Characteristics of Early Work Experiences and Their Association with Future Employment

Michele Capella McDonnall

Jamie O’Mally

Mississippi State University

Author Note

Michele Capella McDonnall, Ph.D., CRC, and Jamie O’Mally, Ph.D., Rehabilitation Research and Training Center on Blindness and Low Vision, Mississippi State University.

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Correspondence concerning this article should be addressed to Michele Capella McDonnall, RRTC on Blindness and Low Vision, P.O. Box 6189, Mississippi State, MS 39762. Email: m.mcdonnall@msstate.edu
Abstract

Introduction: Early work experiences are a key predictor of future employment for transition-age youth with visual impairments. We investigated how specific characteristics of early work experiences influence future employment and whether the receipt of SSI benefits is associated with early work experiences among this population.

Method: Secondary data analyses were conducted using four waves of data from the second National Longitudinal Transition Study (NLTS2). The NLTS2 includes a nationally representative sample of high school students with visual impairments receiving special education.

Results: Future employment outcomes were positively associated with characteristics of early work experiences, including finding a job independently, holding multiple jobs, and holding jobs for longer periods. Participating in school-sponsored work was not associated with future employment. Youth receiving SSI benefits were significantly less likely to engage in productive activities, including employment, in Wave 3 than those not receiving benefits; however this was not the case for youth receiving SSI benefits in Wave 2.

Discussion: Early work experiences were not all found to be equally predictive of future employment for youth with visual impairment. Results indicate that it may not be sufficient for youth to simply be employed during high school, without consideration of the type of work, how the job was obtained, or how long the job lasted. These characteristics of early work experiences are important to future employment and should be considered when helping youth prepare for transition.

Implications for Practitioners: Professionals and parents should emphasize the benefits of early employment to youth with visual impairments. Youth should be encouraged to obtain multiple work experiences during high school, while keeping in mind that longer job tenure is also positively associated with future employment. Professionals should particularly encourage those youth receiving SSI to obtain early work experiences, and should inform youth and their families about incentives that allow them to retain SSI benefits while working.
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Despite academic success and achievement in other domains, transition-age youth (i.e., aged 16 to 24) with visual impairments typically experience challenges in finding employment (McDonnall, 2010a; Newman et al., 2009; Shaw, Gold, & Wolfe, 2007). One important factor known to predict future employment for youth with disabilities and the general population is obtaining early work experiences (e.g., Landmark, Ju, & Zhang, 2010; Patton & Smith, 2009; Test, Mazzotti, Mustian, Fowler, Kortering, & Kohler, 2009; Wright & Carr, 1995). Recently, researchers have begun to identify critical factors that predict employment outcomes for youth with visual impairments, and employment experience during high school was found to be one of the strongest predictors of future employment (McDonnall, 2010b; McDonnall, 2011). There are a variety of ways that youth may gain work experience during high school; types of work include paid employment, volunteer experience, internships, and school-sponsored work experiences.

Previous research has given little attention to the specific characteristics of early work experience that are most predictive of future employment. Although many youth with visual impairments report working during high school, the quality of those work experiences is uncertain. Many of those who had employment experience worked a limited number of hours and/or held short-term jobs (McDonnall, 2010a). In order to gain a deeper understanding of the factors that affect employment outcomes for youth with visual impairments, we propose to examine the influence of characteristics of early work experiences to determine how these are associated with future employment.

**Characteristics of Early Work Experience**

Some characteristics of early work experiences that have been explored include the number of previous jobs, the length of previous job, and type of experience. Having a larger
number of early work experiences has been positively associated with securing future employment for youth with visual impairments and for youth with other disabilities (Benz, Lindstrom, & Yovanoff, 2000; McDonnell, 2010b; McDonnell & Crudden, 2009). Having jobs of at least 12 months in length has been associated with future employment for youth with hearing impairments (Bullis, Davis, Bull, & Johnson, 1995), but the relationship between job length and future employment has not been evaluated for youth with visual impairments. Some research indicates that youth with disabilities benefit from school-to-work programs in securing future employment (Burgstahler, 2001; Shandra & Hogan, 2008), yet research with youth who are visually impaired does not support this finding (McDonnell, 2010b). For some youth with disabilities, these are the only type of work experiences they receive in high school. Research is needed to determine whether school-sponsored work experiences have the same value to future employment as paid work experiences do.

