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College Graduates with Visual Impairment:

A Report on Seeking and Finding Employment

Karla Antonelli and Anne Steverson

Mississippi State University

and

Jamie O'Mally

University of Mobile

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Correspondence concerning this article should be addressed to Karla Antonelli, NRTC on Blindness and Low Vision, PO Box 6189, Mississippi State, MS, 39762. Telephone: 662-325-3151, FAX: 662-325-8989. Email: kantonelli@colled.msstate.edu.

Abstract

Introduction: Career mentoring can help college graduates with legal blindness to address employment barriers. Data on specific employment outcomes and job search experiences for this population can inform job seeking strategies for students, mentors, and service providers.

Methods: A longitudinal study evaluated job seeking activities and employment outcomes for college students with legal blindness, half of whom were randomly assigned to work with a career mentor who was also legally blind and working in the same field. Students reported job search activities and experiences, and those employed reported job details including position, compensation, and satisfaction.

Results: Students spent considerable time job seeking, and reported low interviews-to-applications ratios. Trends indicated that students with mentors spent less time and effort in their job search. Students identified challenges including job market competition, employer bias, and transportation. Students who found employment worked in varied fields, often in professional or skilled positions with competitive salaries.

Discussion: College students with legal blindness can achieve successful employment in competitive positions, but may require an effortful job search to address well-known employment barriers. Experienced mentors may provide guidance for a more focused and efficient job search.

Implications for Practitioners: Invested time and effort are aspects of job seeking that students can control. Mentors can assist college students with legal blindness on those aspects, freeing time and resources to deal with systemic challenges such as employer attitudes and competition.

College Graduates with Visual Impairment:

A Report on Seeking and Finding Employment

Securing successful, competitive employment as a young adult can be challenging, particularly for persons with blindness or visual impairment (B/VI) (McBroom, 1995; Nagle, 2001). Although the economy has been improving, as of 2015 the unemployment rate for recent college graduates still averaged 7.2% (Davis, Kimball, & Gould, 2015). Information specific to college graduates with B/VI is unavailable, but persons of approximate college graduate age (ages 20-24) with B/VI had an unemployment rate of 17.5% in 2015 (Bureau of Labor Statistics, 2015). This higher rate of unemployment exists despite young persons with B/VI having the highest rate of continuing education beyond high school (approximately 78%), compared with students with other disabilities (Newman, Wagner, Cameto, & Knokey, 2009). Acquiring education beyond high school is one way to improve employment outcomes such as earnings (Stevens, Kurlaender, & Grosz, 2015; Belfield, 2015); however, employment challenges facing persons with B/VI are well established in the literature (Crudden, Williams, McBroom, & Moore, 2002; Crudden & McBroom, 1999; McDonnall, Zhou, & Crudden, 2013). As a result, college graduates with B/VI have particular employment challenges despite obtaining secondary education.

Commonly identified employment barriers for individuals with B/VI include: negative employer attitudes about hiring employees with B/VI (McDonnall et al., 2013), lack of employment preparation or access to adaptive equipment (Crudden et al., 2002), and securing employment transportation (Crudden, McDonnall, & Hierholzer, 2015). Career services including mentoring programs, (e.g., American Foundation for the Blind's CareerConnect®), can help persons with B/VI address these barriers. In particular, mentoring youth with B/VI has been

shown to improve transition outcomes such as hope for the future, self-efficacy in career decision-making, and assertiveness in job hunting (Bell, 2012; O'Mally & Antonelli, 2016), which can improve chances for successful employment. Given these barriers to employment, it is important to establish a body of knowledge about specific employment outcomes for college graduates with B/VI, and how they become successfully employed.

Information about how most college graduates are obtaining jobs is difficult to find, including the average number of applications students submit, the number of call backs they receive, and how many of those lead to job interviews. In two studies that examined this question, college graduates completed an average of 6 interviews before securing jobs (Mau & Kopischke, 2001), and an average of 1.29 "second-round interviews" (Brown, Cober, Kane, Levy, & Shalhoop, 2006). Recent anecdotal evidence suggests a difficult job market, with college graduates applying for 30 to 60 jobs before being hired (Goodman, 2015); however, quantitative data on time and effort spent on specific job search tasks is virtually nonexistent. Systemic barriers such as employer discrimination and lack of transportation options can be difficult to address, but the effort invested in job seeking is one controllable factor that can be addressed by job-seekers with B/VI and service providers. Therefore, information regarding how college graduates find jobs and the expected effort required are important considerations as college students with B/VI work with service providers to prepare for employment.

