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Working PAPER

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The Characteristics and Experiences of English Learner Students with Disabilities in Secondary School:

Evidence from the National Longitudinal Transition Study 2012

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ABSTRACT

We compare English learner students with disabilities (ELSWDs) with other students with disabilities and English learners on measures linked to postschool outcomes, using the National Longitudinal Transition Study 2012. ELSWDs have more socioeconomic disadvantages than other SWDs, but similar functional performance. ELSWDs have similar backgrounds as other ELs, but greater functional challenges. In school, ELSWDs are more likely to struggle academically and less likely to participate in activities than both other groups. They are less likely than other SWDs to receive extra time on schoolwork but they attend transition-planning meetings at a comparable rate, are suspended less, and parental expectations for their outcomes are higher. Most differences between ELSWDs and other SWDs diminish when we hold background characteristics constant.

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I. INTRODUCTION

Students with disabilities (SWDs) and English learners (ELs) are more likely than their classmates to come from disadvantaged socioeconomic backgrounds and have lower academic achievement (Kim 2011; Lipscomb et al. 2017; Snyder et al. 2016). SWDs and ELs are also less likely than students overall to pursue postsecondary education, and SWDs have lower rates of employment after high school (Newman et al. 2011; Kanno and Cromley 2012). Students who have both of these characteristics—they are still developing English proficiency and they have a disability—are doubly disadvantaged, and they are the focus of this paper.

Congress has passed laws to support youth who face challenges related to a disability or lack of English proficiency. The Individuals with Disabilities Education Act (IDEA) gives SWDs the right to a free appropriate public education guided by an individualized education program (IEP). IDEA also gives school districts money for special education needs. The latest reauthorization of IDEA in 2004 strengthened the law's focus on identifying measurable goals and services to help students transition to postsecondary education, jobs, and independent living. The Elementary and Secondary Education Act provides resources to support ELs and holds schools accountable for improving achievement among ELs, SWDs, and other subgroups. Its latest reauthorization, the Every Student Succeeds Act (ESSA) of 2015, requires states to develop English language proficiency standards, and schools to improve their ELs' proficiency using those standards.

English learner students with disabilities (ELSWDs) receive support through both IDEA and ESSA. If ELSWDs were in a category of their own, they would be equivalent in size to the fourth largest of 13 IDEA disability categories (National Center on Educational Outcomes, 2014; Snyder & Dillow, 2011), yet little information exists on their backgrounds and experiences.

Most of what we know about ELSWDs comes from a single study by Trainor et al. (2016) that compared them to other SWDs in 2001 and 2003 using data from the National Longitudinal Transition Study (NLTS)-2. We refer to these data as coming from 2003 for sake of brevity because they are for a single cohort of students, and combine measures obtained during 2001 with followup measures on the same students in 2003. Compared with other SWDs at that time, ELSWDs were more likely to have socioeconomic disadvantages, to be Hispanic, and to attend urban schools. ELSWDs were like other students with disabilities in terms of their participation in transition planning activities and graduation rates, although they were less likely than other SWDs to have been employed at any point since high school.

Much has changed since the youth in that cohort were transitioning to life after high school. Congress has reauthorized both of the major federal education laws supporting ELSWDs, and schools now must place a greater emphasis on their accountability for student performance (Dee et al. 2013). In addition, the Great Recession of 2007–2009 led to a substantial tightening of the job market (Oreopoulos et al. 2012). These changes have heightened the importance of updating and expanding information on ELSWDs to help policymakers and educators promote positive outcomes for these at-risk youth.

In this paper, we study a more contemporary cohort of ELSWDs and expand our understanding of their characteristics and experiences. We use the NLTS 2012—the third study

in the NLTS series—to examine ELSWDs who were in grades 7 through 12 (or in ungraded secondary classes) when surveyed in 2012 or 2013. Two research questions guided the analysis:

- 1. How do ELSWDs differ from other SWDs and other ELs in their background characteristics, functional performance, the supports they receive from school and home, their experiences in and outside of school, and their parents' expectations for their future?
- 2. To what extent do statistically significant differences between ELSWDs and other SWDs remain after we control for observable differences in their background characteristics?

By exploring these questions, we make three contributions to the research literature. First, we examine a more contemporary group of ELSWDs and study a broader set of characteristics, experiences, and expectations than Trainor et al. (2016). Measures of functional performance, self-determination, school and parent engagement, social involvement, paid work experience, and parents' expectations are available in the NLTS 2012, and these topics are related to post–high school outcomes for SWDs (Mazzotti et al., 2016; Test et al., 2009). Second, we provide the initial evidence of how ELSWDs compare with other ELs, using the NLTS 2012's inclusion of representative samples of students with and without IEPs. Third, we control for observable differences in the backgrounds of ELSWDs and other SWDs to inform hypotheses about why their experiences differ. Although our findings do not identify causal relationships, they provide insight into how non-English proficiency and broader contextual factors might interact.

