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Understanding the Employment Experiences
of Americans who are Legally Blind

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People who are legally blind have historically faced high rates of unemployment and under-employment. We surveyed 559 adults in the United States who are legally blind to learn about their experiences in the workforce, as well as facilitators and barriers to employment. Results indicated that about half of the adults surveyed were currently working for pay. These individuals most often found their jobs through their personal and professional networks. About one-fourth of the participants were unemployed but seeking employment, and the final 20% were not in the workforce. Transportation barriers and inaccessibility in the hiring process were frequently cited as obstacles to employment. Experiences with vocational rehabilitation (VR) were mixed, and mainstream career resources such as career fairs and recruiters were considered relatively unhelpful by this population. Results point to a great need to promote networking opportunities, increase transportation availability, and remove artificial barriers from the hiring process.

Americans who are blind still face a woefully low employment rate, despite decades of progress in education and rehabilitation. Results from the April 2017 Current Population Survey (CPS) indicated that only 39% of working-age Americans (ages 16-64) who reported being blind or having difficulty seeing were in the labor force, meaning that they were either working or looking for work, compared with 73% of working-age adults without vision loss. Of the 36% of working-age Americans with vision loss who were in the labor force, 10% were unemployed, compared with only 4% of working-age Americans without vision loss who were in the labor force. Furthermore, the employment to population ratio showed that of the 2 million working age adults with vision loss, only 35% were employed, half of the 70% employment-population ratio for working-age adults without vision loss (American Foundation for the Blind, 2017). Thus, there is great interest in identifying modifiable factors that contribute to low employment and labor force participation for Americans who are blind. It is also important to examine how effectively the vocational rehabilitation (VR) system is addressing real employment barriers encountered by consumers who are blind.

According to Lukyanova, Suarez-Balcazar, Balcazar, & Oberoi (2015) factors facilitating employment for people with disabilities include previous work experience, family support, clear VR goals, and involved VR counselors. Factors that impede employment include poor health, poor work history or work performance, lack of transportation, unstable home life, and receipt of SSI (p. 37). In a study of unemployed VR applicants, the most commonly reported reasons for not working included health limitations, inability to find a job, employers not giving them a chance, and feelings of discouragement (Anand & Sevak, 2017). In this same study, workers with disabilities were more likely to retain their jobs if they received accommodations such as schedule flexibility or transportation assistance.

System-level barriers and facilitators also influence employment for people with disabilities. For example, Medicaid expansion may serve as a facilitator by enabling people who could not otherwise afford health insurance to continue receiving Medicaid while working. Hall, Shartzer, Kurth, & Thomas (2017) reviewed the effect of the Medicaid expansion on the workforce. People

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with disabilities living in states that adopted the expansion were more likely to be employed than those living in states that did not expand Medicaid (38.0% to 31.9%) and less likely to be unemployed solely because of disability compared with individuals living in states that did not adopt the expansion. Thus, some people with disabilities may exit the workforce to avoid losing essential benefits.

In addition, the VR system can be both a facilitator and a barrier to employment. Ipsen & Goe (2016) investigated consumer engagement in general Vocational Rehabilitation services in hopes of reducing premature exits. They calculated that $365 million is spent each year on individuals who do not complete the VR process. In studying responses from consumers at various stages of the VR process, 50% of the respondents at every stage said the VR process was too slow. Consumers did not experience the level of commitment they expected from their VR Counselor, did not receive timely training services, and were not placed in jobs soon enough to support themselves or their families. By this study, 71% of premature (and thus unsuccessful closures) were due to this slow pace. Furthermore, consumers who had higher levels of goal setting and problem-solving skills had more successful experiences with VR programs.

Harris, Owen, Jones, & Caldwell (2013) surveyed focus groups of individuals with disabilities and policy makers alike. Results of the survey assert that the work policies and programs meant to support those with disabilities are part of a larger, albeit fragmented system, and the policies and programs do not always work well together in practice.