Research on employment outcomes specific to this population is also scarce. Shaw, Gold, & Wolffe (2007) described job-search and employment outcomes for young adults (ages 15-30) with B/VI, but was not specific to college students. Early research specific to this population reported job characteristics, job search experiences, and challenges (McBroom, 1995). Respondents worked in diverse fields including rehabilitation, education, STEM (i.e., science,

technology, engineering, and mathematics) fields, business, and law, and most were satisfied with their work. The majority of respondents found jobs on their own, and on average took seven months to find jobs. Transportation, employer discrimination, information accessibility, and financial concerns were identified as challenges. McBroom (1995) helped to provide an initial view of employment outcomes for college graduates with B/VI; however, no recent information specific to this population is evident in the literature.

This paper represents a continuation of results reporting from a research study on improving student employment outcomes using a career mentoring program for college students with B/VI; mentees who participated significantly improved their assertiveness in job hunting, and evaluated their experiences positively (Authors, 2016). This report details student employment outcomes, job search efforts and strategies, and challenges faced, and includes results from a follow up survey administered to participants at least one year after their program participation. Research questions addressed in this report are: (a) What job search activities do college students with B/VI engage in while seeking employment? (b) What aspects of seeking employment do college students with B/VI find most challenging? (c) For college students with B/VI who have successfully obtained employment, what are the specific employment outcomes, including salary and benefits, job field, and job satisfaction?

Methods

Design

College students with legal blindness were recruited nationally through several mechanisms including media, contacts with colleges and universities, and consumer and professional organizations. Eligibility surveys were used to select participants for this

longitudinal study. Students were randomly assigned to either work with a mentor for one year (mentees) or to receive traditional employment resources (comparison students).

Participants

A national sample included 26 mentee-mentor pairs and 25 comparison group students. Participant eligibility criteria included legal blindness and U.S. residency. Students were under age 35 (M = 25.88, SD = 4.35) and within one year of graduation with plans to seek employment. The majority of students were white (70.59%), female (62.75%), pursuing undergraduate degrees (72.55%), and had some volunteer or paid work experience (82.35%). Mentors were ages 25-63 (M = 48.00, SD = 10.13), employed or recently retired, and most (72.96%) had graduate degrees.

Materials

Mentees and mentors were given an *Employment Mentoring Manual* (NRTC, 2016a) to guide interactions throughout the project, with recommended activities, topics, and guidance for the mentoring relationship. A *Resource Sheet for Job Seekers* (NRTC, 2016b) that listed career preparation websites was provided to comparison students.

At pretest and posttest, students completed the *Job-Seeking Self-Efficacy* scale (Barlow, Wright, & Cullen, 2002), adapted for B/VI; the *Assertive Job Hunting Survey* (Becker, 1980); and the *Career Adaptability Scale* (Rottinghaus, Day, & Borgen, 2005) to assess the impact of the mentoring intervention. Employed students completed adapted versions of the *Abridged Job Descriptive Index* (AJDI; Stanton, Sinar, Balzer, Julian, Thoresen, Aziz… & Smith, 2002), *Abridged Job in General Scale* (AJIG; Russell, Spitzmuller, Lin, Stanton, Smith, & Ironson, 2004), *Intention to Quit* (Parra, 1995) and *Intent to Leave* (O'Reilly, Chatman, Caldwell, 1991) scales to assess job satisfaction. Mentees completed *Monthly Reports* of their contact (amount and type) with mentors.

Quarterly Reports completed by all students included reports of time spent in career preparation activities such as exploring the job market, researching job openings, and preparing and submitting applications. Students also reported career preparation topics and activities addressed with mentors (mentees) or on their own (comparison students).