II. IDENTIFICATION OF SWDS, ELS, AND ELSWDS

IDEA requires school districts to assess all children and youth who might possibly have a disability and deliver services to all those who are found eligible for them. After the assessment, school staff and parents determine whether a student's needs meet the broad IDEA definition for one of 13 primary disability categories and, if they do, the staff and parents develop an IEP for the student. The disability categories are autism, deaf-blindness, deafness, emotional disturbance, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, and visual impairment. Nationally, 13 percent of children ages 3 to 21 received IDEA services in 2012, and about half had a specific learning disability (Snyder et al. 2016).

The process for classifying students as ELs is based on ESSA and its predecessors, which require states to provide ELs with appropriate support for their English language development. ELs are students who have difficulty speaking, reading, writing, or understanding the English language; and who, if the difficulty remains unaddressed, may not have the opportunity to meet a state's academic standards. To classify students as ELs, most states first administer a home language survey to identify possible ELs (Bailey and Kelly 2010). Students who use a language other than English at home then take assessments to determine their proficiency in speaking, reading, writing, and understanding English; those with low scores are classified as ELs. About 9 percent of public school students in 2012 were classified as ELs, with 77 percent of them speaking Spanish at home (Snyder et al. 2016). Students can exit EL status when they perform well enough on later English language proficiency exams, although some states impose additional criteria, such as requiring input from parents and school staff or good performance on content area tests.

ELSWDs are students who have been identified as both having a disability and not being proficient in English. The process of identifying ELSWDs can be challenging because it requires educators to determine whether students' academic challenges are related to their disability, their struggles with learning English, or both (Burr et al. 2015). Research on language development shows that both SWDs and ELs can have similar problems with pronunciation, syntax, and semantics (Case and Taylor 2005). There is also evidence that school staff can confound evidence of disability identification and lack of English proficiency when tests are not culturally or linguistically diverse enough to identify disabilities among ELs (Abedi 2006; Figueroa and Newsome 2006). In fact, the choice of assessment can lead to different classification outcomes for the same student (MacSwan and Rolstad 2006).

III. PREDICTORS OF POSITIVE POST-HIGH SCHOOL OUTCOMES

Past research, discussed below, has identified in-school predictors of post-high school outcomes for youth, including SWDs and ELs. These predictors include measures of students' backgrounds, functional performance, support from schools and families, and academic engagement, as well as their parents' expectations for their future that are available in the NLTS 2012 data. We focus on these types of measures so that our findings can guide efforts by policymakers and educators to support the doubly challenged population of ELSWDs.

Several studies have revealed relationships between the characteristics of students, households, and schools and the level of students' success after high school (Aud et al. 2011; Fryer and Katz 2013). SWDs and ELs are each more likely than other students to have characteristics such as social and economic disadvantages that are associated with poorer post-high school outcomes (Lipscomb et al. 2017; Flores et al. 2012; Kanno and Cromley 2013). Students' health and capacities are also important factors in their development and future success (Carter et al. 2012; Currie et al. 2010; Wagner et al. 2005). Of particular importance is the concept of self-determination, which researchers consider important for students with disabilities to develop and malleable in high school (Berry et al. 2012; Shogren and Shaw 2016).

Schools and families play important roles in supporting students' educational needs, and in helping SWDs to prepare for the future (Mazzotti et al. 2016; Test et al. 2009). Recent evidence on SWDs finds that they are more likely than their peers to struggle academically, but less likely to receive some forms of school-based support (Lipscomb et al. 2017). Studies have linked parental involvement with greater student engagement in their IEPs and in transition planning (Wagner et al. 2012) and with postsecondary education outcomes for youth with disabilities (Wagner et al. 2014). Parents of ELs can face particular challenges being involved with their children's education because of their own lack of English proficiency (Arias and Morillo-Campbell 2008; Smith et al. 2008).

Other predictors of post-high school success are school engagement and positive peer relationships, which have important academic and social benefits (Juvonen et al. 2012; Wang and Eccles 2012). Almost all SWDs and non-SWDs feel positive about school, but SWDs are bullied and suspended at higher rates, and are less engaged in school and social activities than their classmates are (Lipscomb et al. 2017). Because of communication barriers, ELs also can be less likely to be engaged in school (Good et al. 2010). Research points to the value of paid work experience in high school for increasing the likelihood that youth with disabilities will find jobs

as adults (Mazzotti et al. 2016; Test et al. 2009). However, SWDs lag behind their classmates when it comes to planning and taking steps to obtain postsecondary education and jobs (Lipscomb et al. 2017).

Finally, parents' expectations about their children are correlated with their children's actual outcomes, according to past research (Chiang et al. 2012; Doren et al. 2012; Papay and Bambara 2014; Wagner et al. 2014). These correlations may reflect an effect of parent expectations on outcomes, or that the parents have accurate expectations. Parent expectations about their children's financial self-sufficiency in the future has also been linked with youths' post–high school employment outcomes (Carter et al. 2012).