Youth with disabilities often receive assistance finding employment (Ward, 1991). In one study of youth with learning disabilities, the majority of employed youth received assistance finding their jobs, while 43% found their jobs independently (Sitlington & Frank, 1990). This is also true for youth with visual impairments. Wolffe and Sacks (1997) found that only 31% of students with low vision and 19% of students who were blind found their own jobs, compared to 88% of sighted students. With such a large number of youth who are visually impaired receiving assistance, it is relevant to consider whether their ability to find their own jobs is an important factor in securing future employment.

Receipt of SSI Benefits

Supplemental Security Income (SSI) is a needs-based program that provides financial assistance to people who are legally blind, among others. Research indicates that many people
who receive SSI are living in poverty because they are using SSI as a primary source of income rather than a supplement (Rupp & Scott, 1995). For people who have disabilities, SSI benefits provide a guarantee of low but secure income that would be threatened by paid employment opportunities that may be unstable. Research indicates that youth with disabilities who receive SSI benefits are less likely to be employed compared to those who do not receive SSI (Berry, 2000; Burkhauser & Wittenburg, 1996; Fabian, 2007). Transition-age youth receiving SSI were less successful in various employment outcomes including current employment, number of hours worked per week, monthly earnings, and work history. In fact, the odds of being employed were nearly double for youth who were not receiving SSI benefits in one study (Berry, 2000). However, a recent study involving youth with visual impairments found that SSI receipt was not associated with future employment, when other factors were considered (McDonnall, 2011). Given this finding, it is important to evaluate whether receipt of SSI is associated with concurrent employment for youth with visual impairments.

The Current Study

The objective of this study is to explore some characteristics of and influences on early work experiences to determine how they impact employment outcomes for youth with visual impairments. While it is evident that early work experience is important to future employment, we do not know much about the importance of specific characteristics of those work experiences, or which factors influence the likelihood of obtaining early work experiences. The specific purposes of this study are to evaluate whether characteristics of earlier work experiences influence later employment and to evaluate the impact receipt of SSI has on current employment and other forms of engagement. The characteristics of work experiences studied were: having found a job independently in the past, length of previous jobs, number of paid jobs, and paid
work experience compared to school-sponsored work experience. The following research questions were investigated:

1. Are school-sponsored work experiences as helpful to obtaining future employment as paid work experiences?

2. Do specific characteristics of paid work experiences predict future employment? These characteristics include: ability of youth to find jobs independently in the past, the length of previous jobs, and the number of paid work experiences in the past.

3. Does the ability to find jobs independently in the past significantly predict the number of paid jobs youth hold in the future?

4. Are youth who are receiving SSI benefits less likely to engage in employment and other productive activities than those not receiving SSI benefits?

Method

Data Source

The second National Longitudinal Transition Study (NLTS2) was the source of the data used for this study. The NLTS2 is a longitudinal study (consisting of five waves, or occasions, of data collection) that was conducted between 2001 and 2009 by SRI International, under contract from the U.S. Department of Education. SRI International is an independent nonprofit research institute that conducts client-sponsored research and development activities for the government and other organizations. They have conducted numerous large studies for the Department of Education, including the original NLTS. NLTS2 consists of a nationally representative sample of students receiving special education services who were aged 13 to 16 in December 2000. The sample was stratified based on several factors including disability, resulting in a nationally representative sample of youth with VI who received special education services while in high
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Data was collected via interviews with youth and their parents, interviews with school personnel, and direct assessments of youth. Data was available from the first four waves at the time these analyses were conducted and all four waves of data were used. These data were collected in 2001/2002 (Wave 1), 2003/2004 (Wave 2), 2005 (Wave 3), and 2007 (Wave 4). The data used for this study was collected via interviews with youth and their parents. Additional information about the NLTS2 is available at http://www.nlts2.org/studymeth/index.html.