The *Posttest* and *Follow Up Survey* collected information on job search activities and employment outcomes, including how students found their jobs, position title, company, salary, benefits, job satisfaction, and job fit. The job fit measure developed for the study used a 1 (strongly disagree) to 10 (strongly agree) scale in which students rated how well their jobs matched their education, experience, interests, and post-graduation work expectations. Students also reported the most challenging aspects of seeking employment, as well as whether they declined any job offers and why. In the *Follow Up Survey* students were also asked to identify common barriers to employment they faced in their job search, and to report aspects of the project they found beneficial.

Mentees and mentors completed a *Program Satisfaction* measure developed for the study, rating agreement (on 1-10 scale) with 28 statements assessing the mentoring relationship and the program. *Early Exit Surveys* were used to assess mentoring pairs who withdrew early from the study.

Procedures

Approval was granted by the university's institutional review board, and participants provided informed consent. Students participated in the study during one of four cohorts, beginning up to one year before their expected graduation date. Students who met eligibility requirements were randomly assigned to either the intervention or comparison group. Those in the intervention group were matched with mentors in their career field, who were either local to

students, or were distance mentors who communicated with students via telephone and email. All materials were administered electronically. Students completed the pretest at the beginning of their participation, completed reports over the course of one year, completed the posttest at the end of that year, and completed a follow up measure at least one year following completion of posttest measures. Students received gift cards as incentives for participating.

Quantitative and qualitative data were analyzed for response averages and qualitative themes, and inferential statistics were used to test for group differences. Responses to open-ended questions were examined and categorized into emergent themes by two independent raters.

Results

Retention

Participant retention was high (93.50%), with 72 of the 77 total participants completing the program. The follow up survey was administered to students at least one year after each respective cohort, with a response rate of 76.60%, (21 mentees; 15 comparison students).

Job Search Activities

Students were asked to report their quarterly job search activities in four areas: 1) number of hours spent engaging in career preparation or job seeking activities, such as creating a resume, learning about the job market, job shadowing, or practicing interview skills; 2) number of hours spent researching job openings; 3) number of hours spent preparing or submitting job application materials; and 4) number of job applications submitted.

Annual totals for each of these four variables were calculated for each student; Table 1 provides means and standard deviations[1] for both groups. A MANOVA was conducted to assess

[1]Individual outlier totals (n = 4) that were more than 3 SD from the group mean were replaced with the overall variable mean for these calculations.

differences between group means. The multivariate main effect for the four variables was not significant by group, Wilks' $\lambda = .882$, F (4, 44) = 1.477, $p = .23$; however, comparison group students reported spending substantially more time on career preparation and job seeking (in annual hours; $M = 228.96$, $SD = 284.17$) than mentees ($M = 126.17$, $SD = 165.09$).

To examine whether job search activities differed based on employment status (i.e. employed or unemployed), a mixed-factors MANOVA was conducted. The multivariate interaction for employment by group was not significant, Wilks' $\lambda = .917$, F (4, 39) = .879, $p = .49$; however, some trends were observed by employment. Employed mentees reported spending more time on all four job search activities than unemployed mentees. However, for employed students, means for all four variables were similar for intervention and comparison groups. In contrast, for unemployed students, comparison students reported greater engagement in all four job search variables than mentees, particularly on hours spent job seeking, (mentees, $M = 54.25$, $SD = 54.67$; comparison students, $M = 243.88$, $SD = 180.61$).

Challenges and Barriers

At follow up, students were asked to identify barriers encountered while seeking employment. Table 2 provides the list of barriers and percentages of students who selected each. The top three barriers identified by intervention students were lack of transportation, employer discrimination or negative attitudes, and lack of jobs. Comparison students identified two of those barriers most often, with lack of accommodations or assistive technology replacing lack of jobs as a top barrier.

At posttest and follow up, both groups reported having submitted a sizable number of job applications over the previous year, averaging approximately 25 at posttest and approximately 18 at follow up, but had a comparatively small number of interviews, averaging approximately 2.5

at posttest and 5 at follow up; Table 3 provides descriptive statistics by group. In fact, securing interviews was commonly identified in response to the question, “In your opinion, what was the most challenging aspect of obtaining employment?” Job market competition was another; as one student responded: “The horrible job market. People could choose from candidates with much more experience than me for entry level positions.” Another major theme that emerged was overcoming stereotypes of visual impairment, including the challenge of proving oneself as a competent employee. Representative responses included:

> Getting employers to realize that despite my visual impairment, I am capable of doing the job.
>
> The face to face interview process and convincing a potential employer that I am a capable individual for the job.
>
> Being comfortable with my disability and showing it was part of me and even a possible asset rather than a setback.

