College Graduates with Visual Impairments: A Report on Seeking and Finding Employment

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Structured 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 a considerable amount of time job seeking, and reported low interviews-to-applications ratios. Trends indicated that students with mentors spent less time and effort in their job searches. Students identified challenges including job market competition, employer bias, and transportation issues. 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 they may require an effortful job search to address well-known employment barriers for this population. 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.

Securing successful, competitive employment as a young adult can be challenging, particularly for persons with blindness or low vision (that is, those who

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are visually impaired; McBroom, 1995; Nagle, 2001). Although the U.S. economy has been improving, as of 2015 the unemployment rate for recent college graduates still averaged 7.2% (Davis, Kimball, & Gould, 2015). Information

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specific to college graduates with visual impairments is unavailable, but persons of approximate college graduate age (aged 20 to 24 years) with visual impairments had an unemployment rate of 17.5% in 2015 (Bureau of Labor Statistics, 2015). This higher rate of unemployment exists despite young persons with visual impairments 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 (Belfield, 2015; Stevens, Kurlaender, & Grosz, 2015); however, employment challenges facing persons who are visually impaired are well established in the literature (Crudden & McBroom, 1999; Crudden, Williams, McBroom, & Moore, 2002; McDonnall, Zhou, & Crudden, 2013). As a result, college graduates with visual impairments have particular employment challenges despite obtaining secondary education.

Commonly identified barriers to employment for individuals with visual impairments include: negative employer attitudes about hiring employees who are visually impaired (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 such as the American Foundation for the Blind's CareerConnect (2017) can help visually impaired persons address these barriers. In particular, mentoring youths with visual impairments 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 who are visually impaired, 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 callbacks they receive, and how many of those callbacks led to job interviews. In two studies that examined this question, college graduates completed an average of six 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 who are visually impaired and their service providers.

Research on employment outcomes specific to this population is also scarce. Shaw, Gold, and Wolffe (2007) described job-search and employment outcomes for young adults with visual impairments (aged 15 to 30), but not specifically for 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 (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 them. 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 who are visually impaired; however, no recent information specific to this population is evident in the literature.

This paper represents a continuation of results reported in a research study on improving student employment outcomes using a career mentoring program for college students who are visually impaired; mentees who participated significantly improved their assertiveness in job hunting, and evaluated their experiences positively (O'Mally et al., 2016). This article 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: What job search activities do college students who are visually impaired engage in while seeking employment? What aspects of seeking employment do college students with visual impairments find most challenging? and For college students with visual impairments 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 menteementor pairs and 25 comparison group students. Participant eligibility criteria included legal blindness and U.S. residency. Students were under age 35 years (M=25.88, SD=4.35) and within one year of college graduation with plans to seek employment. The majority of students were white (70.59%), female (62.75%), and pursuing undergraduate degrees (72.55%), and had some volunteer or paid work experience (82.35%). Mentors were aged 25 to 63 years (M=48.00, SD=10.13), and were employed or recently retired, and most (72.96%) had graduate degrees.

MATERIALS

Mentees and mentors were given an *Employment Mentoring Manual* (National Research and Training Center on Blindness and Low Vision [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 visually impaired students; the Assertive Job-Hunting Survey (Becker, 1980); and the Career Adaptability Scale, a subscale of the Career Futures Inventory (Rottinghaus, Day, & Borgen, 2005) to assess the effect of the mentoring intervention. Employed students completed adapted versions of the Abridged Job Descriptive Index (AJDI; Stanton et al., 2002), Abridged Job in General scale (AJIG; Russell et al., 2004), Intention to Quit scale (Parra, 1995), and Intent to Leave scale (O'Reilly, Chatman, & Caldwell, 1991) to assess job satisfaction. Mentees completed monthly reports of their contacts (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 employ-

ment, 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 a 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 or were distance mentors who communicated with students via telephone and e-mail. 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 after 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

Table 1Means and standard deviations for job search activities.

		Intervention		Comparison		
Job search activity	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)

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.

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: 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; number of hours spent researching job openings; number of hours spent preparing or submitting job application materials; and 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 for both groups. 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. A MANOVA was

conducted to assess 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 job seeking (in annual hours; M = 228.96, SD = 284.17) than did mentees (M = 126.17, SD = 165.09).

To examine whether job search activities differed based on employment status (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 the barriers they encountered

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 one works (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

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 one of the three top barriers.