Samples, Variables, and Statistical Analyses

The sample was restricted to youth who had a visual impairment identified as the primary disability under which they were eligible for special education services. NLTS2 does not formally differentiate these youth based on level of vision loss, but parents were asked if the youth had “complete blindness.” (Percentage of parents reporting “complete blindness” for our samples is provided in Table 1.) Different subsets of the overall group were used to answer the research questions, based on data available for the specific items utilized. Because the sample, set of variables, and statistical analysis method was unique to each research question (RQ), these aspects will be described by RQ. Demographic information about the samples available for RQ1 and RQ2 is provided in Table 1. This is a restricted-use dataset, so unweighted sample sizes can only be provided to the nearest 10. Therefore, sample sizes reported in this study are approximates, not exact numbers.

RQ1. The sample for RQ1 was limited to youth who had employment data available at Wave 4 and had completed or were no longer attending high school (N=310). The dependent variable for this analysis was current employment, which was reported at Wave 4. Employment was defined as working 20 or more hours per week and was coded as 0 if the individual did not work at least 20 hours per week and 1 if the individual did work 20 or more hours per week. The
independent variables were *paid work experience while in high school* and *participation in school-sponsored work*, either of which could have been reported at Waves 1, 2, and/or 3. These variables were both dichotomous. Examples of school-sponsored work activities provided to participants were a work study job, an internship, or a school-based business. The statistical technique used to analyze the data was logistic regression, and SAS version 9.2 was the statistical software used for all analyses.

**RQ2.** The sample for RQ2 was limited to youth who were no longer in high school and reported employment experience in Wave 2 or 3 (N=110). The dependent variable for this analysis was also *current employment*, reported at Wave 4, and defined as working 20 or more hours per week. The independent variables were *number of paid jobs* during the two-year period preceding Wave 3, whether the youth had *found his or her own job* during Wave 2 or Wave 3, and the *job length* (in months) of the longest job the youth reported holding during Waves 2 or 3. The statistical technique used to analyze the data was logistic regression.

**RQ3.** The sample for RQ3 was also limited to youth who were no longer in high school and reported employment experience in Wave 2 or 3 (N=110). The dependent variable for this analysis was *number of paid jobs* during the two-year period preceding Wave 4. The independent variable was whether the youth had *found his or her own job* during Wave 2 or Wave 3. The statistical technique used to analyze the data was an independent t-test. Cohen’s $d$ was used as a measure of effect size.

**RQ4.** The sample for RQ4 consisted of youth at Wave 2 and Wave 3 who had data available about receipt of SSI benefits and engagement in productive activities (N=120 and N=180). The dependent variable was *engagement in productive activities* during the past two years (for Wave 2 and Wave 3), which was grouped into three categories for this analysis.
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(employment, other, and none). Youth were placed in the Employment category if they participated in paid employment alone, or paid employment and any other activity. They were placed in the Other category if they did not participate in paid employment but did participate in job skills training, volunteer work, and/or postsecondary school. They were placed in the None category if they did not participate in any of these activities. The independent variable was receipt of SSI benefits (yes or no) during the two-year period preceding Wave 2 and Wave 3. The statistical technique used to analyze the data was chi-square, with two separate analyses run by wave. Cramer’s V was used as a measure of effect size.