Other themes identified as challenging were transportation issues and finding job openings that matched students’ qualifications. These themes also emerged when we asked whether students had turned down any job offers and their reasons for doing so. Of the few responses to this question (*n*= 13), the most prevalent themes were transportation, job location, lack of job fit, and limited hours, as seen in comments such as:

> Either it was in another state, or it wasn’t easy to get to with transportation.
>
> Job only consisted of working one week out of every month and some summers as part of a program, compared to a 40 hour per week job.

Employment Outcomes

At posttest, 12 mentees and 14 comparison students were employed, with no significant group differences, X^2 (2, N = 46) = 1.36, p = .51, (Authors, 2016). At follow up, 16 mentees and 8 comparison students were employed, again with no significant group differences, X^2 (1, N = 36) = 2.06, p = .15; however, despite the lack of significance, a higher percentage of mentees (76.19%) than comparison students (53.33%) were employed at follow up, as would be expected from the intervention.

Employed students were asked how they found their jobs (see Table 4). Generally, more mentees than comparison students reported finding jobs on their own or through a friend or family member, while comparison students were more likely to use employment agencies or recruiters. We examined changes in employment over time for all students who were employed at either the posttest or follow up, (mentees, n = 16; comparison, n = 10). At least 80% of employed students in both groups had either maintained or advanced their job standing from posttest to follow up in one or more of the following areas: salary, position, benefits, and hours worked. The remaining comparison students (n = 2), reported employment at posttest but were unemployed at follow up. The remaining mentees (n = 3) were still employed, but reported a decrease in one or more of those measures.

Employed students provided detailed information about their jobs, including: start date, the name and type of the company/organization, job position/title, whether they received benefits, annual gross salary, and average number of hours worked weekly. The name and type of company/organization, along with job titles, were examined to determine the various fields that students pursued; see Table 6 for student percentages per field. Two fields with the highest percentage of students employed were rehabilitation/medical and education.

To summarize the types of positions students obtained, data provided on job position/title were examined and recoded into the following general categories: professional (i.e., requiring a specialized degree); skilled, (i.e., requiring specialized or technical training); entry level, (i.e., work that could be performed with minimum skill or on-the-job training); and intern (i.e., temporary training position). The majority of employed students were in professional or skilled positions, at both posttest (80.77%) and follow up (75.00%). Most students also received benefits (69.23% at posttest; 50.00% at follow up), and worked full time (69.23% at posttest; 66.67% at follow up), defined as 32 hours or more per week. Most students who reported annual salaries earned between $16,000 and $45,000, with a median of $29,000 at posttest and $38,600 at follow up. At follow up, a higher percentage of students in the comparison group were employed full time; otherwise, there were no statistical or qualitative group differences on other job characteristics. Table 7 provides information on job details at posttest and follow up.

Three measures were used to examine job satisfaction at follow up: job fit, promotion potential, and the *Abridged Job in General Scale*, (Stanton et al., 2002). Employed students were satisfied with their jobs, rating them fairly high on a 10-point scale on matching their experience (mentees, $M = 8.36$, $SD = 1.63$; comparison students, $M = 8.07$, $SD = 2.73$), and slightly lower on matching their expectations (mentees, $M = 7.73$, $SD = 2.87$; comparison students, $M = 6.50$, $SD = 3.32$). Job satisfaction was not significantly influenced by group at follow up; see Table 5 for descriptive statistics.

Mentoring Benefit

While there were few significant differences between groups on employment outcomes, we examined responses to determine if mentees felt the mentoring project was beneficial to their transition from college to employment. At follow up, we asked students how much their

participation in the study assisted them in transitioning from college to employment using a 1 (assisted very much) to 5 (provided no assistance) scale. The comparison students' average response indicated they found little assistance from participating (M = 4.0, SD = 1.13), whereas mentees rated the assistance they received significantly higher (M = 2.6, SD = 0.88), $t(33) = 4.11$, $p < .01$.