IV. DATA AND METHODS

Data source

Data for this study come from the NLTS 2012, which is the most recent study in the NLTS series to examine the characteristics and experiences of secondary school students who receive IDEA services. It is the only NLTS that allows researchers to directly compare youth with and without an IEP, which permits us to study ELs without disabilities as a separate group. Among the youth with an IEP in the sample are students in each IDEA disability category. Among the youth without an IEP are students with no identified disability and those who receive disability accommodations through Section 504 of the Rehabilitation Act but not through IDEA.

NLTS 2012 used a two-stage sample design to represent all students in grades 7-12 or in secondary ungraded classes in the United States. In the first stage, a nationally representative sample of 572 public school districts was drawn based on size and geography, and participation was obtained from 432 of them (76 percent). In the second stage, participating districts provided lists of their enrolled students as of December 2011, from which students were randomly selected, in order to produce representative samples from (1) each IDEA disability category, (2) students with a Section 504 plan but no IEP, and (3) students with no identified disability.

Interviews with parents and students were conducted in 2012 and 2013. In 2012, surveys were conducted using computer-assisted telephone interviewing. The study added a web survey and field interviews in 2013 to raise the response rates obtained during 2012. Surveys were completed for about 12,980 parents and 11,120 youth across the two years, for response rates of 59 and 51 percent, respectively. Youth were ages 12 to 23 when interviews took place, with more than 97 percent ages 13 to 21. Parents provided proxy responses for 16 percent of the youth respondents who were unable to self-report even with accommodations (such as options to take the survey in Spanish and use assistive technology they normally use). Proxy responses were not obtained for questions that depended on the youth's perspective.

NLTS 2012 examined the potential for nonresponse bias and found that nonresponse weight adjustments succeeded in limiting the potential for bias (Burghardt et al. 2017). The weights provided with the data set were designed for analyses of youth enrolled in secondary school in the year they or their parents were surveyed (about 11,850 parents and 10,140 youth) and were poststratified to match the secondary school population in 2011-2012 by age at interview.

Sample

We compared ELSWDs to two other groups of students: other SWDs and other ELs. SWD and EL status was based on district-reported information at the time of sampling on IEP and limited English proficient status, respectively. IEP status was available for all students, but we excluded about 1,150 parents and 1,000 youth (with and without disabilities) because of missing EL status. Next, we excluded 1,970 parents and 1,680 youth who were neither SWDs nor ELs. After these exclusions, our analysis sample for parent-reported measures included about 720 ELSWDs, 7,870 non-EL SWDs, and 130 EL non-SWDs, although exact sample sizes varied by measure. For youth-reported measures, the sample sizes were about 620 ELSWDs, 6,720 non-EL SWDs, and 120 EL non-SWDs. Because we needed to exclude students with missing EL status, we poststratified the NLTS 2012 weights so that our weighted number of enrolled students equaled the weighted number in the full NLTS 2012 analysis sample by age and disability.

Nationally, 12 percent of secondary school students in 2012 were SWDs, and 8 percent were ELs (Table 1). These groups mostly did not overlap; only 1 percent of the population were classified as ELSWDs, whereas 11 percent and 7 percent, respectively, were classified as other SWDs and other ELs. As indicated in Table 2, ELSWDs in 2012 were more likely than other SWDs to have a specific learning disability (61 vs. 46 percent; p < .01); they were less likely to have other health impairments (9 vs. 15 percent; p < .01), emotional disturbance (5 vs. 9 percent; p < .01), and autism (2 vs. 7 percent; p < .01).

Table 1.	Percentages of the student population in grades 7 through 12 in
2012, by E	EL and SWD status

EL/SWD group	SWD	Non-SWD	Total
EL	1	7	8
Non-EL	11	81	92
Total	12	88	100

Source: National Longitudinal Study 2012 Restricted Use File.

Note: EL = English learners; SWD = students with disabilities. Percentages for the U.S. population are weighted estimates based on the NLTS 2012 data. Students in the analysis were ages 12–22 when they and their parents participated in the study. Grades 7 through 12 include secondary ungraded classes.

Differences in the relative size of the disability groups appear to have increased over time. For 2003, Trainor et al. (2016) found that the two groups differed by a statistically significant margin only in the percentage having an emotional disturbance (5 percent for ELSWDs vs. 11 percent for other SWDs; p < .01). At that time, 68 percent of ELSWDs and 62 percent of other SWDs had specific learning disabilities. Since then, the number of specific learning disabilities identified has declined nationally and the NLTS 2012 data suggest that this decline may have been more concentrated among non-ELs. The number of youth with other health impairments, in contrast, more than doubled during this period (Liu et al. 2017). Considering that similar shares of ELSWDs and SWDs had other health impairments in 2003 (3 and 5 percent) (Trainor et al. 2016), the growth in the number of youth identified in this disability group appears to have been greater among non-ELs. Autism, for which we also found a statistically significant difference between ELSWDs and other SWDs, was not reported separately by Trainor et al. (2016).

