

File created March 7, 2016. This is not the final version of record. The following article was published in the *Journal of Visual Impairment & Blindness (JVIB)*, 111, 61-71. The final version of record can be found at <http://www.jvib.org>.

Working with Randolph-Sheppard Entrepreneurs who are Deaf-Blind:

A Qualitative Analysis

Anne C. Hierholzer, M.P.S.A. (ach715@msstate.edu)

Jacquelyn Bybee, M.S. (jbybee@colled.msstate.edu)

The National Research & Training Center on Blindness & Low Vision (NRTC)

P.O. Box 6189

Mississippi State, MS 39762

662-325-2001

Acknowledgments:

¹The contents of this article were developed under a grant from the U.S. Department of Health and Human Services, NIDILRR grant #90RT5011. However, these contents do not necessarily represent the policy of the Department of Health and Human Services, and should not indicate endorsement by the Federal Government.

Working with Randolph-Sheppard Entrepreneurs who are Deaf-Blind: A Qualitative Analysis

Abstract

Introduction: The purpose of the study was to explore challenges facing deaf-blind entrepreneurs and the staff who work with them in the Randolph-Sheppard Business Enterprise Program.

Methods: Interviews were conducted with 41 Randolph-Sheppard staff and deaf-blind entrepreneurs across the U.S. Participants were selected using a snowball sampling procedure. Interviews were conducted by telephone or email, and results were coded to identify overarching themes.

Results: The top challenge identified among all staff was helping deaf-blind entrepreneurs interact effectively with customers. Common communication challenges included reliance on third parties and communication characterized by repetition and slowness. While challenges surrounding communication were commonly cited by staff, problems with technology were the most important concerns for the entrepreneurs themselves. Over one-third of respondents (36%) felt deaf-blindness did not create any unique communication challenges. Common suggestions for program improvement were expanding access to interpreters and training in sign language and tactile interpreting.

Discussion: Entrepreneurs and staff agreed that many challenges relating to deaf-blindness can be overcome with creativity and determination. One important approach for improving communication is to proactively inform customers about the entrepreneur's deaf-blindness and describe the best communication strategies. Further research to determine the extent of hearing loss among entrepreneurs in the Randolph-Sheppard program would be beneficial.

Implications for Practitioners: Individuals with deaf-blindness have demonstrated the ability to take part in the workplace, but challenges remain. Staff who work with these entrepreneurs should help them address their unique communication needs in a proactive, positive manner.

Created in 1936, the Randolph-Sheppard (R-S) Business Enterprise Program (BEP) provides competitive work experience for legally blind individuals across the United States. The R-S Act (20 U.S.C. §107 et. seq.) granted blind individuals priority in the operation of all food service facilities on federal property. Since that time, many states have adopted similar laws that include state, county, municipal, and some private facilities in the program. Through the R-S program, legally blind individuals (referred to as “entrepreneurs,” “operators,” or “vendors”) own and operate facilities that range from vending machine routes to full-service cafeterias. State licensing agencies have responsibility for recruiting the next generation of entrepreneurs, equipping them with training and licensing, and finally placing them in facilities in need of an operator.

BEP facilities employ 2,319 legally blind entrepreneurs to run facilities across 49 states and three U.S. territories (RSA, 2010). As the BEP matures, it has expanded from small vendor-managed kiosks and concession stands to encompass large food service facilities, full restaurants, and laundry services. Entrepreneurs are responsible for day-to-day operations of their facility, including customer service, inventory, accounting, and cleanliness. In order to assist them in these tasks, R-S entrepreneurs employ over 12,000 other staff members to work in support roles, of whom about 400 are also blind and over 1,000 have some other disability. In FY 2010, annual gross sales for the BEP totaled nearly \$800 million, with individual entrepreneurs earning an

average annual salary of about \$56,000, well above the national median household income for that year.