Results

Demographic information for each sample used in this study is provided in Table 1. More than one-third of the RQ1 sample and slightly more than one-fourth of the RQ2 sample had a secondary disability. Types of secondary disabilities most commonly reported by parents were (percentages are for RQ1 and RQ2): attention deficit disorder (13%; 15%), physical/orthopedic impairment (13%; 5%), cerebral palsy (8%; 4%), learning disabilities (7%; 7%), and mental retardation (6%; 1%). Two percent or less of the samples reported the following disabilities: TBI, autism, emotional disturbance/behavioral disorder, and speech/communication impairment.

RQ1: School-Sponsored Work Experience versus Paid Work Experience

Of the 90 currently employed youth in this sample, 80% had previous paid work experience, 31% participated in school-sponsored work, and 14% had no prior work experience. The overall model significantly predicted future employment, $\chi^2 (2, N = 310) = 18.00, p < .01$, Nagelkerke $R^2 = .08$. Although paid work experience significantly predicted future employment, $\chi^2 (1, N = 310) = 15.92, p < .01$, school-sponsored work during high school was not associated
with future employment, $\chi^2 (1, N = 310) = 0.14$, $p = .71$. The odds that youth would be working at Wave 4 were 3.3 times greater if they had previous paid work experience.

**RQ2: Characteristics of Previous Employment**

For youth with prior work experience, current employment reported at Wave 4 was significantly influenced by whether they found their own paid employment in the past, the number of previous jobs, and the length of those jobs [$\chi^2 (3, N = 110) = 18.66$, $p < .01$, Nagelkerke $R^2 = .21$]. Sixty-eight percent of the 50 youth in this sample who were currently working reported that they found a job independently in the past. On average, currently employed youth worked 2.28 (SD=2.06) jobs in the past, while those who were not employed worked 1.60 (SD=0.96) jobs in the past. Youth who were currently employed worked an average 13.45 (SD=9.28) months at the longest job they held in the past, while those who were not currently employed worked an average of 8.96 (SD=7.69) months at the longest job they held in the past.

The odds that youth would be currently employed were 2.46 times greater if they found a job independently in the past [$\chi^2 (1, N = 110) = 4.42$, $p = .04$]. Odds of being currently employed increased with each additional paid job held in the past [$\chi^2 (1, N = 110) = 4.22$, $p = .04$] and with increased length of previous jobs [$\chi^2 (1, N = 110) = 6.50$, $p = .01$]. For example, if a youth held two paid jobs in the previous two years, he or she had odds 2.18 times greater of being currently employed compared to someone who did not have a paid job. Odds of being employed also increased by more than 2 for each additional 12 months of job tenure (e.g., holding a one-month job versus a job that lasted 13 months).

**RQ3: Influence of Finding Job Independently in the Past on Number of Future Jobs**
For youth with prior work experience, those who found jobs independently during Wave 2 or 3 were significantly more likely to have more paid jobs during the two-year period preceding Wave 4 than those who received assistance in finding previous work \([t(104) = -2.05, p = .04, d = .40]\). Youth who found their own jobs in the past worked an average of 2.05 (SD=1.35) jobs during the two-year period preceding Wave 4, while those who received assistance in finding jobs in the past worked an average of 1.51 (SD=1.38) jobs during that time.

**RQ4: Association between Receipt of SSI Benefits and Productive Activities**

At Wave 2, 39% of youth reported receiving SSI benefits. The percentage of youth who engaged in productive activities in Wave 2 did not differ based on whether they received SSI benefits \([\chi^2 (2, N = 120) = .38, p = .83, \text{Cramer’s } V = .06]\). However, by Wave 3, 61% of youth reported receiving SSI benefits and those receiving benefits were significantly less likely to engage in productive activities during the two-year period preceding Wave 3 \([\chi^2 (2, N = 180) = 12.77, p < .01, \text{Cramer’s } V = .27]\). In Wave 3, 21% of youth receiving SSI benefits were not engaged in any productive activities, compared to only 4% of youth not receiving SSI benefits. Of those who were not receiving SSI benefits, 72% participated in paid employment, compared to 49% who were receiving SSI benefits.