Transportation represents a significant employment barrier for many people with disabilities, especially people who are legally blind. Americans with disabilities are almost twice as likely as Americans without disabilities to lack transportation access (Kessler Foundation/National Organization on Disability, 2010). For people who cannot drive due to blindness or visual impairment, alternative transportation is needed to get to and from work or to perform essential job duties, such as visiting clients. In a recent survey study, more than a third of respondents with visual impairments reported turning down a job opportunity due to transportation barriers (Crudden, McDonnall, & Hierholzer, 2015). People living in rural or suburban areas in particular may have little or no access to reliable, accessible and affordable transportation.

Negative employer attitudes have also been recognized as barriers particularly impacting job applicants who are legally blind. McDonnall, O'Mally, & Crudden (2014) measured employer attitudes and the effect of those attitudes on hiring behavior indicating that negative attitudes correspond with discrimination in multiple areas, including hiring, promotion, placement, training, salary, harassment, and relationships with coworkers (p. 214). It was also found that employers typically have elevated concerns regarding hiring individuals who are blind compared to hiring individuals with other disabilities. However, the research also indicated that employers with previous exposure to blindness held more positive attitudes toward hiring people who are blind. The research concluded that limited information about accommodations, assistive technology, and nonvisual methods of accomplishing job tasks

were the primary causes of employers' negative attitudes toward hiring people who are blind. Based on a survey measuring attitudes of hiring managers, Lynch (2013) added support to the notion that misconceptions of blindness still abound. In this study, the majority of managers surveyed reported a belief that there were very few jobs available within their respective companies that a legally blind person could do; that it was more expensive to onboard a B/VI individual than it is to onboard someone without a disability; and that recruiting, training, and/or retaining employees who are blind is a low priority (p. 409). The researcher also found that managers who had a relationship with an individual who was blind were more likely to hire someone who was blind than managers who did not have a personal connection.

The Current Study

In this study, we investigated facilitators and barriers to employment in a group of American adults who were legally blind, using both quantitative and qualitative data. Specifically, we report on the experiences of a group of currently employed individuals, a group of job-seekers, and a group of individuals who are currently out of the workforce. We also investigated facilitators and barriers to employment described by the group as a whole. Research questions included:

1. What are the characteristics of jobs held by Americans who are blind?

2. How do successfully employed individuals find their jobs?

3. How do jobseekers who are blind evaluate the quality of services received

    through VR?

4. What challenges are encountered by active jobseekers who are blind?

5. What factors motivate some individuals to leave the workforce prior to

    retirement?

6. What facilitators and barriers to employment are most commonly encountered by   people who are blind throughout their working lives?

Method

Participants

This survey was conducted as part of a multi-phase study examining rehabilitation, employment, parenting, and social outcomes for Americans who are legally blind. The participants for the larger study were a convenience sample drawn from blindness consumer organizations, listservs, and social media forums (Bell & Silverman, in press). Individuals who participated in the larger study were emailed a link to the survey for the current study if they indicated that they wished to participate. To qualify for this study, participants had to be legally blind, be at least 18 years old, and live in the United States. We did not place an upper age limit on

the sample in order to obtain historical experiences from individuals who have retired from past employment; however, 544 of the participants (97%) were of working age (18-70 years).

A total of 559 individuals completed this employment survey between November 2016 and October 2017. The sample included 215 males (38%), 330 females (59%), and 14 individuals (3%) did not specify their gender. Participant age ranged from 18-88 years (M = 46.80, SD = 15.02). Most of the participants identified as white (n = 433, 77%); 37 participants identified as black or African American (7%); 28 identified as Hispanic or Latino (5%); 19 identified as Asian American (3%); 5 as Native American/Alaska Native (1%); 2 as Native Hawaiian/Pacific Islander (1%); and 35 reported other or mixed races (6%).

The participants came from all U.S. states except Wyoming. The greatest proportion reported living in cities of 100,000 residents or more (50%); 40% of the participants reported living in towns of 5000-100,000 residents; 5% reported living in rural areas; and the remaining 5% were unsure of the size of their community. Thirty-six participants (6%) had a high school diploma only; 84 (15%) had some college but no degree; 23 (4%) had a vocational or trade school degree; 34 (6%) had an associate's degree; 179 (32%) had a bachelor's degree; and the remaining 204 participants (36%) had a graduate degree.