By definition, all BEP vendors are legally blind. However, blindness is not the only disability an entrepreneur in the BEP may confront. It is estimated that there are 1.54 million U.S. adults who have both hearing and vision impairment, the majority of whom are over age 70 (Swenor, Ramulu, Willis, & Friedman, 2013). For individuals below age 70, the prevalence of dual sensory loss was less than 1%. While the BEP does not collect data on the number of entrepreneurs who experience hearing loss in addition to their vision loss, in a survey of 44 state BEP directors, 48% ($n=21$) reported encountering entrepreneurs with deaf-blindness in their state program (Bybee, 2012). In order to qualify for participation in the BEP, individuals must be legally blind, meaning they have a visual acuity of 20/200 or less in the better eye with best correction and/or a visual field of 20 degrees or less. In order to be considered deaf-blind, an individual must be both legally blind and have chronic hearing impairment so severe that most speech cannot be understood with optimum amplification (Heubner, 1995).

Securing employment is a challenge for individuals who are deaf-blind. However, few studies have examined employment outcomes for this population. One study used data from the original National Longitudinal Transition Study and found that youths ages 13-21 who are deaf-blind are competitively employed at a rate of 16.1% (Nagle, 2001). Research demonstrates that individuals who experience dual sensory loss (such as deaf-blindness) often withdraw from activities and productive roles (Brennan, Horowitz, & Su, 2005; McDonnall, 2009). Therefore, it may be inferred that the rate of employment for adults who are deaf-blind is likely even lower than the rate observed for youths who are deaf-blind.

When individuals who have deaf-blindness do manage to secure a job, they face unique challenges in the workplace. One of the largest obstacles is effective communication (Brabyn, Schneck, Haegerstrom-Portney, & Loft, 2007). Individuals who are deaf-blind use a number of technologies and strategies, most based on the sense of touch, to communicate effectively. These adaptations include using tactile communication, such as braille and fingerspelling, to interact with customers and employees. Social interactions and travel can also be significant challenges for workers who are deaf-blind (Brennan et al., 2005; Fischer et al., 2009). However, some individuals with deaf-blindness have overcome these challenges and maintain careers in a variety of fields, including as BEP entrepreneurs.

The purpose of this study is to present qualitative data on the challenges encountered by deaf-blind entrepreneurs within the BEP and staff who work with them. It provides recommendations on changes that can be made to improve the workplace experience of BEP entrepreneurs with deaf-blindness and how BEP staff can work more effectively with these individuals.

Method

Participants

Respondents were state directors ($n=14$), trainers ($n=5$), and business consultants ($n=10$) for the BEP, and BEP entrepreneurs with deaf-blindness ($n=12$), for a total sample of 41 participants from 15 large and small states across all regions of the continental U.S. Of the 29 staff interviewed, 22 (76%) were male and seven (24%) were female. The average time spent working in the program was 11 years, with a minimum of six months and a maximum of 30

years. Each individual had some experience working with a BEP entrepreneur with deaf-blindness.

Of the 12 BEP entrepreneurs with both vision and hearing loss, nine (75%) were male and three (25%) were female. The average age was 56 years old (range 47 to 69) and the number of years working in the program was between four and 34 years, with an average of 16 years. The age of onset for hearing loss ranged from birth to 53 years of age, with over half of entrepreneurs experiencing their hearing loss before age 21 (58%, $n=7$). One-third of the entrepreneurs (33%, $n=4$) reported using sign language. Ten of the entrepreneurs ran vending routes, which requires them to travel between vending machines to keep them stocked. The remaining two entrepreneurs operated snack bar facilities, which entailed interacting with customers to provide face-to-face food service.

Instrument

Upon approval from Mississippi State University's institutional review board for the protection of human subjects, BEP state programs were contacted to participate in this study. Targeted programs were identified through a previously administered national survey that inquired about experience working with BEP entrepreneurs with deaf-blindness. The Helen Keller National Center (HKNC) for Deaf-Blind Youths and Adults assisted with identifying additional state programs for participation in the study. A snowball sampling procedure was administered in which each state director was asked to provide contact information for BEP trainers and/or business counselors who have experience working with entrepreneurs with deaf-blindness, as well as contact information for any entrepreneurs who are deaf-blind.

The interview instrument was developed by project staff and reviewed by a representative from the HKNC. The instrument contained between 10 and 27 open-ended questions tailored to each group of individuals (i.e., director, trainer, business counselor, and entrepreneur), with each group receiving a different set of questions. Interviews were conducted by the study's second author, and discussion varied based on responses given during the interview. BEP state directors were asked questions regarding experience with deaf-blind entrepreneurs, accommodations used, policies and procedures, and challenges encountered. Training staff and business counselors were asked to comment on accommodations used, challenges faced, potential program improvements, and communication strategies they use when working with deaf-blind entrepreneurs. Deaf-blind entrepreneurs were asked about personal experiences, challenges encountered, accommodations used, communication strategies, and the most challenging aspects of their job.

