Characteristics of Early Work Experiences and Their Association with Future Employment

Michele Capella McDonnall and Jamie O’Mally

Abstract: Introduction: Early work experiences are a key predictor of future employment for transition-age youths with visual impairments. We investigated how specific characteristics of early work experiences influence future employment and whether the receipt of Supplemental Security Income (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, which included a nationally representative sample of high school students with visual impairments who were receiving special education services. Results: Future employment outcomes were positively associated with the characteristics of early work experiences, including finding a job independently, holding multiple jobs, and holding jobs for longer periods of time. Participating in school-sponsored work was not associated with future employment. Youths who received SSI benefits were significantly less likely to engage in productive activities, including employment, in Wave 3 than were those who did not receive benefits; however, this was not the case for youths who received SSI benefits in Wave 2. Discussion: Not all early work experiences were found to be equally predictive of future employment for youths with visual impairments. The results indicate that it may not be sufficient for youths simply to be employed during high school without consideration of the types of work, how the jobs were obtained, or how long the jobs lasted. These characteristics of early work experiences are important to future employment and should be considered when helping youths prepare for the transition from school to work. Implications for Practitioners: Professionals and parents should emphasize the benefits of early employment to youths with visual impairments. Youths 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 youths who receive SSI benefits to obtain early work experiences and should inform them and their families about incentives that allow them to retain benefits while working.
Despite academic success and achievement in other domains, transition-age youths (those aged 16 to 24) with visual impairments (that is, those who are blind or have low vision) typically experience challenges in finding employment (McDonnell, 2010a; Newman, Wagner, Cameto, & Knokey, 2009; Shaw, Gold, & Wolffte, 2007). One important factor that is known to predict future employment for youths with disabilities and the general population is obtaining early work experiences (Landmark, Ju, & Zhang, 2010; Patton & Smith, 2010; Test et al., 2009; Wright & Carr, 1995). Researchers have begun to identify critical factors that predict employment outcomes for youths with visual impairments and have found that employment during high school is one of the strongest predictors of future employment (McDonnell, 2010b, 2011).

There are a variety of ways in which youths may gain work experience during high school; the types of work include paid employment, volunteer experiences, internships, and school-sponsored work experiences.

Previous research has paid little attention to the specific characteristics of early work experiences that are most predictive of future employment. Although many youths with visual impairments have reported working during high school, the quality of their work experiences is uncertain. Many of those who were employed worked a limited number of hours or held short-term jobs (McDonnell, 2010a). To gain a deeper understanding of the factors that affect employment outcomes for youths with visual impairments, we examined the influence of the characteristics of early work experiences to determine how these characteristics are associated with future employment.

Characteristics of early work experiences

Some characteristics of early work experiences that have been explored include the number of previous jobs, the length of previous jobs, and the types of experiences. Having a larger number of early work experiences has been positively associated with youths with visual impairments and those with other disabilities obtaining future employment (Benz, Lindstrom, & Yovanoff, 2000; McDonnell, 2010b; McDonnell & Crudden, 2009). Having jobs for at least 12 months has been associated with future employment for youths with hearing impairments (Bullis, Davis, Bull, & Johnson, 1995), but the relationship between the length of jobs and future employment has not been evaluated for youths with visual impairments. Some research has found that youths with disabilities benefit from school-to-work programs in obtaining future employment (Burgstahler, 2001; Shandra & Hogan, 2008), yet research
with youths who are visually impaired has not supported this finding (McDonnell, 2010b). For some youths with disabilities, this is the only type of work experience in which they engage 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.