Category	ELSWD	Other SWD
	(%)	(%)
Specific learning disability	60.7	46.1**
Other health impairment	8.6	15.0**
Intellectual disability	8.6	10.1
Emotional disturbance	4.5	9.4**
Autism	2.4	6.5**
Speech or language impairment	5.3	4.2
Other disability category ^a	9.9	8.7

Table 2. Primary disability categories reported by school districts

Source: National Longitudinal Study 2012 Restricted Use File.

Note: ELSWD = English learner students with disabilities; SWD = students with disabilities. Students in the analysis were ages 12–22 when they and their parents participated in the study. Means are weighted percentages of the population.

^aOther disability category includes deafness, deaf-blindness, hearing impairment, multiple disabilities, orthopedic impairment, traumatic brain injury, visual impairment, and having an individualized education program (IEP) but an unspecified disability.

*Difference from ELSWD is statistically significant at the .05 level, two-tailed test.

**Difference from ELSWD is statistically significant at the .01 level, two-tailed test.

Measures

The measures we examined are defined in the NLTS 2012 Restricted Use File. We discuss them below, providing detail only where most useful for understanding the analysis.

Background characteristics. Parents reported on most of these measures, including the primary language used at home, race and ethnicity, gender, household income and benefits receipt, and parental education and employment. The household income variable is an indicator for income below 185 percent of the poverty level for the state, household size, and year, the level used to define free or reduced-price lunch eligibility in many districts. NLTS 2012 imputed missing values for household income (Burghardt et al. 2017). Parental education is defined as the highest level of education obtained by either the reporting parent or that parent's spouse, and parental employment is a measure of whether either person had a paid job at the time of the survey.

School characteristics include measures of academic proficiency in math and reading, the school's special education rate, and urbanicity. The academic proficiency measure is an indicator for whether the school's proficiency rate (averaged across reading/language arts and math) is in the bottom quarter in the school's state. The special education rate measure is an indicator for being in the top quarter of schools nationally.

Health, functional performance, and self-determination. These measures include parentreported indicators of students' health status, communication abilities, and performance on daily living activities, as well as students' perceptions about their self-determination. General health status and communication abilities are measured by categorical variables. Performance on daily living activities is measured by a seven-item index that includes how often or how well youth use an ATM, make appointments, get to places outside the home, fix their own breakfast or lunch, do their own laundry, clean their room, and buy things at the store that they need. Parents selected one of four responses for each item; we present categories based on the average index value.

We measure self-determination through two indices based on items from the Arc Self-Determination Scale (SDS). The two indices measure autonomy and self-direction, with the latter construct combining variables from the SDS's psychological empowerment and self-realization domains. The autonomy index includes seven measures: how often youth choose the activities they want to do with friends; write letters, text, or talk on the phone to friends and family; choose gifts to give to family and friends; plan weekend activities they like; go to movies, concerts, and dances; and volunteer for things they are interested in. Youth selected one of four possible responses for each item, and we present categories based on the average index value. The selfdirection index is composed of 14 binary measures that address how well youth perceive that they understand their strengths and needs, and believe that their actions are related to outcomes. We report the mean of the average index value between zero and one.

Supports from school and at home. We examine parent-reported indicators of whether their children received accommodations, modifications, and related services. We also include several indicators of parents' engagement, such as whether they go to parent-teacher conferences and help regularly with homework. Finally, for youth who are at least 17 years old, we examine the self-reported participation rates of parents and youth in transition planning meetings.

Experiences in and outside of school. These measures include attitudes about coursework and indicators of extracurricular and social, school discipline, and work experience. Most of these measures were reported on by youth, except that parents reported on indicators of school discipline, such as whether their child has ever been suspended.

Parents' expectations. We explored parents' expectations about whether their child will obtain postsecondary education, become financially independent, and live independently. The latter two expectations look ahead to when the youth reach age 30.

Analytic approach

We used two methods to address the study's research questions. First, we presented weighted means for ELSWDs, other SWDs, and other ELs, and used F-tests to compare the weighted means for ELSWDs to those of other SWDs and other ELs. We report statistically significant differences in means at both the p = .01 and p = .05 levels to balance (1) the concern that multiple comparisons would generate too many statistically significant results with (2) the concern that small sample sizes for the "other ELs" group would lead to too few statistically significant results. We focus mostly on the statistically significant differences at the .01 level.