Each interview took approximately 30 minutes to complete, with additional time allowed as needed. If requested, interviews with deaf-blind entrepreneurs were conducted over email; all other interviews were conducted by phone. All participants verbally consented to participate. Responses from the 41 participants were analyzed using a modified version of an inductive data analysis procedure (Miles & Huberman, 1994). This procedure included the authors independently coding all data, grouping data, and developing themes that emerged through analysis. The codes and developed themes from each author were then compared and refined. An outside consultant reviewed all data and independently verified the analysis results.

Results

Interviews covered a wide range of subjects, and the interviewer allowed flexibility in the topics covered depending on the path the discussion took. Common themes that emerged from

the interviews are described in greater detail below. Results regarding the most commonly-cited challenges are described first, followed by accommodations used and suggestions for program improvement.

Major Challenges

Participants were asked to describe the greatest challenges encountered when either working with deaf-blind entrepreneurs or being a person with deaf-blindness in the BEP. The most commonly-cited challenge among all participants was ensuring the entrepreneurs were communicating effectively with customers, which was noted by 25% of the BEP state directors ($n=3$) and 44% of the BEP counselors ($n=4$) who responded to the question. In contrast, this concern was rarely mentioned by the entrepreneurs themselves, with only one entrepreneur (9%) citing communication with customers as their greatest challenge. BEP staff described instances when customers were uncomfortable interacting with the entrepreneur or were dissatisfied with the service they received. As one counselor put it:

He [the entrepreneur] has to ask people to repeat themselves, and he could be a little bit more outgoing with some people. I think the hearing difficulty plays a role in him not being as outgoing. I think that the [entrepreneur] can come off as a little gruff or unfriendly to customers sometimes.

Other major challenges reported by both BEP staff and entrepreneurs included issues regarding the mechanics of communication, such as the difficulty of having one-on-one conversations and lack of spontaneity (14%, $n=5$). In addition, both staff and entrepreneurs cited the fact that communication with deaf-blind entrepreneurs tends to take longer (14%, $n=5$) as a major challenge. As one director recalled about working with a former deaf-blind entrepreneur,

“Communication was very difficult, and most of us only communicated with him when it was absolutely necessary due to how much of a struggle it was to communicate.”

Some challenges were reported only by BEP staff, with no entrepreneurs mentioning these issues as major challenges. Staff were frustrated by the difficulty of getting qualified interpreters (14%, $n=5$) to assist them in communicating with the entrepreneurs. Staff also expressed concern about whether entrepreneurs were correctly comprehending content and lamented the difficulty of conveying lengthy or technical information (17%, $n=6$). Worries about entrepreneurs fully understanding content were particularly pronounced among counselors, with 33% ($n=3$) reporting this as a major challenge. One counselor described the dilemma this way:

One issue is the seven page field report that I need to review with the vendor. There is so much information that it's not realistic to be able to go through it all with the vendor through signing or typing... That's my biggest frustration – how do you communicate such a lengthy report effectively? I do the best I can and try to hit on the most important aspects. Also, when an interpreter is signing to the individual I have no idea what he is signing or if he is signing the information correctly or thoroughly. I'm not able to give feedback [to deaf-blind vendors] to the extent that I'm able to give a vendor with only a vision loss. I can only hit on the important parts, so minor things are not addressed, and the communication is subdued.

Some staff and entrepreneurs stated that they felt deaf-blindness did not create any unique challenges (17%, $n=6$). State directors and entrepreneurs were the most likely to report that deaf-blindness did not create any unique challenges, with 25% ($n=3$) and 18% ($n=2$), respectively, stating this opinion.