Youths with disabilities often receive assistance finding employment (Ward, 1991). In one study of youths with learning disabilities, the majority of employed youths received assistance in finding their jobs, while 43% found their jobs independently (Sitlington & Frank, 1990). Similarly, 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 youths who are visually impaired receiving assistance, it is relevant to consider whether their ability to find their own jobs is an important factor in obtaining 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 has found that many people who receive SSI are living in poverty because they are using SSI as a primary source of income, rather than as a supplement (Rupp & Scott, 1995). For people with disabilities, SSI benefits provide a guarantee of a low but secure income in an uncertain economy in which paid employment opportunities may offer less financial security. Research has indicated that youths with disabilities who receive SSI benefits are less likely to be employed than are those who do not receive SSI (Berry, 2000; Burkhauser & Wittenburg, 1996; Fabian, 2007). Transition-age youths who received SSI were less successful in various employment outcomes, including current employment, the number of hours worked per week, monthly earnings, and work history. In fact, the odds of being employed were nearly double for youths who were not receiving SSI benefits in one study (Berry, 2000). However, a recent study involving youths with visual impairments found that the receipt of SSI was not associated with future employment when other factors were considered (McDonnall, 2011). Given this finding, it is important to evaluate whether the receipt of SSI is associated with concurrent employment for youths with visual impairments.

**The current study**

The objective of the study presented here was to explore some characteristics of and influences on early work experiences to determine how they affect employment outcomes for youths with visual impairments. While it is evident that early work experience is important to future employment, little is known about the importance of the specific characteristics of those work experiences or which factors influence the likelihood of obtaining early work experiences. The specific purposes of the current study were to evaluate whether the characteristics of earlier work experiences influence later employment and to evaluate the impact that the receipt of SSI has on current employment and other forms of engagement. The characteristics of work experiences that we studied were having found a job independently in the past, the
length of previous jobs, the 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 in obtaining future employment as paid work experiences?
2. Do specific characteristics of paid work experiences predict future employment? These characteristics include the ability of youths 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 that youths will hold in the future?
4. Are youths who are receiving SSI benefits less likely to engage in employment and other productive activities than those who are not receiving SSI benefits?

**METHOD**

**Source of data**

The second National Longitudinal Transition Study (NLTS2) was the source of the data for the current study. NLTS2 is a longitudinal study (consisting of five waves 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. It has conducted numerous large studies for the U.S. Department of Education, including the original NLTS. NLTS2 consisted of a nationally representative sample of students who were receiving special education services who were aged 13 to 16 in December 2000. The sample was stratified on the basis of several factors, including disability, resulting in a nationally representative sample of youths with visual impairments who received special education services while in high school. The data were collected via interviews with the youths and their parents, interviews with school personnel, and direct assessments of the youths. The data were 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 2001–02 (Wave 1), 2003–04 (Wave 2), 2005 (Wave 3), and 2007 (Wave 4). The data used for our study were collected via interviews with the youths and their parents. Additional information about the NLTS2 is available at <www.nlts2.org/studymeth/index.html>.

**SAMPLES, VARIABLES, AND STATISTICAL ANALYSES**

The sample was restricted to youths with visual impairments as the primary disability under which they were eligible for special education services. NLTS2 did not formally differentiate these youths on the basis of their level of vision loss, but the parents were asked if the youths had “complete blindness” (see Table 1). Different subsets of the overall group were used to answer the research questions, on the basis of data that were available for the specific items that were used. Because the sample, set of variables, and statistical method were unique to each research question, these aspects are described by
the research questions. Demographic information about the samples that was available for the first two questions is presented in Table 1. This is a restricted-use data set, so unweighted sample sizes can be provided only to the nearest 10. Therefore, the sample sizes reported in this article are approximates, not exact numbers.

**Question 1**
The sample for Question 1 was limited to the 310 youths for whom employment data were available at Wave 4 and who had completed or were no longer attending high school. 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, or 3 (or all three waves). These variables were both dichotomous. Examples of school-sponsored work activities were a work-study job, an internship, or a school-based business. The statistical technique that was used to analyze the data was logistic regression, and SAS version 9.2 was the statistical software used for all the analyses.