Materials and Procedure

Participants completed a survey either online or over the phone with research staff, depending on their preference. Participants indicated their preference to complete the survey by phone by leaving their contact information on a call-in voicemail number and by e-mail. Telephone surveys were not audio recorded. These telephone survey data were only entered into the survey website if the participant completed the survey.

The survey began with an initial screener question asking about the participant's current employment status. Participants could choose "currently working for pay," "not working for pay, but looking for paid work," or "not working or looking for paid work." In addition, all participants were asked, "Regardless of your current work status, are you currently looking for a job?" Based on participants' responses, the survey then branched into additional questions.

For the participants who were currently working, they were asked to provide information about their current job, including the job type, how long they had held the job, their annual salary and fringe benefits, whether or not they had opportunities for promotion, their level of satisfaction with their job, and how confident they were that they could obtain a similar or better job in the future. Participants were invited to provide open-ended comments about their job satisfaction and opportunities for promotion. Finally, working participants were asked to select resources from a list that they felt were critical in helping them find their current position.

Participants who reported looking for a job were asked additional questions about how long they had been looking for a job, how many resumes or applications they had submitted in the last

month, and how many interviews they had had in the last month. They were asked whether or not they had received job-seeking support services from VR in the last year, and if they had, to rate their satisfaction with the services and provide open-ended comments about their experience. Finally, the jobseekers were asked whether or not they had encountered any of six potentially discriminatory situations in the last three months that prevented them from pursuing a job opportunity: an inaccessible application process, a job posting that required a driver's license, lack of transportation to get to and from the job, an employer asking inappropriate questions during an interview, an interview being canceled when blindness was disclosed, or an employer not providing needed accommodations at the time of interview or hire.

Participants who were neither working nor looking for work were asked whether or not they planned to look for work in the future. They were also asked to select reasons that they were not currently working or looking for work and could provide open-ended comments.

At this point, the survey branches converged, and participants were presented with a list of 11 employment resources or facilitators, and a list of 15 barriers to employment. The facilitators and barriers were developed by the research team based on a review of the disability and employment literature, informal conversations with adults who are blind, and our own experiences as employed persons who are blind. For each facilitator, participants were asked whether or not they had ever used the facilitator during their working lives, and if they had used the facilitator, how helpful it was on a scale from 1 (not at all helpful) to 5 (very helpful). For each barrier, participants were asked whether or not they had ever encountered the barrier during their working lives, and if they had, whether the barrier had no impact, some impact, or a large impact on their employment.

Data analysis focused primarily on descriptive statistics for quantitative survey items. We also present a small selection of open-ended comments that appear most representative of the quantitative trends observed. However, a structured qualitative analysis is beyond the scope of this paper.

Results

When asked about their current work status, 296 participants (53%) said that they were currently working in a paid position. Another 141 participants (25%) reported that they were not currently working for pay but that they were looking for a job. The remaining 122 participants (22%) reported that they were not working and not looking for a job.

In addition, we asked all 559 participants whether or not they were actively looking for jobs, regardless of whether or not they currently had a job. To this question, 210 participants (38%) answered yes. This group of active jobseekers included 86 participants who are currently employed and 124 participants who are unemployed.

In this paper, we presented findings for the participants who are currently working, who are active jobseekers, and who are out

of the workforce (not working or looking for work). We conclude with a summary of facilitators and barriers to employment described by the full sample.

Results from Working Participants

Of the 296 currently employed participants, 194 (66%) were in a full-time position; 59 participants (20%) were in a part-time position; and 43 participants (15%) were self-employed. They had held their current job for an average of 8.05 years (SD = 8.87; range = 1 month-40 years). Their average annual salary was $44,879.16 ($SD$ = 36,734.96; median = $38,400; range = $1,560-$260,000). Most of the working participants received fringe benefits through their jobs, including medical insurance (65%), dental insurance (60%) and retirement or investment planning (63%).

Participants were asked which resources helped them find their current position and were allowed to select multiple resources. Networking was the most commonly used resource: 40% found their job through networking with professional colleagues, 36% through networking from family members or friends, 20% through networking with previous colleagues, and 18% through networking with a blindness consumer organization. In addition, 20% of the working participants reported that VR counselors or job developers assisted them in finding their current job. The least commonly used resources were online job boards (10%) and career fairs (2%).