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 they 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; 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 com-

Table 3
Means and standard deviations for job applications and interviews.

	Pos	Posttest Follow-up		w-up
Application process	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)

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.

petent 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, (O'Mally et al., 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 or organization, job position or title, whether they received benefits, gross annual salary, and average number of hours worked weekly. The names and types of the company or organization, along with job titles, were examined to determine the various fields that students pursued; see Table 5 for student numbers per field. The two fields with the highest number of

Table 4
Percentages for how employed students found jobs.

	Intervention		Comparison	
Method of finding job	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

Students could check more than one option.

students employed were rehabilitation or medical, and education.

To summarize the types of positions students obtained, data provided on job position or title were examined and recoded into the following general categories: professional (requiring a specialized degree); skilled (requiring specialized or technical training); entry-level (work that could be performed with minimum skill or on-the-job training); and intern (tem-

Table 5 Number of students in job fields.

Job field	Posttest	Follow-up
Rehabilitation or medical	7	6
Education	5	7
Retail or customer service	4	4
Science or technology	3	3
Business	3	0
Communications	2	2
Agriculture	1	0
Law, public administration, or government	1	2
Performance art	0	1

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

porary 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 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 6 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* (Russell et al., 2004). Employed students were satisfied with their jobs, rating them fairly high on a 10-point scale on matching their experience

Table 6
Job details of employed students.

	Pos	Posttest		w-up
Job details	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%

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

(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 7 for descriptive statistics.

BENEFIT OF MENTORING

While there were few significant differences between groups on employment outcomes, we examined responses to de-

Table 7
Means and standard deviations of job satisfaction measures at follow-up.

Job satisfaction measure	Intervention n =15	Comparison $n=8$
Job fit $^{\alpha}$	6.25 (2.66)	6.78 (2.46)
Promotion potential $^{\beta}$	2.93 (0.83)	2.86 (1.33) ^{γ}
AJIG $^{\beta}$	3.52 (0.87)	3.70 (0.96)

Standard deviations shown in parentheses. $^{\alpha}$ On a 1–10 scale, with 10 indicating high satisfaction. $^{\beta}$ On a scale of 1 to 5, with 5 indicating high satisfaction. $^{\gamma}$ n=7.

termine whether 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 that 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 the mentees reported that they were still in contact with their mentors more than one year after completing the program, indicating a long-term benefit of the project. Mentees were also asked to what extent they felt that a mentoring relationship was beneficial to the transition from college to employment for a visually impaired person, 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 visually impaired college-educated persons, and exploring how employment rates can be improved for this population. We examined job search activities engaged in by these students 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 they may have been more focused and efficient in their job searchs. Mentees may have benefitted from the advice of their mentors regarding how and where to seek employment and how to prepare for applying for work, 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 visually impaired persons. 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 these students with overcoming barriers, the barriers themselves are still present in the job market.

For students who secured employment. trends indicated differences in how mentees and comparison students found jobs. A greater percentage of mentees than comparison students found jobs by searching on their own; comparison students tended to use employment agencies or recruiters. These trends may indicate that guidance from their mentors enabled mentees to conduct their job searches 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 searches. Mentees also significantly increased their assertiveness in job hunting by the posttest (O'Mally et al., 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 indicated 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 fulltime positions that required specific education or training. Employed students also reported fairly high job satisfaction, with jobs that generally met their expectations for the work they would be doing after graduation. Additionally, employed students represented diverse fields of work, the majority of which were not related to blindness, as is sometimes considered a default career for visually impaired persons. 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 was encouraging for visually impaired college students. However, it is important to note that these experiences were 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 et al., 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 need to be considered. First, only 36 of the original 51 students responded to the follow-up survey, resulting in a small sample size that limited generalizability. Second, despite quantitative trends in data, few group comparisons were significant. As a result, conclusions need to be drawn with caution. Third, this study reports employment information and outcomes during a time in which unemployment rates were high in the general U.S. 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 effectiveness of the intervention. 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 selfreported 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 in order to examine the lasting effect of career mentoring for college students with visual impairments. 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 students who are visually impaired and service providers on some important points. First, data trends in this study may suggest a mentoring benefit in transition to employment for visually impaired college students, despite limited statistical evidence. Second, the continued prevalence of frequently identified barriers to employment 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 these college graduates should be encouraging for students and employers, underscoring the fact that successful employment among this population is attainable and mutually beneficial.

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