**Discussion**

In this study, we investigated whether characteristics of early work experiences influence future employment and evaluated the impact of one potential influence (receipt of SSI benefits) on obtaining early work experiences for youth with visual impairments. We found that characteristics of early work experiences are associated with future employment, and that SSI receipt is negatively associated with obtaining employment experience. Four separate research questions were evaluated, and the results will be discussed by research question.
One characteristic of early work experience investigated was the type of work (school-sponsored versus paid work experience). Although paid work experience was associated with future employment in this study, as in previous studies, our results indicate that engagement in school-sponsored work experiences during high school has little to no impact on securing future employment. This supports the finding of the lack of impact of school-to-work program participation on future employment for youth with visual impairments in a recent study (McDonnall, 2010b). Based on these findings, we cannot assume that providing youth with school-related employment experiences will benefit them in the future. Two possible associations should be considered when evaluating these results. One is that youth who are more significantly disabled (e.g., with secondary disabilities) may be more likely to participate in school-sponsored work experiences. In addition, they may experience more difficulty finding employment after completing high school, which could explain why school-sponsored work was not associated with future employment in this study. Another possibility is that school-sponsored work experiences may facilitate later independent paid employment experiences while in high school, which are associated with future employment. This kind of relationship was not investigated in this study, but many youth who participated in school-sponsored work activities also participated in paid employment.

Results of this study indicate that characteristics of early employment experiences play an important role in future employment for youth with visual impairment. Not all early employment experiences are equal in terms of their beneficial impact on future employment: experience finding a job independently and the length of previous jobs both predict future employment. Even when taking these two factors into consideration, the number of paid jobs in the past two years also predicts future employment. It is important to acknowledge that while the length of
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Job tenure is important, having multiple job experiences is similarly important. Obviously, in a short time span, the two are diametrically opposed. Given that employers must invest time and other resources in each job search, it makes sense that they might prefer to hire someone with a history of longer job tenure. The ability to hold a job for a length of time would indicate that the person possesses the basic “soft skills” that would make an acceptable employee. Alternatively, holding multiple jobs might increase the potential for future employment by allowing youth to obtain a variety of specific job skills, improve their interviewing and/or job searching skills, increase their professional network of contacts, and build a work history that may look appealing to employers.

Finding a job independently was associated with future employment, as measured by both whether the youth was currently employed at the time of the Wave 4 interview and the number of jobs held during a two-year period in the future. There are many possible reasons why ability to find a job independently is associated with a greater likelihood of being employed in the future. It may be associated with better job-seeking knowledge and skills, or the youth may have a larger network of professional contacts. The experience of finding one’s own job could increase job search self-efficacy, resulting in more job search efforts and greater success in the future. Alternatively, it could be associated with motivation level for working: those who were most interested in working found their own jobs and were able to continue doing so in the future.

Results of this study also indicate that youth who receive SSI benefits are less likely to engage in productive activities at Wave 3 than those not receiving SSI benefits. Consistent with previous research, the largest difference among engagement in productive activities was that youth receiving SSI benefits were much less likely to hold a paid job compared to those not receiving SSI. Additionally, a large percent of SSI recipients did not engage in any type of
productive activities. In Wave 2, however, there was no significant difference in engagement for the same group of youth. One explanation for the differences that occurred in Wave 3 but not in Wave 2 could be that as youth get older they are more likely to worry that engaging in productive employment activities will threaten their entitlement to government benefits. Particularly in low-income households, family members may discourage youth from engaging in productive employment activities as they get older for fear of losing the stability that SSI benefits offer in an unstable economy. It is also possible that youth who are recent recipients of SSI – for which a portion of the sample in Wave 3 were – are less likely to engage in paid employment for fear of losing new found benefits.