**Question 2**
The sample for Question 2 was limited to the 110 youths who were no longer in high school and reported employment experience in Wave 2 or 3. The dependent variable for this analysis was also current employment, reported at Wave 4, and was defined as working 20 or more hours per week. The independent variables were the 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 length of the job (in months) of the longest job the youth reported holding during Wave 2 or 3. The statistical technique that was used to analyze the data was logistic regression.

**Question 3**
The sample for Question 3 was also limited to the 110 youths who were no longer in high school and reported employment experience in Wave 2 or 3. The dependent variable for this analysis was the number of paid jobs during the two-year period preceding Wave 4. The independent variable for this analysis was the 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 that was used to analyze the data was an independent t test. Cohen’s $d$ was used as a measure of the effect size.

**Question 4**
The sample for Question 4 consisted of youths at Wave 2 and Wave 3 for whom data were available about the 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 (employment, other, and none). Youths 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, or postsecondary school. They were placed in the none category if they did not participate in any of these activities. The independent variable was the receipt of SSI benefits (yes or no) during the two-year period preceding Wave 2 and Wave 3. The statistical technique that was used to analyze the data was chi square, with two separate analyses run by wave. Cramer’s V was used as a measure of the effect size.

Results
Demographic information for each sample used in the current study is presented in Table 1. More than one-third of the Question 1 sample and slightly more than one-fourth of the Question 2 sample had a secondary disability. The types of secondary disabilities that were most commonly reported by the youths’ parents were (the percentages are for the Question 1 and Question 2 samples, respectively) attention deficit disorder (13% and 15%), a physical or orthopedic impairment (13% and 5%), cerebral palsy (8% and 4%), learning disabilities (7% and 7%), and mental retardation (6% and 1%). Two percent or less of the samples reported the following disabilities: traumatic brain injury, autism, an emotional disturbance or behavioral disorder, and a speech or communication impairment.

School-sponsored vs. Paid Work
Of the 90 currently employed youths in the 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 the youths would be working at Wave 4 were 3.3 times greater if they had previous paid work experience.

Characteristics of Previous Employment
For the youths 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 \(R^2 = .21.\) Of the 50 youths in this sample who were currently working, 68% reported that they found a job independently in the past. On average, the currently employed youths 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. The youths who were currently employed worked an average of 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 the youths would be currently employed were 2.46 times greater if they found a job independently in the past, \(\chi^2 (1, N = 110) = 4.42, p = .04.\) The 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 the greater length of their 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 than someone who did not have a paid job. The odds of being employed also increased by more than 2 for each additional 12 months of job tenure (holding a one-month job versus a job that lasted 13 months, for example).

**FINDING PREVIOUS JOBS INDEPENDENTLY**

For the youths 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 were those who received assistance in finding previous work, \(t(104) = -2.05, p = .04, d = .40.\) The youths 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.

**RECEIPT OF SSI BENEFITS**

At Wave 2, 39% of the youths reported receiving SSI benefits. The percentage of youths who engaged in productive activities in Wave 2 did not differ on the basis of whether they received SSI benefits, \(\chi^2 (2, N = 120) = .38, p = .83,\) Cramer’s \(V = .06.\) However, by Wave 3, 61% of the youths reported receiving SSI benefits, and those who were receiving benefits were significantly less likely to engage in productive activities during the two-year period preceding Wave 3, \(\chi^2 (2, N = 180) = 12.77, p < .01,\) Cramer’s \(V = .27.\) In Wave 3, 21% of the youths who were receiving SSI benefits were not engaged in any productive activities, compared to only 4% of those who were 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 the study presented here, we investigated whether the characteristics of early work experiences influence future employment, and evaluated the impact of one potential influence (the receipt of SSI benefits) on youths with visual impairments obtaining early work experiences. We found that the characteristics of early work experiences are associated with future employment, and that the receipt of
SSI is negatively associated with obtaining employment experience. Four separate research questions were evaluated, and the results are discussed by research question.