More than half (61.90%) of mentees reported that they were still in contact with their mentors more than one year after completing the program, indicating long term benefit of the project. Mentees were also asked to what extent they felt that a mentoring relationship is beneficial to the transition from college to employment for a person with B/VI, on a 1 (very beneficial) to 5 (not at all beneficial) scale. The average response by mentees (M = 1.7, SD = .81) indicated that a mentoring relationship was quite beneficial. Mentee comments on the benefit of mentoring included:

> The project gave me an example of someone who followed a similar path and found jobs. I learned from her experiences and knew it wasn't impossible for me to do the same.
>
> My mentor gave, and still does give, me sound, helpful advice.
>
> It's good to hear what the interviewing process is like or what options you have career wise. Some people go on studying things because of what they think it can do for them potentially but don't look at it from a realistic lens. We need those people in our lives to help with our decision making.

Discussion

Because data on employment outcomes specific to this population is lacking in the literature, this report represents an important first step in increasing our knowledge of the employment climate for college educated persons with B/VI, and how employment rates can be

improved for this population. We examined job search activities engaged in by college students with B/VI who were seeking employment. Although there were few significant group differences, numerical trends suggest that mentees spent less time on job search activities overall, and submitted slightly fewer job applications, suggesting that mentees may have been more focused and efficient in their job search. Mentees may have benefitted from mentor advice regarding how and where to seek employment and how to prepare for applying, which may have streamlined their efforts.

Students reported experiencing common barriers to employment that have been established in the literature, indicating that these barriers continue to be obstacles for persons with B/VI. Furthermore, two barriers most frequently evidenced in the literature – negative employer attitudes and transportation – were identified frequently among participants. Thus, although support systems and services to improve transition to employment such as career mentoring may assist students with overcoming barriers, the barriers themselves are still present in the job market.

For students who secured employment, trends indicate differences in how mentees and comparison students found jobs. A greater percentage of mentees than comparison students found jobs by searching on their own, whereas comparison students tended to use employment agencies or recruiters. These trends may indicate that guidance from a mentor enabled mentees to conduct their job search more independently and be more self-sufficient in finding work, while comparison students found it necessary to rely more on outside assistance in their job search. Mentees also significantly increased their assertiveness in job hunting by the posttest (O'Mally & Antonelli, 2016), and this increased assertiveness may have helped mentees to gain the confidence or skills needed to ask about job opportunities on their own. Additionally,

qualitative reports from mentees indicate that they found value in participating in the project and believed it provided assistance with their transition to employment. Mentees valued the contributions and support provided by their mentors, and reported benefiting from working with an experienced mentor in their field.

The majority of employed students were working in high quality jobs with competitive salaries, benefits, and full time positions that required specific education or training. Employed students also reported fairly high job satisfaction, with jobs that generally met students' expectations for the work they would be doing after graduation. Additionally, employed students represented diverse fields of work, the majority of which were not blindness related, as is sometimes considered a default career for persons with B/VI. Though some nuances were seen between the two groups in measures that may indicate the amount of effort required to obtain jobs, generally positive employment situations over one year after college graduation is encouraging for college students with B/VI. However, it is important to note that these experiences are provided only by those who were successfully employed. There were 20 students who were unemployed at the posttest (12 mentees, 8 comparison students) and 12 students at the follow up survey (5 mentees, 7 comparison students), two of whom were employed at posttest but were not by follow up. With a current unemployment rate of 7.2% for this age group, (Davis, Kimball, & Gould, 2015) it should not be surprising that not all were employed, but with 33% of students in this study continuing to report unemployment more than one year after their participation, it is clear that more research on improving employment rates for this population is warranted.

Limitations

Some limitations of this longitudinal study must be considered. First, only 36 of the original 51 students responded to the follow up survey, resulting in a small sample size that limits generalizability. Second, despite quantitative trends in data, few group comparisons were significant. As a result, conclusions must be drawn with caution. Third, this study reports employment information and outcomes during a time when unemployment rates are high in the general population. An unfavorable job market might affect any person's ability to gain employment, and might further decrease opportunities for employment among this population. Thus, the employment climate at the time of this project may have impeded an accurate assessment of intervention effectiveness. Moreover, this longitudinal study included participants who were completing their degrees and becoming employed across different years. Potential changes in job climate between cohorts may further limit statistical power to compare groups. Finally, the accuracy of self-reported employment status, benefits, or other job characteristics could not be verified within the scope of this study.