When asked to rate their overall job satisfaction, the average rating was 5.91 on a 7-point scale, indicating generally high job satisfaction (SD = 1.19; range = 1-7). Among the participants with high job satisfaction, themes in open-ended comments included participants doing the job they loved, employers providing needed tools and support, and participants being treated with respect. For example:

- It is the perfect job. Great pace and people to work with; no issues with accessibility; good income.
- As a blind person, I am respected and held to the same standards as my normally sighted counterparts. I have an excellent supervisor. My work and opinions are respected and appreciated. I earn a decent wage and have good benefits comparative to most private-sector workers. I work with a terrific team, and it is a very positive environment. Of course, it is not perfect, but it is truly a good place to work.
- My dream job! Respect, Great coworkers, perfect schedule with flexibility, trust, responsibility, reward of helping others and seeing quantifiable results through improved quality of life and positive economic impact, opportunities every day for personal and professional growth, getting paid to do something I love and would do for free!
- I love what I do and thrive on the variety. The people with whom I work are supportive, and we learn from each other. I left a higher paying job (VOC rehab for the state), with more benefits and higher pay. I wish I had the benefits, but otherwise, no regrets, and much higher satisfaction, even though I'm working harder now.

Among the participants with lower job satisfaction, common themes included boredom, a sense of being "stuck" without opportunities for upward mobility, and employers not meeting their needs. For example:

- There are a lot of technology issues with the program that we use. It's gotten worse after a recent update, and I feel like I'm not being listened to when I try to communicate with people about the issues. At the beginning, I was part of the troubleshooting. Now I feel like they hear what I have to say, but don't listen. My background is in the same adaptive technology I'm using for this job, and we have nobody on staff or remotely who knows the software, so they're making all sorts of changes without actually knowing what they're doing.
- I have had this job too long. I am bored and tired of dealing with it.
- I am glad to have the income, and flexible hours, and I enjoy working with the clients, but it is not my chosen line of work.
- While I enjoy my job and am comfortable with my employer, my current position has no room for advancement.
- This is not the job I have ever desired. It is simply a job that was easy to obtain and provides financial security.
- This job is merely paying the bills while I look for something that is more suited to my educational background and experience. It is not as intellectually stimulating as I would like. I am very thankful for it, and if I had not learned braille as a child, I would not have the job right now.
- I always try to strive for better if I have an opportunity. I wish I was working in a job where I'm using my college degree and making better income so I don't have to live on Social Security. Maybe someday I will be able to afford to go off Social Security. As of right now, I can't afford to go off Social Security.

About half of participants stated that they have opportunities for promotion or advancement: 38% said they could be promoted in their current job, while another 16% said they had opportunities for advancement on their overall career path but not in their current job. Another 34% said they did not have opportunities for advancement, and the remaining 12% were unsure.

Participants were fairly confident that they could obtain a similar or better job in the future: their average confidence was 3.65 (SD = 1.18; range = 1-5).

Results from Jobseekers

The jobseekers had been actively searching for jobs for an average of 17.22 months (SD = 19.71; range = <1 month-9 years). Jobseekers reported submitting an average of 5.18 applications or resumes in the last month (SD = 10.68, range = 0-76) but receiving an average of less than one interview in the last month (M = .56, SD = 1.82, range = 0-20).

Ninety of the jobseekers (43%) reported that they were receiving job assistance from their state VR agency or had received this assistance within the last year. When asked how satisfied they were with the VR assistance they received, the mean satisfaction score was 3.79 out of 7 (SD = 2.19; range: 1-7). Among those who were satisfied with the services they received, common themes in open-ended comments included counselors who helped overcome

barriers and supported networking and career building and a sense that the counselor cares about the client's well-being. For example:

- Because they gave me many resources, not only for employment purposes, but also for networking and education as well.
- I have one of the best VR counselors in the St. Louis area. She knows her stuff, has resources and holds my feet to the fire. She also has stated on more than one occasion that she is confident I will find a job in social work.
- My VR counselor cares deeply about my well-being and my future. I am so grateful for the guidance and caring she has shown me.
- My VR counselor has gone above and beyond to ensure that I reach my career goals and has worked with me on overcoming some barriers to employment.