Second, we estimated a regression to explore whether the differences between ELSWDs and other SWDs in terms of their preparation for life after high school are related to differences in their backgrounds. We held constant the factors listed in Table 3. We limited our analysis to measures on which ELSWDs and other SWDs differed by a statistically significant margin at the p = .01 level. We did not include other ELs in this analysis because there are relatively few of them in the NLTS 2012. The estimation equation is as follows:

(1) $Measure = \beta_0 + \beta_1 * ELSWD + \beta_2 \mathbf{X} + \varepsilon$

Characteristic	ELSWD	Other SWD	Other EL
	(%)	(%)	(%)
Primary language used at home, parent-reported			
English	33.6	90.4**	24.8
Spanish	60.1	7.9**	65.7
Other	6.3	1.7**	9.5
Race/ethnicity and gender, parent-reported			
Black	3.9	20.4**	3.7
Hispanic	79.2	18.1**	77.0
White, multi-race, and other	16.9	61.5**	19.3
Male	61.5	67.2	50.6
Household income and government benefits, parent- reported			
Household income below 185% of the poverty level	85.3	54.6**	83.1
Received SNAP in last two years	46.2	33.1**	44.2
Received TANF in last two years	13.9	9.5*	11.6
Child received SSI in last two years	16.8	22.7*	4.5**
Parent (or the responding parent's spouse) education and employment, parent-reported			
Less than high school	51.0	12.1**	42.1
High school or equivalent	28.5	38.2**	28.7
Some college (includes voc-tech and 2-year degrees)	12.8	21.3**	13.4
Four-year college degree or higher	7.8	28.4**	15.8*
Has a paid job	82.7	79.7	84.4
School characteristics, school-reported			
Academic proficiency in bottom quarter of state	33.1	26.2	36.6
Special education rate in top quarter nationally	34.7	35.4	31.4
Urban locale	45.0	27.3**	40.2
Suburban locale	36.3	34.1	33.5
Rural locale	18.6	38.6**	26.3

Table 3. Student, household, and school characteristics

Source: National Longitudinal Study 2012 Restricted Use File.

Note: ELSWD = English learner students with disabilities; SWD = students with disabilities; EL= English learners; FRPL = free or reduced price lunch; SNAP = Supplemental Nutrition Assistance Program; TANF = Temporary Assistance for Needy Families; SSI = Supplemental Security Income. Samples include students ages 12–22. Table reports population-weighted percentages.

*Difference from ELSWD is statistically significant at the .05 level, two-tailed test.

**Difference from ELSWD is statistically significant at the .01 level, two-tailed test.

In equation 1, X includes all the background characteristics in Table 3. As a sensitivity analysis, we also explored including disability category indicators from Table 2. The coefficient measures the adjusted difference between ELSWDs and SWDs on the outcome measure. A statistically significant indicates that a difference between ELSWDs and SWDs remains even after controlling for observable background characteristics. Such a result would indicate that the unadjusted differences partly reflect factors beyond those specifically controlled for in the model, such as school influences or other background characteristics.

V. RESULTS

Student, household, and school background characteristics

The social and demographic backgrounds of ELSWDs in 2012 were more disadvantaged than those of other SWDs (Table 3). ELSWDs were less likely to speak primarily English at home than other SWDs were, as expected (34 vs. 90 percent; p < .01), and the majority of them were Hispanics (79 percent) and spoke Spanish (60 percent). Their parents were more likely than parents of other SWDs to report low household incomes (85 vs. 55 percent; p < .01) and to have participated in the past two years in federal welfare programs like the Supplemental Nutrition Assistance Program (46 vs. 33 percent; p < .01). Parents of ELSWDs also reported lower levels of education than parents of other SWDs did. About half the parents (51 percent) of ELSWDs reported that they and their spouse had not completed high school, compared to 12 percent for the parents of other SWDs (p < .01). There were no differences between the two groups in terms of gender or parental employment.

There were fewer differences in the kind of schools attended by ELSWDs and other SWDs. ELSWDs were more likely than other SWDs to attend urban schools (45 vs. 27 percent; p < .01) and less likely to attend rural schools (19 vs. 39 percent; p < .01). But there were no statistically significant differences between ELSWDs and other SWDs in the proportion of students attending schools where academic proficiency rates are in the bottom quarter in their state, or in the proportion attending schools where special education rates are in the top quarter nationally.

On average, ELSWDs and other ELs had similar background characteristics. There were only two statistically significant differences between ELSWDs and other ELs (Table 3). First, ELSWDs were more likely to receive Supplemental Security Income benefits (17 vs. 5 percent; p < .01), which is not surprising because benefit eligibility depends on having a disability. Second, parents of ELSWDs were less likely to have a four-year degree (8 vs. 16 percent; p < .05).

Student health, functional abilities, and self-determination

ELSWDs had poorer health than other SWDs, but similar functional performance (Table 4). Parents of about one-third of ELSWDs rated their children's health as excellent, compared with nearly one-half of parents of other SWDs (36 vs. 46 percent; p < .01). About 30 percent in both groups had at least some trouble communicating, and about 45 percent had at least some trouble understanding others, according to parents. There were no differences between ELSWDs and other SWDs in performance on activities of daily living or self-perceptions of autonomy and self-direction.

Compared with other ELs, ELSWDs had worse health and faced greater challenges with their functional performance (as reported by parents). ELSWDs' general health is therefore worse than that of either ELs or SWDs. Few ELs without disabilities have trouble communicating or understanding others. They are more likely than ELSWDs to perform activities of daily living, and they have a stronger sense of self determination.