Future Directions and Implications

Evaluation of longer term mentoring programs with larger samples is recommended to examine the lasting impact of career mentoring for college students with B/VI. Especially in challenging economic times, it may take much longer than one year for college graduates to successfully establish careers. Additionally, collecting longitudinal data on employed students' salary, benefits, promotions, and job satisfaction could provide important information on the long term benefit of mentoring interventions. Therefore, following this population further into their careers and interviewing those successfully employed could enhance our understanding of effective strategies for securing employment.

These findings can inform consumers and service providers on some important points. First, data trends in this study may suggest a mentoring benefit in transition to employment for college students with B/VI, despite limited statistical evidence. Secondly, the continued prevalence of frequently identified employment barriers has been demonstrated in this study. Students, mentors, service providers, and parents would benefit from remaining acutely aware of these barriers and working toward solutions. Finally, evidence of competitive employment in diverse fields among college graduates with B/VI should be encouraging for students and employers, underscoring the fact that successful employment among this population is attainable and mutually beneficial.

References

AFB (2017). CareerConnect®. American Foundation for the Blind. Retrieved from http://www.afb.org/info/living-with-vision-loss/for-job-seekers/make-connections/123.

Barlow, J., Wright, C., & Cullen, L. (2002). A job-seeking self-efficacy scale for people with physical disabilities: Preliminary development and psychometric testing. *British Journal of Guidance & Counseling, 30*(1), 37-53.

Becker, H.A. (1980). The Assertive Job-Hunting Survey. *Measurement and Evaluation in Guidance, 13*(1), 43-48.

Belfield, C. (2015). Weathering the great recession with human capital? Evidence on labor market returns to education from Arkansas. *Center for Analysis of Postsecondary Education and Employment.* Retrieved September 22, 2016 from http://capseecenter.org/weathering-great-recession-human-capital/.

Bell, E.C. (2012). Mentoring transition-age youth with blindness. *The Journal of Special Education, 46*(3), 170-179.

Brown, D.J., Cober, R.T., Kane, K., Levy, P.E., & Shalhoop, J. (2006). Proactive personality and the successful job search: A field investigation with college graduates. *Journal of Applied Psychology, 91*(3), 717-726.

Bureau of Labor Statistics. (2015). *Unpublished data tables of specific disability questions in the Current Population Survey.* Washington, DC: Author.

Crudden, A., & McBroom, L.W. (1999). Barriers to employment: A survey of employed persons who are visually impaired. *Journal of Visual Impairment & Blindness, 93*(6), 341-350.

Crudden, A., McDonnall, M., Hierholzer, A. (2015). Transportation: An electronic survey of persons who are blind or visually impaired. *Journal of Visual Impairment and Blindness, 109*(6), 445-456.

Crudden, A., Williams, W., McBroom, L.W., & Moore, J.E. (2002). *Consumer and employer strategies for overcoming employment barriers* (Technical Report). Mississippi State, MS: Rehabilitation Research and Training Center on Blindness and Low Vision.

Davis, A., Kimball, W., & Gould, E. (2015, May 27). The Class of 2015: Despite an improving economy, young grads still face an uphill climb. *Economic Policy Institute.* Retrieved October 30, 2015 from http://www.epi.org/publication/the-class-of-2015/.

Goodman, L.M. (2015, May 27). Millennial college graduates: young, educated, jobless. *Newsweek.* Retrieved October 17, 2016 from http://www.newsweek.com/2015/06/05/millennial-college-graduates-young-educated-jobless-335821.html

Mau, W., & Kopischke, A. (2001). Job search methods, job search outcomes, and job satisfaction of college graduates: A comparison of race and sex. *Journal of Employment Counseling, 38*(3), 141-149.

McBroom, L.W. (1995). *Transition to work following graduation from college: Experiences of employees with visual impairments and their employers* (Technical Report). Mississippi State, MS: Rehabilitation Research and Training Center on Blindness and Low Vision.