Among those with negative experiences, common themes included high staff turnover; VR counselors not supporting consumers' career goals; and agencies being ill-prepared to assist educated, experienced consumers. For example:

- My current VR job developer does not listen when I tell her the types of jobs I am looking for. She also doesn't seem to consider my current job a "real" job.
- Counselors changed 4 times; counselors unfamiliar with current technology; counselor wanting to fit individual into a box on a form; counselor indifference to client knowledge and aptitude; always seeking the opinion of an "expert" who knows less than I do about a potential position; just interested in closing case, not results; not understanding blindness-specific needs.
- Because I've had to change counselors two or three times in the same year, and I haven't even been introduced, or had the knowledge that they even changed.
- I was trained on a screen reader that was outdated and didn't have any training on the notetaker or braille display I was expected to use on the job. I struggled with the job for two months and quit.
- I have to deal with the same people again and again in order to get services. I need services, and this is the only way I can get them. It is what it is. It's like going to the grocery store when all you have is an old Chevy instead of a Mercedes. It's what you have., so you use it.
- I had an employment coordinator with VR who was actually getting employment resources from me instead of the other way around. Then he quit, and I've had a new employment coordinator who has ignored my repeated attempts to reach out over the past 6 months. Every time I ask my counselor what else I can possibly do to find employment and what other avenues I can try, I never get any information of substance. However, my counselor has agreed that in my field, I may have a case for further schooling beyond a bachelor's. Ask me this question again in a few months, and my answer may be different, depending on whether or not they approve my request for graduate school funding. At this moment in time though, VR might as well not exist.
- It is clear to me that the state has little interest in providing adequate funding/support to its disabled population. This has been an issue with the state since I have lived here

(recently, starting in 2011) and as a child (1990 through 1993). In addition, Good Will Industries (the agency to which I was referred by my vocation rehabilitation counselor) is not equipped for placing individuals with graduate-level degrees (such as myself (M.A. in history)). Also, the ability of the Good Will Industries employees is questionable at best as I was given poor advice on how to apply for specific jobs.

Finally, more than half of the jobseekers (114, 54%) reported encountering at least one of the six discriminatory situations at least once in the last three months. The most commonly encountered barriers were job postings requiring a driver's license (70 participants, 34% of jobseekers); a lack of transportation (62 participants, 30%); and inaccessible job applications or screenings (42 participants, 21%). In addition, 23 participants (11%) said they had an interview scheduled and then canceled due to blindness; 19 participants (9%) dealt with inappropriate comments about blindness during an interview; and 12 participants (6%) said that an employer denied reasonable accommodations, preventing their hire. For example:

- My degree is in Counseling Psychology, and I also have state certification as a Mental Health Peer Support Specialist. However, most jobs in the human services field, especially those that serve either youth, or under-privileged and under-served client populations, require a driver's license.
- I did the whole interview. At the end of the interview, they said it was a requirement to have a driver's license. I was going for a Teacher's Assistant. She told me they required a license because you had to take students to the movies. I would have to be able to drive them. They were not willing to accommodate me.
- There are a couple of jobs that would be perfect for me, but I didn't have a way to get there. So, I wasn't able to apply.
- My rehab agency often wishes me to work with my local Workforce center, but they have no accommodations for those who are blind to use their computers, testing software, or other tools. Nor do they have any knowledge of accessibility when I have brought it up. This has also been the case with the temp work agencies in my area.
- There was a job that was posted on the local Web Site. I applied for that job only to find out that the Web Site was inaccessible. I tried to get hold of the people that run the job, and it was an international call, and they didn't understand what I was talking about.
- I interviewed for a bilingual outreach job in a financial aid office. I passed the bilingual Spanish exam and ranked 1 after the technical interview. When the supervisor met me, she would not make eye contact with me. She kept turning her voice away from me during the interview. She also fidgeted and acted nervously, moving the bracelets around on her wrist during the entire interview. It was very uncomfortable.
- This [canceling interviews] is the most common form of discrimination I have experienced, and it is harder to prove than blatant discrimination. In an effort to avoid this, I try not to disclose my blindness prior to an inter-

view, but in several cases, circumstances like pre-interview testing have made it necessary to do so, after which the interview is cancelled, and the employer sends me a rejection email or letter.