Communication Challenges

Participants were asked to comment specifically on the challenges related to communication with deaf-blind entrepreneurs. Two major themes emerged from their responses. Sixteen respondents (44%) reported that communication with the deaf-blind entrepreneurs is characterized by repetition and slowness. The entrepreneurs themselves frequently reported (45%, $n=5$) having to ask customers to repeat themselves multiple times in order to correctly understand what they were saying. While such tactics cause communication to take longer, repetition and summarization are important techniques used by staff and entrepreneurs alike to ensure that the message is fully understood. As one entrepreneur described it:

I try to be a fun, go-lucky guy with my customers...I have no shame in telling them what my disability is or whether I didn't hear something they said. You deal with these people every day, and you become part of the family. I pick up 85% [of what is said]. If I feel like what I missed is important, I will ask the person to repeat themselves. If I don't think it's important I'll just let it go so as not to annoy them.

Another major theme that emerged is reliance on outside help to communicate (44%, $n=16$). When interacting with deaf-blind entrepreneurs, assistance was provided by professional interpreters, employees who know sign language or fingerspelling, or family members. Rather than communicating primarily with the deaf-blind entrepreneur, some customers communicated with the entrepreneur's support staff. Such reliance on a third party for communication can pose challenges. As one BEP director put it, "Things get lost in translation when using an interpreter." This concern was echoed by a trainer, who worried that, "with tactile interpreters, the person might say they understood but there's no real way to tell if they really did understand or if the interpreter communicated the right information."

Another common theme described by nearly one-third of respondents (31%, $n=11$) was relying on communication methods such as writing or speaking over the phone, rather than speaking face-to-face. BEP counselors were most likely to report relying on writing as their primary mode of communication with deaf-blind entrepreneurs (44%, $n=4$). One counselor described the importance of written communication for conveying serious information: “At the end of a conversation I can never be 100% confident that he [the entrepreneur] has heard me...if it [communication] involves any type of disciplinary action, it’s always hand-written, and I read it to him.”

Another counselor described the importance of written communication for conveying technical information: “The most difficult thing is if...I am trying to relay some very technical, specific information to him [the vendor]. It’s sometimes difficult to get across. When this happens we turn to written communication.”

Another important communication issue is making sure customers know the vendor is deaf-blind (25%, $n=9$). Alerting customers to the vendor’s dual sensory loss can go a long way towards improving interactions. As one BEP director noted, “The building population is aware of his [the entrepreneur’s] disabilities, which makes it easier for everyone.” A deaf-blind entrepreneur described her proactive strategy this way: “When I first go to a new facility, I send out a letter to everyone in the building letting them know about my condition and letting them know how they can get my attention.”

Thirty-six percent of respondents ($n=13$) felt that deaf-blindness among vendors did not create any unique communication issues. BEP state directors were especially likely to report that this was the case, with six of the eleven who responded to this question (55%) selecting this option.

Job Accommodations

Participants were asked to discuss accommodations that can be used to help an entrepreneur with deaf-blindness navigate their job. Two-thirds of respondents (66%, $n=21$) who answered this question reported that entrepreneurs with deaf-blindness used some form of hearing aid, cochlear implant, or personal sound amplifier while on the job. Reliance on outside help while interacting with others, either through interpreters (19%, $n=6$) or employees with knowledge of sign language or tactile interpreting (16%, $n=5$), was another common accommodation. One vendor noted how important it is to hire “employees that are going to be understanding of your hearing loss and won’t get aggravated or agitated if they have to repeat themselves.”

Other frequently-mentioned accommodations include braille items, such as a braille light, braille labels, or braille displays (16%, $n=5$); TTY phones (16%, $n=5$); and laptops customers can use to communicate with the entrepreneur (13%, $n=4$). Sixteen percent ($n=5$) of respondents reported that no accommodations were used on the job by deaf-blind entrepreneurs.

Suggestions for Program Improvement

All participants were asked to provide suggestions for ways the BEP could be improved to be more effective when working with deaf-blind entrepreneurs. The most common suggestion was to expand access to individuals who can serve as interpreters (26%, $n=8$). This includes employing tactile interpreters as BEP employees and helping trainers and counselors learn sign language and/or tactile signing techniques. Trainers (40%, $n=2$) and counselors (30%, $n=3$) were eager to obtain such training.

Another suggestion was to expand and update the technology available to deaf-blind entrepreneurs, with all mentions of this suggestion coming from the entrepreneurs themselves (16%, $n=5$). These entrepreneurs expressed concern that the technology used by the BEP was out-of-date and that they lacked the tools they needed to do their job successfully. Another suggestion was to strengthen the BEP's partnerships with outside organizations, such as state Vocational Rehabilitation Programs or the Council for the Deaf and Hard of Hearing, in order to expand resources for entrepreneurs with deaf-blindness (10%, $n=3$). Nine respondents (29%) did not have any suggestions for improvements.