Measure	ELSWD	Other SWD	Other EL
	(%)	(%)	(%)
General health status, parent-reported			
Poor	0.7	0.9	0.4
Fair	13.1	6.5**	5.8*
Good	28.8	20.4**	26.3
Very good	21.3	26.4*	19.4
Excellent	36.1	45.8**	48.0*
Communication and understanding, parent-reported			
How well youth communicates by any means			
Not at all	0.3	0.3	0.4
With a lot of trouble	3.7	4.3	0**
With a little trouble	27.6	23.8	4.7**
With no trouble	68.5	71.6	94.9**
How well youth understands what others say to them			
Not at all	0.9	0.5	0
With a lot of trouble	5.3	6.4	0.4**
With a little trouble	38.9	36.7	12.9**
With no trouble	54.9	56.4	86.7**
Performance on activities of daily living, index from zero to 3, parent-reported			
Never/not at all well, 0–<1	21.1	24.5	4.6**
	46.6	47.5	4.0
Sometimes/not very well, 1-<2		-	
Usually/pretty well, 2–<3	29.1	25.4	47.2**
Always/very well, 3	3.3	2.6	3.4
Self-determination, youth-reported			
Autonomy, index from 0 to 3			
Never, even when there is a chance, 0–<1	16.5	11.4	11.3
Sometimes when there is a chance, 1–<2	58.6	58.2	62.8
Most of the time there is a chance, 2–<3	21.3	26.6	23.4
Every time there is a chance, 3	3.6	3.8	2.5
Self-direction, index from 0 to 1 (mean reported)	0.9	0.9	1.0*

Table 4. Health, functional performance, and self-determination

Source: National Longitudinal Study 2012 Restricted Use Files.

Note: ELSWD = English learner students with disabilities; SWD = students with disabilities; EL = English learners. Samples include students ages 12 to 22. Table reports population-weighted percentages, unless otherwise noted.

*Difference from ELSWD is statistically significant at the .05 level, two-tailed test.

**Difference from ELSWD is statistically significant at the .01 level, two-tailed test.

Student supports at school and at home

Parents of ELSWDs were less likely than parents of other SWDs to report that their children received extra time on tests (61 vs. 73 percent; p < .01) and homework assignments (59 vs. 67 percent; p < .01), but about half the parents in both groups reported that their children received modified tests, modified assignments, or related services (Table 5). There were no statistically significant differences in transition planning meeting participation rates (whether reported by themselves or their parents). Although parents of ELSWDs were more likely to indicate that they

attended a parent-teacher conference (88 vs. 84 percent; p < .05), they were less likely to report attending a school or class event (46 vs. 59 percent; p < .01), volunteering at school (16 vs. 22 percent; p < .05), or regularly discussing their children's school experiences with them (74 vs. 85 percent; p < .01).

Table 5. Supports from school a	and home
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Support	ELSWD	Other SWD	Other EL
	(%)	(%)	(%)
Special education supports received in the past year, parent			
reported			
Extra time on tests	60.9	73.0**	
Extra time on assignments	58.7	67.2**	_
Modified tests	47.2	53.1	_
Modified assignments	44.9	40.9	_
Any related service ^a	51.5	47.9	—
Attendants of meeting to develop a transition plan for after			
high school (17+), parent- and youth-reported ^b Parent	64.7	61.6	
Staff from vocational rehabilitation services or other community services agency	46.4	37.1	_
Youth	63.5	69.5	—
Parent (or another household adult) involvement at school			
and at home during the school year, parent reported			
Went to a parent-teacher conference	87.6	84.0*	68.0**
Went to a school or class event	46.2	59.2**	56.7
Went to a general school meeting	71.3	74.9	70.6
Volunteered at school	16.4	22.4*	12.1
Helped with homework at least weekly	60.6	61.5	59.6
Regularly discussed school experiences with youth	74.2	85.1**	73.3

Source: National Longitudinal Transition Study 2012 Restricted Use File.

Note: ELSWD = English learner students with disabilities; SWD = students with disabilities; EL = English learners; IEP = individualized education program. — = no data. Samples include students ages 12–22 unless otherwise indicated. Table reports population-weighted percentages.

^aIncludes counseling, speech or language therapy, audiology services, vision services, occupational therapy, mobility services, nursing care, or special transportation services.

^bParents reported on their own participation and on the participation of community service agency staff. Youth reported on their own participation.

*Difference from ELSWD is statistically significant at the .05 level, two-tailed test.

**Difference from ELSWD is statistically significant at the .01 level, two-tailed test.

Compared with the parents of other ELs, parents of ELSWDs were more likely to attend a parent-teacher conference (88 percent vs. 68 percent for the other ELs' parents; p < .01). Their levels of engagement in school functions and of academic support at home were comparable.