- A member of the interviewing team said that using my phone to scan and OCR the interview questions for the study session would be a security issue.
- This is a fun one. I was having an interview with a recruiting agency, and the recruiter asked me if my "intuitive senses" were greater because of my blindness. He proceeded to then talk to me for almost 10 minutes about a place where I could take classes from a psychic in my area. He spent more time talking to me about psychics than about a job. I found this very demeaning.
- The HR manager said that I probably would not be able to use their company's old computer system and they were not planning on updating it for at least a couple of years.
- Web Sites not accessible for online work.
- I think, right now, one of my biggest barriers is that I have a huge gap because I have had so much trouble finding a job. Because of the difficulty, I have a huge lack of self-confidence at the moment, and I have fallen into a depression. I just need a little bit of hope. I also feel like my local VR agency completely let me down. I try to open a case, and the caseworker assigned to me would not return any of my calls and set me paperwork in print although I left messages informing her that I did not have a scanner or a reliable way of reading mail in print. I just feel really discouraged, and I think that is a huge barrier to searching for a job – well, and also to having any kind of good interviews when I do get them.
- Employers do not have a positive outlook on blindness, that is all, in a nutshell.

Results from Nonworking Participants

Of the 122 participants who reported that they were not working and also not looking for work, 38 (32%) were retired. Among the nonretired participants (n = 84), 43 (52%) said they planned to look for work in the future; 16 (19%) said they did not plan to look for work in the future; and 25 (29%) were unsure. We examined the reasons they reported for not working or looking for work (participants could select multiple reasons). Table 1 lists the reported reasons for not working, in order from most to least commonly reported. The most commonly reported reasons were concerns about losing disability benefits, a lack of transportation access, and health-related challenges.

Table 1. Reasons for Not Looking for Work.

Reason	N	Percent
Do Not Want to Lose Benefits	30	36.14
No Transportation Access	27	32.53
Health Issues	25	29.76
Employers Will Discriminate	21	25.30
In School	21	25.30
No Jobs in My Field for a Blind Person	18	21.69
Want to Get Blindness Training	14	16.87
Don't Get Agency Support	11	13.25
Family Responsibilities	10	12.05
Want to Go Back to School	9	10.84
Spouse is Employed	6	7.23
Do Not Want to Work	6	7.23
None of These	3	3.61

Open-ended comments included:

- At the end of last year, I had my school loans discharged due to me being on Social Security Disability. Due to this, I have to stay at or below poverty level for the next three years, or I will have to begin paying my school loans.
- Because I can't come up with something that I can make money doing. I used to be a phone solicitor for a while, and I can see myself doing reception work. That kind of stuff isn't around anymore. it is now computer stuff. it's not just the phone any more. I lost touch with anything that is work related that I could actually do.
- I tried to find jobs, and the transportation issue was a real problem, and I couldn't have gotten to work if I had a job. A lot of companies aren't open to having carpools.
- I wanted training, but I' didn't get it. I was told by someone who I respect in the blind community about rehab services for the blind in the state of Missouri, and they didn't know what to do with me. so, in a way, I believe that they didn't know what to do with me. but I also know that there was a supervisor who didn't like me. she pretended to like me, but she didn't. So, I didn't get what I needed. for me to get the training I needed, I would have to go out of state, and they didn't want to do that. this woman would not pay for me to go to Lighthouse to get training that I needed to get training in the music software.
- The selections above only start to explain my situation. I must juggle several health conditions, deal with transportation that can be a challenge in some locations, worry about a complicated benefits situation, try to get work in a field that is often not thought of as blind-friendly though I know of several blind librarians, and also just deal with sleep issues, too. It gets overwhelming at times.

Facilitators and Barriers to Employment

All participants in the full sample (n = 559) were asked about facilitators and barriers to employment. Table 2 lists, for each resource facilitating employment, the number and percentage of participants who had used the resource at any point in their working lives, as well as the average rating of how helpful the resource was for finding and keeping jobs, on a five-point scale. Resources are ranked from most to least helpful. The three resources rated as most helpful by the participants who used them were technology assistance from VR, training on writing a resume or cover letter, and residential blindness training. The three resources rated least helpful by participants who used them were job developers, career counselors, and job fairs or recruiters.

