talents I have



# Theme: Quality of life

**Definition:** Being able to take care of oneself; physical health, transportation, health care system, technology; navigating one's life

Quotes (*n* = 11):

- Being mentally disabled is a bit of a challenge.
- How do other physical health challenges affect our learning disabilities? I was hoping to see questions like that.
- How to better adapt to society, acquire the necessary skills and jobs.
- How to do life.
- I can do virtually everything for myself.
- I find it difficult to balance my academic pursuits with other commitments, such as work or extracurricular activities.
- It's difficult to deal with my daily activities but I somehow manage.
- Learning disabilities do have some negative effects on my life and work.
- My learning disability did have a certain negative impact on my work and life at some point, but it didn't stop me from pursuing a good life.
- My learning disability has been a major problem for me getting along with my friends.
- Social challenges would hinder my interactions and cooperation with peers and instructors.



# Theme: Thinking about one's future

**Definition:** Discussions of the plans one has for their futures well as envisioning goals or desired outcomes for the future

### Quotes (*n* = 11):

- I am not sure of my future.
- I don't know what my future will be.
- I pray every day to be a successful person.
- Improve my disability learning
- Improving my life
- Indecisive about future
- Sometimes, I don't know how else to think or behave because I feel drained merely thinking about my future.
- Trying to figure out things more.
- Trying to improve myself in all ways.
- Working hard on myself.
- Working on my importance in society.



# **Theme: Employment**

Definition: Experiences and feelings about finding and retaining employment

#### Quotes (*n* = 8):

- Being disabled mentally limits me in my job.
- Gaining employment can be challenging.
- Getting work has been quite challenging.
- I have advocated for accommodations at work but been denied. I have a really great job overall and understand my rights but am afraid to ask for more because of the fear of being fired. I think this is common in the disability community– knowing how to advocate for yourself but being unable to do so because of the potential consequences.
- I'm still looking for a job.
- It's been a smooth ride since I got a job; unlike before, the discrimination has been reduced to a great extent.
- I've been facing limited job opportunities because of my learning disability.
- My experience with learning disability impacted my career life positively.