McDonnall, M.C., Zhou, L., & Crudden, A. (2013). Employer attitudes towards persons who are blind or visually impaired: Perspectives and recommendations from vocational rehabilitation personnel. *Journal of Rehabilitation, 79*(3), 17-24.

Nagle, K.M. (2001). Transition to employment and community life for youths with visual impairments: Current status and future directions. *Journal of Visual Impairment and Blindness, 95*(12), 725-738.

NRTC (2016a). Employment Mentoring Manual. National Research and Training Center on Blindness and Low Vision. Mississippi State University, MS. Retrieved from http://blind.msstate.edu/docs/employment_mentoring_manual.pdf.

NRTC (2016b). Resource Sheet for Job Seekers. National Research and Training Center on Blindness and Low Vision. Mississippi State University, MS. Retrieved from http://blind.msstate.edu/docs/resource_sheet_for_job_seekers-update_2016-12-02.pdf.

Newman, L., Wagner, M., Cameto, R., & Knokey, A-M. (2009). The post-high school outcomes of youth with disabilities up to 4 years after high school. A report of findings from the National Longitudinal Transition Study-2 (NLTS2) (NCSER 2009-3017). Menlo Park, CA: SRI International. Retrieved from www.nlts2.org/reports/2009_04/nlts2_report_2009_04_complete.pdf.

O'Mally, J., & Antonelli, K. (2016). The effect of career mentoring on employment outcomes for college students who are legally blind. *Journal of Visual Impairment & Blindness, 110*(5), 295-307.

O'Reilly, C., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person–organization fit. *Academy of Management Journal*, 34,487– 516.

Parra, L.F. (1995). *Development of an intention to quit scale.* Unpublished manuscript, Bowling Green State University.

Rottinghaus, P.J., Day, S.X., & Borgen, F.H. (2005). The Career Futures Inventory: A measure of career-related adaptability and optimism. *Journal of Career Assessment, 13*(1), 3-24.

Russell, S.S., Spitzmüller, C, Lin, L.F., Stanton, J.M., Smith, P.C., & Ironson, G.H. (2004). Shorter can also be better: The Abridged Job in General Scale. *Educational and Psychological Measurement, 64*(5), 878-893.

Shaw, A., Gold, D., & Wolffe, K. (2007). Employment-related experiences of youths who are visually impaired: How are these youths faring? *Journal of Visual Impairment and Blindness, 101*(1), 7-21.

Stanton, J.M., Sinar, E.F., Balzer, W.K., Julian, A.L., Thoresen, P., Aziz, S., …Smith, P.C. (2002). Development of a compact measure of job satisfaction: The Abridged Job Descriptive Index. *Educational and Psychological Measurement, 62*(1), 173-191.

Stevens, A., Kurlaender, M., & Grosz, M. (2015). Career-technical education and labor market outcomes: Evidence from California community colleges. *Center for Analysis of Postsecondary Education and Employment.* Retrieved September 22, 2016 from http://capseecenter.org/career-technical-labor-market-outcomes/.

Table 1: Means and Standard Deviations for Job Search Activities

Job Search Activity	Intervention			Comparison		
	All	Employed	Unemployed	All	Employed	Unemployed
Job Seeking	126.17 (165.09)	198.08 (206.67)	54.25 (54.67)	228.96 (284.17)	256.22 (350.98)	243.88 (180.61)
Job Research	60.81 (65.63)	72.50 (60.50)	49.13 (71.05)	84.46 (94.68)	90.17 (95.39)	102.75 (104.60)
Job Preparation	58.96 (87.06)	82.67 (101.56)	35.25 (65.62)	55.03 (72.06)	53.70 (71.33)	70.75 (85.80)
Job Application	27.12 (42.48)	39.25 (56.76)	14.99 (15.18)	37.76 (72.56)	47.64 (91.20)	31.50 (44.20)

Note. Averages of total hours spent in each activity, or total number of job applications submitted, over one year. Standard deviations shown in parentheses. Outlier values for individual totals more than 3 *SD* away from the group mean (4 values) were replaced by the overall mean for that variable.