BEP state directors were also asked whether their state programs have policies and procedures in place to guide their response to deaf-blind entrepreneurs. None of the 11 state directors who responded to the question reported having any official policies or procedures. A few reported having unofficial guidelines they try to abide by when working with deaf-blind entrepreneurs, including having interpreters present at all official BEP meetings (18%, $n=2$) and requesting that only one person speak at a time during meetings (9%, $n=1$).

Discussion and Implications for Practitioners

The themes that emerged when analyzing responses demonstrate that, while communication is not an insurmountable barrier for deaf-blind entrepreneurs, it is a major challenge. The number one challenge cited by BEP staff is helping entrepreneurs who are deaf-blind communicate effectively with both BEP staff and with the customers they encounter. Interestingly, only one entrepreneur said that communication with others was their biggest challenge. In fact, entrepreneurs' perceptions of their greatest challenge were extremely diverse, with no more than two vendors citing any one challenge. This disconnect between challenges perceived by entrepreneurs and by the staff who work with them is an interesting finding in

itself. It may indicate that the deaf-blind entrepreneurs are somewhat unaware of the communication obstacles perceived by others. While it may seem implausible that so few entrepreneurs would acknowledge communication as their primary challenge, many deaf-blind individuals are, by necessity, incredibly adaptive and ingenious. They do not view their dual sensory loss as a disability but rather something one adjusts to, as with any other circumstance. Therefore, once one learns to adapt to their circumstances, their deaf-blindness no longer appears to be a major challenge or a barrier. In addition, only two of the 12 entrepreneurs who participated in this study worked in settings requiring regular face-to-face customer service; the others operated vending routes, which tends to be a more solitary endeavor. Additional research on entrepreneurs who work in more customer service-oriented positions could help shed light on whether this segment of the population is more attuned to communication challenges.

BEP staff tended to also be more concerned about other communication-related issues, such as ensuring that content is accurately conveyed and the limitations created by reliance on third parties and technology. Fortunately, many staff also indicated that, while communication is a challenge, it can be tackled effectively. Recommendations in this area include ensuring consistent access to qualified interpreters when needed (the number one recommendation for program improvement among staff) and making sure interpreters know how to communicate technical material related to running a food service or vending facility. Staff also felt it would be helpful if more among their own ranks were more knowledgeable about deaf-blindness. For example, providing staff with information sessions on deaf-blindness or training on fingerspelling or sign language may help staff facilitate more effective communication with R-S entrepreneurs who are deaf-blind.

In order to ensure that entrepreneurs are communicating effectively with customers, a proactive and positive mindset is essential. Although only one entrepreneur cited communication with customers their primary challenge, such communication was frequently perceived to be an issue by BEP staff who observed the entrepreneurs at work. BEP staff should ensure that entrepreneurs are aware of the communication challenges perceived by customers. After all, if entrepreneurs do not view communication as a challenge, they are unlikely to take proactive action to address it. Entrepreneurs need to understand that their customers may perceive communication to be a major challenge, and BEP staff can help entrepreneurs implement strategies to overcome these obstacles. For instance, entrepreneurs can let customers know ahead of time that a food service or vending facility will be staffed by a deaf-blind individual. This notification should clearly tell customers how best to communicate with the entrepreneur, as letting customers know how to interact with the vendor ahead of time can help alleviate potential awkwardness or uncertainty.

Among the vendors themselves, concerns about communication were secondary to concerns about improving the BEP's use of technology. Of the six entrepreneurs who made recommendations for improving the BEP, five focused on the need for the program to ensure entrepreneurs have the technology they need to perform their job effectively. Although not necessarily related, it is possible that, by helping deaf-blind entrepreneurs acquire updated technology, issues of communication may also be improved.

BEP state directors were more likely than other categories of respondents to state that deaf-blindness did not create any major communication challenges (55%, $n=6$) and to have no suggestions for program improvement (60%, $n=6$). Such responses indicate a need for state directors to interact more closely with deaf-blind entrepreneurs and to observe them while on the

job. It also suggests that, when creating policies for working with deaf-blind entrepreneurs, state directors should consult with the trainers and counselors who work with entrepreneurs on a more regular basis.