Student experiences in and outside of school

ELSWDs were more likely than other SWDs to have trouble with homework (56 vs. 46 percent; p < .01) and to need more help from their teachers (59 vs. 49 percent; p < .01) (Table 6). In addition, they were less likely to participate in a sport or club organized either through school (52 vs. 65 percent; p < .01) or outside of school (45 vs. 56 percent; p < .01). However, there were no differences in their frequency of social involvement, with about half in both groups reporting that they usually got together with friends weekly. In addition, there were no statistically significant differences between ELSWDs and other SWDs in the proportions who had repeated a grade or been expelled, or who in the past two years had been arrested. In fact, parents reported that ELSWDs were less likely than other SWDs to have been suspended (20 vs. 30 percent; p < .01). There were no statistically significant differences between ELSWDs were less likely than other SWDs to have been Suspended (20 vs. 30 percent; p < .01). There were no statistically significant differences between ELSWDs were less likely than other SWDs to have been Suspended (20 vs. 30 percent; p < .01). There were no statistically significant differences between ELSWDs and other SWDs in the proportions reporting to paid work experience in the previous year, although ELSWDs were less likely to have had school-sponsored work activities (7 vs. 12 percent; p < .01).

Table 6. Experiences in and outside of school

Experience	ELSWD	Other SWD	Other EL
	(%)	(%)	(%)
Experiences with coursework during the school year, youth-reported ^a			
Agreed class work is hard to learn	56.5	53.5	47.0
Agreed they have trouble with homework	56.4	45.9**	42.0*
Agreed they need more help from teachers than they are getting	59.1	49.3**	50.6
Extracurricular participation and social involvement during the past year, youth-reported			
Any school sport or club	51.6	64.8**	71.0**
Any sport or club outside of school	44.9	55.5**	43.9
Usually got together with friends at least weekly	46.9	52.6	53.3
Grade repetition and disciplinary actions, parent-reported			
Ever repeated a grade	27.7	32.3	10.0**
Ever suspended from school	20.2	30.0**	11.6*
Ever expelled from school	7.9	8.3	1.3**
Arrested in the past two years	4.3	5.8	2.0
Work experience in the past year, youth-reported			
Had paid work experience	34.1	40.6	37.3
Had school-sponsored work activity	7.3	12.4**	6.7

Source: National Longitudinal Transition Study 2012 Restricted Use File.

Note: ELSWD = English learner students with disabilities; SWD = students with disabilities; EL= English learners. Samples include students ages 12 to 22. Table reports population-weighted percentages.

^aAgreement includes youth responses that they "agree a lot" or "agree a little."

*Difference from ELSWD is statistically significant at the .05 level, two-tailed test.

**Difference from ELSWD is statistically significant at the .01 level, two-tailed test.

Compared with other ELs, ELSWDs also were more likely to report having trouble with homework, and less likely to participate in school-sponsored activities. They were more likely than other ELs to repeat a grade (28 vs. 10 percent; p < .01), to be suspended (20 vs. 12 percent;

p < .05) or to be expelled (8 vs. 1 percent; p < .01). However, their self-reported rates of obtaining paid work experiences and school-sponsored work were similar.

Parents' expectations for their children

In spite of the social and academic challenges facing their children, parents of ELSWDs were more likely than parents of other SWDs to expect that their children will obtain a bachelor's degree (42 vs. 34 percent; p < .05) and be financially independent by age 30 (88 vs. 79 percent; p < .01) (Table 7). About three-quarters in each group expect that their children will live on their own. However, parents of ELs without disabilities have even higher expectations for their children's futures. Nearly two-thirds (64 percent) expect that their children will obtain a four-year college degree, and 88 percent believe their children will live independently by age 30.

Table 7. Parents' expectations for their children

Parents' expectation	ELSWD	Other SWD	Other EL
	(%)	(%)	(%)
Expectations about postsecondary education, parent-			
reported			
Less than high school	2.0	3.4*	0.6
High school diploma or GED	32.1	35.2	15.7**
Technical school, trade school, or another 2-year college degree	24.2	27.7	19.9
Bachelor's degree or higher	41.7	33.7*	63.7**
Expectations about independence, parent-reported			
Financially self-supporting at age 30	88.0	79.3**	
Living independently at age 30	74.4	78.6	88.2**

Source: National Longitudinal Transition Study 2012 Restricted Use File.

Note: ELSWD = English learner students with disabilities; SWD = students with disabilities; EL= English learners. Samples include students ages 12–22. Table reports population-weighted percentages. — = no data.

*Difference from ELSWD is statistically significant at the .05 level, two-tailed test.

**Difference from ELSWD is statistically significant at the .01 level, two-tailed test.

Whether differences between ELSWDs and other SWDs remain after controlling for differences in background characteristics

The statistically significant differences between ELSWDs and other SWDs in Tables 4-7 narrow when the background factors in Table 3 are held constant, with many becoming statistically insignificant (Table 8). The adjusted differences are smaller than the unadjusted gaps for 13 of the 14 measures from Tables 4-7 where a statistically significant unadjusted difference existed at the 1 percent level. In 12 instances, the gap is no longer significant at the 1 percent level, and in 10 of those 12 instances, the gap also is not significant at the 5 percent level. We reached similar conclusions after also controlling for the primary disability groups in Table 2. Although our findings provide suggestive evidence that part of the perceived differences between ELSWDs and other SWDs may relate to differences in their backgrounds, our analysis does not identify root causes or rule out contributions from other factors that were not included in the regression.