Participants were also asked about barriers to employment. For each barrier, participants indicated whether or not they had encountered the barrier at all in their working lives and the extent of the barrier's impact on a 3-point scale: no impact, some impact,

or large impact. Most of the barriers were rated as moderately impactful. Table 3 lists barriers in order from most to least commonly encountered. The three most common barriers were a lack of transportation, trouble finding jobs in the participants' field, and inaccessible job applications or screenings. The three least common barriers were employers' unwillingness to provide accommodations, lack of awareness of skills needed to be employable, and health issues limiting work hours.

Discussion

In this study, Americans who are legally blind reported on both positive and negative experiences with employment. The participants who were employed at the time of the survey were generally satisfied with their jobs, and many earned competitive salaries and benefits. While some of these individuals found employment with assistance from VR, referrals from family, friends, and colleagues were frequently cited as instrumental in helping these individuals find jobs. Among the participants who were satisfied with their jobs, having employers who valued them and respected their access needs was considered instrumental to their success.

The survey data also highlight challenges encountered by current jobseekers who are legally blind. These individuals, despite being well-educated, reported being on the job market for a relatively long time (nearly 18 months on average) and receiving a low ratio of interviews to applications. These jobseekers also reported a troubling frequency of artificial barriers. In particular, more than a third were forced to turn down a job opportunity because the job posting required a driver's license, even though the job itself did not require driving. Another 30% did not have transportation to get them to a potential job site, and 21% had at least one recent experience where an essential job screening was inaccessible. Although less frequent, other instances of discrimination at the time of interview were also reported. These kinds of barriers are unnecessary and can readily be removed through appropriate employer education.

Jobseekers who were working with their state VR agencies reported mixed experiences. On one hand, some jobseekers had counselors who supported their overall career goals and helped them build their networks. On the other hand, many jobseekers reported problems with inefficiency or high staff turnover at their state's VR agency, or they had to deal with staff who did not understand blindness or the goals and needs of jobseekers with more advanced qualifications. Unfortunately, staff at general VR agencies may not always understand the unique access needs of consumers who are legally blind (McDonnall, Zhou, & Crudden, 2013). Some VR professionals may also be unaccustomed to working with consumers who have advanced degrees or specialized work experience. VR counselors may be best able to support these consumers by highlighting their strengths and working with them to build professional networks.

Transportation barriers were repeatedly highlighted in this survey: Transportation was listed as the top barrier to employment among the full sample, a barrier identified by 30% of jobseekers, and one of the top three reasons identified for not seeking employment among individuals out of the workforce. Specific transporta-

tion problems may include a lack of public transportation nearby; inefficient fixed-route public transit or paratransit; transit systems not operating on evenings or weekends; and the high cost of hired drivers or ridesharing. Jobseekers facing transportation challenges may benefit from customized transportation interventions, such as the program developed by Crudden, Antonelli, & O'Mally (2017) in which a VR staff member works with the jobseeker to identify options for getting to and from work. Such individualized supports can improve social problem-solving skills and self-efficacy (Crudden, Antonelli, & O'Mally, 2017), which may encourage jobseekers to stay in the workforce despite transportation challenges.

Finally, participants in the full sample stated that throughout their working lives, the most helpful resources they received were technology support, residential blindness skill training, and training on writing resumes and cover letters. This is consistent with the finding from Bell & Mino (2013) that graduates of structured-discovery residential training centers were more likely to be employed than individuals without formal training in blindness skills. While the participants rated technology support and residential skill training funded by their VR agencies as highly helpful, they rated support from job developers as only slightly helpful, suggesting that some participants may have had negative experiences with job developers. Furthermore, the participants rated mainstream career resources such as career counselors and job fairs as relatively unhelpful.

Limitations

This study included a convenience sample primarily drawn from U.S. blindness consumer organizations, email listservs, and blindness groups on social media. As such, the sample was highly educated on average, with two-thirds of the participants having at least a bachelor's degree and over a third having postgraduate education. The participants also tended to have stronger connections with blindness community networks and services. Thus, results may not generalize to the broader population of Americans who are legally blind. More research is needed with jobseekers, particularly those who are less educated or who have recently experienced vision loss. Nonetheless, the findings provide a snapshot of

Table 2. Facilitators to Employment.