One characteristic of early work experience that we investigated was the type of work (school-sponsored versus paid work). Although paid work experience was associated with future employment in the study, as in previous studies, our results indicate that engagement in school-sponsored work experiences during high school has little to no impact on obtaining future employment. This finding supports McDonnall’s (2010b) finding of the lack of impact of participation in school-to-work programs on future employment for youths with visual impairments. On the basis of these findings, we cannot assume that providing youths with school-related employment experiences will benefit them in the future. Two possible associations should be considered when evaluating these results. One is that youths who are more significantly disabled (such as those with secondary disabilities) may be more likely to participate in school-sponsored work experiences. In addition, they may have 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. We did not investigate this kind of relationship in our study, but many youths who participated in school-sponsored work activities also participated in paid employment.

The results indicate that the characteristics of early employment experiences play an important role in future employment for youths with visual impairments. 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 these two factors are taken into consideration, the number of paid jobs in the past two years also predicts future employment. It is important to acknowledge that although the length of 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 may 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 has the basic “soft skills” that would make an acceptable employee. Alternatively, holding multiple jobs may increase the potential for future employment by allowing youths to obtain a variety of specific job skills, improve their interviewing and 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 the 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 the level of motivation to work: Those who were most interested in working found their own jobs and were able to continue doing so in the future.

The results also indicate that youths who received SSI benefits were less likely to engage in productive activities at Wave 3 than were those who were not receiving SSI benefits. Consistent with previous research, the largest difference among engagement in productive activities was that the youths who were receiving SSI benefits were much less likely to hold paid jobs than were those who were not receiving SSI. In addition, a large percentage 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 youths. One explanation for the differences that occurred in Wave 3 but not in Wave 2 could be that as youths get older, they are more likely to worry that engaging in productive employment activities will threaten their entitlement to governmental benefits. Particularly in low-income households, family members may discourage youths 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 youths who are recent recipients of SSI—of which a portion of the sample in Wave 3 were—are less likely to engage in paid employment for fear of losing newfound benefits.

**Implications for Practice**

One of the most important points to take away from this research study is that early work experiences by youths with visual impairments are not equally beneficial. It may not be sufficient for a youth simply to 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 our 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 youths 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 a longer length of time.

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

LIMITATIONS
The common disadvantages of secondary data analysis apply to this research. The primary limitation of the study was missing data. Missing data decreased 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 that we analyzed were limited to youths for whom employment data were available at specific waves. Responses to particular questions were available only for a subset of the sample at various waves. For example, the sample for Questions 2 and 3 was relatively small because it included only those who had completed high school and had employment experience during Wave 2 or Wave 3. A second limitation is that our analyses were limited to the data that were available. To gain a better understanding of the results, it would be helpful to examine additional specific characteristics of previous employment, job search skills, and individual motivation to work, which were 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 affect employment outcomes for youths with visual impairments, it also raised 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 (such as those with more severe disabilities or those who are not able to find a job independently)?
- Which is more important: the duration of a job or the number of jobs held? This question was not evaluated in this study but should be investigated because it would provide valuable information that could help youths and professionals who work with them focus on the most important aspects of obtaining early work experiences.
- Is the receipt of SSI a deterrent to obtaining work experience only for certain types of youths (such as those with the lowest family income or resources or those who have recently been approved to receive it)?

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

References


Employment-related experiences of youths who are visually impaired: How are these youths faring? *Journal of Visual Impairment & Blindness*, 101, 7–21.


*Michele Capella McDonnell, Ph.D., CRC, research professor, Rehabilitation Research and Training Center on Blindness and Low Vision, Mississippi State University, P.O. Box 6189, Mississippi State, MS 39762; e-mail: <m.mcdonnall@msstate.edu>. Jamie O’Mally, Ph.D., assistant research professor, Rehabilitation Research and Training Center on Blindness and Low Vision, Mississippi State University; e-mail: <jomally@colled.msstate.edu>.