None of the BEP state directors reported that their programs had official policies or procedures for dealing with deaf-blind entrepreneurs in the program, and only a few reported having unofficial, informal policies. State programs should consider creating a set of guidelines that can be referred to when working with deaf-blind entrepreneurs. Such guidelines may become more necessary in future years as many current BEP entrepreneurs age, putting them at greater risk of experiencing hearing loss. Given the results of this study, these guidelines should include procedures for hiring qualified interpreters, outline promising communication strategies, and address the unique technology needs of deaf-blind individuals.

Because this study involved a relatively small number of participants, results may not be generalizable to the larger population. However, the results of this research point to areas ripe for additional study and begins to fill the gap when it comes to research on employment outcomes and challenges for individuals who are deaf-blind, an area greatly lacking in peer-reviewed research. The limited number of respondents in this study may indicate relatively low numbers of deaf-blind entrepreneurs within the BEP. Alternatively, it may indicate that few staff are aware of the entrepreneurs in their program who are suffering from hearing loss. In either case, further research into the number of entrepreneurs impacted by hearing loss is warranted. The limited number (12) of entrepreneurs with hearing loss participating in this project also limits the ability to draw broad conclusions about the experiences of deaf-blind individuals within the BEP. More broad-based research that captures the thoughts of a greater number of deaf-blind entrepreneurs would be beneficial. In addition, research to capture competitive

employment rates and experiences for the larger population of adults who are deaf-blind could help lend insight into the experiences of those who participate in the BEP. Currently, employment statistics and studies for this population are sorely lacking.

In conclusion, with the appropriate accommodations and adaptations individuals who are deaf-blind can operate food service facilities and vending routes while maintaining customer satisfaction and keeping their business profitable. While communication is a challenge, neither deaf-blind entrepreneurs nor staff view communication challenges as an insurmountable barrier to being successful in the BEP. Individuals with deaf-blindness can make effective BEP entrepreneurs if they are provided with updated technology, notify customers about the best ways to communicate with them, and keep a positive, upbeat attitude when interacting with customers. Additional training for staff on dealing with deaf-blindness and increased interpreter support would also be beneficial program improvements. As long as an entrepreneur with deaf-blindness is provided the appropriate tools and support, he or she can build a career as a business owner in the BEP.

References

- Brabyn, J. A., Schneck, M. E., Haegerstrom-Portnoy, G., & Lott, L. A. (2007). Dual sensory loss: overview of problems, visual assessment, and rehabilitation. *Trends in amplification, 11*(4), 219-226.
- Brennan, M., Horowitz, A., & Su, Y. P. (2005). Dual sensory loss and its impact on everyday competence. *The Gerontologist, 45*(3), 337-346.
- Bybee, J. (2012). [Selected analysis of 2012 National Research and Training Center on Blindness and Low Vision survey data]. Unpublished raw data.

- Fischer, M.E., Cruickshanks, K.J., Klein, B.E.K., Klein, R., Schubert, C.R., & Wiley, T.L. (2009). Multiple sensory impairment and quality of life. *Ophthalmic Epidemiology*, 16(6), 346-353. doi: 10.3109/09286580903312236
- Heubner, K. M. (1995). *Hand in hand: Essentials of communication and orientation and mobility for your students who are deaf-blind*. American Foundation for the Blind.
- McDonnall, M. C. (2009). Risk factors for depression among older adults with dual sensory loss. *Aging & Mental Health*, 13(4), 569-576.
- Miles, M. B., & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd edition). Thousand Oaks, CA: Sage.
- Nagle, K. M. (2001). Transition to employment and community life for youths with visual impairments: Current status and future directions. *Journal of Visual Impairment & Blindness*, 95(12), 725-738.
- Randolph-Sheppard Act of 1936, as amended, 20 U.S.C. §107 et seq. (1974 Amendments)
- Swenor, B. K., Ramulu, P. Y., Willis, J. R., Friedman, D., & Lin, F. R. (2013). The prevalence of concurrent hearing and vision impairment in the United States. *JAMA Internal Medicine*, 173(4), 312-313.