Characteristic	Unadjusted difference	Adjusted difference
General health status, parent-reported		
Fair	6.7**	1.9
Good	8.4**	1.6
Excellent	-9.8**	-4.7
Special education supports received in the past year, parent-reported		
Extra time on tests	-12.1**	-2.3
Extra time on assignments	-8.5**	-7.4*
Parent's (or another household adult's) involvement at school and at home during the school year, parent-reported		
Went to a school or class event	-12.9**	-5.1
Regularly discussed school experiences with youth	-10.9**	-3.5
Regularly aboutoon onportorioto with youth	10.0	0.0
Experiences with coursework during the school year, youth-reported ^a		
Agrees they have trouble with homework	10.5**	11.3**
Agrees they need more help from teachers than they are getting	9.9**	6.3
Extracurricular participation and social involvement during the past year, youth-reported		
Any school sport or club	-13.2**	-10.5**
Any sport or club outside of school	-10.7**	-2.8
Grade repetition and disciplinary actions, parent-reported		
Ever suspended from school	-9.9**	-6.4*
Preparation for further education and employment, youth reported		
Has school-sponsored work activity in the past year	-5.1**	-2.4
	0	
Expectations about independence, parent-reported		
Financially self-supporting at age 30	8.6**	2.6

Table 8.Unadjusted differences between ELSWDs and other SWDs, andadjusted differences controlling for background characteristics

Source: National Longitudinal Transition Study 2012 Restricted Use File.

Note: ELSWD = English learner students with disabilities; SWD = students with disabilities. Samples include students ages 12 to 22. Table reports percentage point differences in population-weighted percentages. The adjusted differences are based on a regression that controls for the measures listed in Table 3.

^aAgreement includes youth responses that they "agree a lot" or "agree a little."

*Difference from ELSWD is statistically significant at the .05 level, two-tailed test.

**Difference from ELSWD is statistically significant at the .01 level, two-tailed test.

For two measures, having trouble with homework and participating in school-sponsored extracurricular activities, the adjusted difference between ELSWDs and other SWDs remained statistically significant at the 1 percent level. On these two measures, the differences between ELSWDs and other SWDs might reflect true differences in the perceived experiences of ELs or the role of other background characteristics that could not be controlled for in the analysis.

VI. CONCLUSION

In this paper, we examine the characteristics and experiences of a group of ELSWDs from the NLTS 2012 and compared them to those of other SWDs and ELs. We found that ELSWDs are like other SWDs in some ways, and different in others. For instance, ELSWDs are more disadvantaged than other SWDs, but their functional performance is similar. Perhaps because of their more disadvantaged backgrounds and functional performance characteristics, they struggle more with academics and with participating in extracurricular activities than other SWDs do. But in other respects, such as their likelihood of suspension or their parents' expectations for their post–high school outcomes, they fare better than other SWDs.

We also contribute the first evidence of how ELSWDs compare with other ELs. ELSWDs and other ELs have similar home language, socio-demographic, and school characteristics on average. However, ELSWDs face greater functional performance challenges than other ELs, which is consistent with having disabilities. ELSWDs struggle more academically and have lower participation rates in extracurricular activities than other ELs do (just as they struggled more in these areas than other SWDs did). Moreover, their likelihood of suspension is greater than that of other ELs, and their parents' expectations for post–high school outcomes are lower than EL parent expectations for their children.

Finally, our findings suggest that the apparent differences between ELSWDs and other SWDs partly reflect differences in their background characteristics. When holding background characteristics constant, the differences between ELSWDs and other SWDs in their receipt of supports, their experiences, and their parents' expectations narrow and often become statistically insignificant. These findings highlight the importance of policymakers and educators understanding students' backgrounds when developing policies and practices to serve them. We cannot tell whether the variables in our regression model are proxies for language proficiency, cultural differences, socioeconomic factors, or a combination of all of these. Yet the conclusion remains that differences between ELSWDs and other SWDs may be less stark than they appear.

Researchers conducting studies on ELSWDs should pursue a better understanding of the factors that lead to differences in their preparation for life after high school relative to other students, and to examine their post–high school outcomes directly. The policy focus on improving outcomes for ELSWDs is likely to increase in the years ahead because of ESSA's requirements that schools improve English language proficiency among ELs and the ongoing emphasis through IDEA on preparing SWDs for post–high school success. In the future, it will be possible to study students' post–high school outcomes using administrative records that will be collected on students in the NLTS 2012 sample. These data will provide opportunities for exploration that can aid our understanding of how ELSWDs fare after high school relative to their peers, and identify in-school predictors of later success that are specific to ELSWDs.

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