**Implications for Practice**

One of the most important points to take away from this research study is that early work experiences by youth with visual impairments are not equally beneficial. It may not be sufficient for youth to simply be employed, without consideration of the type of work, how the job was obtained, or how long the job lasted. Professionals who work with this population should be aware of other important work-related factors that influence future employment. In this study, we documented that finding one’s own job independently is important, while participating in school-sponsored work was not associated with future employment. We also found that the length of the job is important, but that having multiple work experiences is also important. Given these two findings, it would not be advisable for youth to work at as many short-term jobs as possible while in high school, but perhaps to work at a few different jobs during high school, each held for longer lengths of time.

The other major finding of this study is associated with receipt of SSI benefits. In a previous study (McDonnall, 2011), receipt of SSI was not found to be associated with future
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Employment when other factors were considered. The current study evaluated whether receipt of SSI was associated with obtaining concurrent employment experiences, which have clearly been associated with future employment. Those who received SSI at Wave 3 (ages 17 to 21) were substantially less likely to engage in employment, and more likely to not be engaged in any productive activity. This finding indicates that youth who receive SSI may need more encouragement from parents and professionals to obtain employment experiences during high school and postsecondary school. Providing counseling to youth and their families regarding how paid work would affect their SSI benefits would be valuable. Ideally, counseling could be a required activity prior to initiating benefits, or when the youth turned 16 if benefits began at an early age. The advantages of early work experiences should be emphasized, as well as information about incentives that allow youth to earn income without SSI being affected (U.S. Social Security Administration, 2011).

Limitations

Common disadvantages of secondary data analysis apply to this research. The primary limitation of this study is missing data. Missing data decreases the representativeness of the sample reducing our ability to generalize the results of the study to the population. Samples of each of the research questions analyzed were limited to youth who had employment data available at specific waves. Responses to particular questions were only available for a subset of the sample at various waves. For example, the sample size for RQ2 and RQ3 was relatively small as it included only those who had completed high school and had employment experience during Wave 2 or Wave 3. A second limitation of the study is that our analyses are limited to the data available. In order to better understand the results, it would be helpful to examine additional
specific characteristics of previous employment, job search skills, and individual motivation to work which are not included in the NLTS2 data.

**Future Research Directions**

Although this research answered some important questions about how some characteristics of and influences on early work experiences impact employment outcomes for youth with visual impairments, it also raises additional questions that deserve further investigation.

- Does participation in school-sponsored work precede or facilitate participation in paid employment experiences? Is this true only for a certain type of student (e.g., those with more severe disabilities, or those who are not able to find a job independently)?

- Which is more important: job length or number of jobs held? This was not evaluated in this study but should be investigated as it would provide valuable information that could help youth and professionals who work with them to focus on the most important aspects of obtaining early work experiences.

- Is SSI receipt a deterrent to obtaining work experience only for certain types of youth (e.g., those with the lowest family income/resources, or those who have recently been approved to receive it)?

As suspected, not all early employment experiences are equal in terms of their beneficial impact on future employment. Further research is necessary to confirm these findings. It is also important to continue evaluating early work experiences in more detail. Additional areas of inquiry include evaluating other potential factors that may influence obtaining early work experiences (e.g., parental attitudes, parental or other adult encouragement, financial need, personal motivation to work), and identifying other characteristics of early work experiences
that impact future employment (e.g., the skill level of the job, the value of work experiences obtained through a transition program). Research that evaluates an expanded definition of future employment, to include such factors as number of hours worked, rate of pay, potential for career advancement, and availability of benefits is also important.
References


crossing the bridge into adult life? Learning Disability Quarterly, 13(2), 97-111.


Table 1

*Demographic characteristics of the samples*

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<tr>
<th>Variable</th>
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<th>RQ2 Sample</th>
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<td>Working 20 hours or more per week (at Wave 4)</td>
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*NOTE:* All figures are reported in percentages without decimal places, per IES guidelines.