Table 2: Percentage of Students Who Reported each Barrier

Barriers	Intervention *n* = 21	Comparison *n* = 15
Lack of transportation to and from a job site	76.2%	33.3%
Employer discrimination or negative attitudes	52.4%	46.7%
Lack of jobs	47.6%	20.0%
Lack of accommodations or assistive technology needed to perform a job	33.3%	40.0%
Lack of jobs with adequate pay	33.3%	20.0%
Potential loss of disability benefits if you work (including monthly payments and/or medical coverage)	28.6%	26.7%
Lack of skills or abilities to perform jobs	23.8%	13.3%
Lack of needed vocational rehabilitation services	19.0%	20.0%
Lack of knowledge about how to find a job	14.3%	6.7%
Difficulty with travel skills	9.5%	13.3%
None of the above	4.8%	13.3%

Table 3: Means and Standard Deviations for Job Applications and Interviews

Application Process	Posttest		Follow Up	
	Intervention	Comparison	Intervention	Comparison
Job Applications Submitted	26.92 (35.31)	23.52 (33.03)	16.71 (26.17)	18.67 (15.56)
Phone Interviews Completed	2.54 (3.71)	2.61 (6.23)	6.79 (13.55)	3.00 (3.88)
Face to Face Interviews Completed	2.75 (3.83)	3.52 (8.39)	3.93 (6.96)	2.58 (3.06)

Note. Averages of totals reported for the year prior to student response, if unemployed, or for the year preceding student's employment. Standard deviations shown in parentheses.

Table 4: Percentages for How Employed Students Found Jobs

Method of Finding Job	Intervention		Comparison	
	Posttest *n* = 12	Follow Up *n* = 16	Posttest *n* = 14	Follow Up *n* = 8
I found it by searching for jobs myself.	67%	56%	43%	25%
A friend, parent or other family member brought it to my attention.	0%	19%	43%	12%
Someone who works at the job brought it to my attention.	17%	19%	21%	25%
My rehabilitation counselor brought it to my attention.	17%	6%	14%	12%
An employment agency or recruiter brought it to my attention.	8%	12%	14%	25%
My mentor brought it to my attention.	8%	6%	0%	12%
An organization that I am a member of brought it to my attention.	8%	0%	7%	0%
Other	0%	12%	0%	25%

Note. Students could check more than one option.

Table 5: Means and Standard Deviations of Job Satisfaction Measures at Follow Up

Job Satisfaction Measure	Intervention *n* =15	Comparison *n* = 8
Job Fit[α]	6.25 (2.66)	6.78 (2.46)
Promotion Potential[β]	2.93 (0.83)	2.86 (1.33)[γ]
AJIG[β]	3.52 (0.87)	3.70 (0.96)

Note. Standard deviations shown in parentheses. [α] On a 1-10 scale, with 10 indicating high satisfaction. [β] On a scale of 1 to 5, with 5 indicating high satisfaction. [γ] *n* = 7.

Table 6: Number of Students in Job Fields

Job Field	Posttest	Follow Up
Rehabilitation/Medical	7	6
Education	5	7
Retail/Customer Service	4	4
Science/Technology	3	3
Business	3	0
Communications	2	2
Agriculture	1	0
Law/Public Administration/Government	1	2
Performance Art	0	1

Note. One participant held two jobs in different fields at follow up.

Table 7: Job Details of Employed Students

Job Details	Posttest		Follow Up	
	Intervention *n* = 12	Comparison *n* = 14	Intervention *n* = 16	Comparison *n* = 8
Position Type				
Professional	41.7%	57.1%	50.0%	62.5%
Skilled	16.7%	42.9%	25.0%	12.5%
Entry Level	25.0%	0.0%	18.8%	25.0%
Intern	16.7%	0.0%	6.3%	0.0%
Receive Benefits	75.0%	64.3%	50.0%	50.0%
Employed Full Time	66.7%	71.4%	56.3%	87.5%
Salary				
10k-15k	25.0%	21.4%	0.0%	0.0%
16k-25k	16.7%	7.1%	31.3%	0.0%
26k-35k	16.7%	21.4%	6.3%	12.5%
36k-45k	16.7%	21.4%	25.0%	0.0%
>45k	8.3%	14.3%	6.3%	50.0%

Note. Full time is defined as 32 hours or more weekly. Percentages not totaling one hundred indicate missing or invalid responses.