Resource	N Used	Percent Used	Mean Helpfulness (range: 1-5)	SD Helpfulness (range: 1-5)
Tech Support from VR	302	56.13	4.27	1.09
Training on Resumes and Cover Letters	354	65.80	4.11	0.94
Residential Blindness Training	295	54.83	4.04	1.24
Training on Interview Skills	336	62.34	3.99	1
Summer Work Experience	135	25.09	3.94	1.14
Day Blindness Training	178	33.09	3.83	1.31
Training on Networking	231	42.94	3.78	1.15
Social Media Training	148	27.51	3.59	1.49
Job Developer	267	49.63	3.35	1.39
Career Counselor	280	51.95	3.2	1.29
Going to Job Fairs or Working with Recruiters	282	52.42	2.88	1.31

employment experiences of relatively well-resourced individuals who are legally blind and highlights the challenges that they encounter despite the resources available to them.

Implications for Practice

The findings have a number of implications for VR professionals. First, networking is key to successful employment outcomes. VR counselors and staff can facilitate networking in a number of ways: offer awareness of how to find professional associations in the consumer's field of interest; training to use LinkedIn and Twitter for networking as part of the job search; suggest and/or pay for consumers to attend conferences in their areas of interest; offer consumers awareness of networking and relationship-building webinars, books, and articles; provide consumers with information on how to find hiring managers for the positions they apply for; encourage consumers to initiate and conduct informational interviews; and provide other ways for consumers to get involved in their communities. In addition, VR counseling strategies that focus on the consumer's long-term career goals and desires for advancement, rather than simply focusing on a short-term case closure, will lead to more consumer satisfaction and reduce the likelihood of re-opened cases.

Second, transportation represents a major unmet need for many jobseekers who are legally blind. VR agencies may wish to hire additional staff or develop programs specifically to assist consumers with securing transportation to work and to educate consumers about transportation strategies they may not have used, such as hiring drivers or carpooling (Crudden, Antonelli, & O'Mally, 2017). Transportation support may also be needed to complete on-the-job tasks, such as visiting clients. Self-employment, which can often be done from home, is an under-utilized placement strategy that may be especially good for individuals with limited transportation access (Ibsen & Swicegood, 2017).

Third, there is a need to educate employers about the requirements of the Americans with Disabilities Act (ADA) and to help them identify and remove artificial barriers. For example, employers can be guided to state in their job postings that "reliable transportation" is a requirement of the job, rather than requiring a driver's license. Employers can also be guided to replace inaccessible Web-based job screenings and tests with more accessible tools, and to provide reasonable accommodations when necessary during the hiring process.

Finally, the findings suggest that jobseekers who are legally blind may not be getting full benefit from mainstream job search tools, such as career counselors and job fairs. VR professionals may wish to work with mainstream recruiters and career counselors to improve the accessibility of their services and to facilitate outreach to jobseekers who are legally blind.

Table 3. Barriers to Employment				
Barrier	N Encountered	Percent Encountered	Mean Impact (range: 1-3)	SD Impact (range: 1-3)
Lack of Transportation	440	78.71	2.14	0.78
Trouble Finding Jobs in Your Field	434	77.64	2.23	0.72
Inaccessible Job Applications or Screenings	373	66.73	2.04	0.76
Inaccessible Software at Work	364	65.12	2.1	0.76
Feeling Socially Awkward or Incompetent Around Others	352	62.97	1.67	0.71
Blatant Discrimination from Employers	312	55.81	2.29	0.67
Low Expectations from VR Professionals	307	54.92	2.01	0.82
Resume Gaps	304	54.38	2	0.76
Low Expectations from Colleagues or Management	292	52.24	1.91	0.75
Lack of VR Support	279	49.91	1.98	0.79
Concerns About Losing Benefits	249	44.54	2.01	0.8
Not having Nonvisual Skills	236	42.22	1.92	0.71
Employer Reluctant to Accommodate	232	41.50	1.99	0.76
Lack of Awareness of What Skills are Needed to be Employable	183	32.74	1.79	0.68
Health Issues Limiting Work Hours	130	23.26	2.03	0.75

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