State of the Science Conference

on Employment for Individuals with Blindness and Other Visual Impairments

Final Report

April 2019

The National Research and Training Center on Blindness and Low Vision

Table of Contents

Introduction

The National Research and Training Center on Blindness and Low Vision (NRTC) presented its State of the Science (SOS) Conference on Employment for Individuals with Blindness and Other Visual Impairments at the 2019 American Foundation for the Blind Leadership Conference (AFBLC) in Arlington, VA on February 28 and March 1, 2019. We partnered with AFBLC for this conference-within-a-conference by assuming responsibility for their seven Employment Track sessions. The AFBLC is the most widely attended annual blindness-specific professional conference, typically attracting approximately 400 participants, and therefore an ideal partner for the SOS Conference.

The SOS Conference provided an opportunity to share the latest updates on the NRTC's NIDILRR-funded grant projects and gain feedback from professionals in the field through two days of presentations, a poster session, and a focus group session with sponsored SOS scholars. Presenters included NRTC project directors, NRTC staff, project partners, research participants, and external experts. Six major research projects are funded under the current NIDILRR Rehabilitation Research and Training Center on Employment for Individuals with Blindness or Other Visual Impairments (RRTC) grant, which is in the fourth year of its five-year cycle. The presentations provided information about each project's latest research findings and the current status of projects that are still in progress.

To encourage interaction during the one-hour presentations, audience members were provided with clickers that allowed them to answer questions provided by the presenters. Clickers are electronic remotes that allow each participant to provide an anonymous answer to a question, with results immediately displayed in the PowerPoint.

This report provides an overview of the conference, including feedback from SOS scholars; a summary of each presentation; and a copy of project posters displayed during the conference.

SOS Scholars

A group of state-federal vocational rehabilitation (VR) agency professionals from across the country were awarded scholarships to attend our SOS Conference. This provided scholars an excellent opportunity to learn about the latest research and products available to help their consumers obtain employment. We sponsored 19 scholars, including administrators, supervisors, training personnel, counselors, and assistive technology specialists, from agencies representing Alabama, Colorado, Delaware, Georgia, Idaho, Illinois, Kentucky, Massachusetts, Maryland, Maine, North Carolina, Nebraska, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Virginia, and Wisconsin.

Scholar Expectations

- Attend all SOS concurrent sessions sponsored by the NRTC and the general sessions sponsored by AFB.
- Participate in a discussion group at the conclusion of the conference.
- Complete an online survey after the conference.
- Complete a follow-up survey later in the year.
- Share information obtained during the conference with other VR agency staff members.

Scholar Insights

As Scholars attended SOS sessions, they were asked to consider a number of questions that were then discussed in a focus group setting at the conclusion of the conference:

- What did you learn that stands out the most that you will want to take back and share with people at your agency?
- How could you use results from the _____ project in your agency or your practice?
  - Job retention and career advancement
  - Job-search training for youth
  - Experiment to evaluate approaches to a meeting between a VR professional and an employer
  - Business-development training for rehabilitation counselors for the blind
- What do you see as barriers to adopting or using these research results?
  - How can those barriers be addressed?
- What issues related to employment for people who are blind or visually impaired (B/VI) would you like to see addressed with future research?

Focus Group Responses

The responses recorded in this section are direct quotes from Scholars. Many quotes indicate that the presentations and research results encouraged Scholars to rethink some of their agencies' policies and practices.

1. **What did you learn that stands out the most that you will want to take back and share with people at your agency?**

   - So, I had written down the retention program that Alabama was doing, this RAVE. We had had some kind of concept of that in Maryland a while ago, but it's one of those projects that wasn't really formalized. So I think that's a good thing to revisit for us. Really liked the idea about the app for youth, so I was going to pass that along to our transition manager. And then the business-development training, that is something that is on our to-do list for some time this calendar year.

   - I'm going to echo to the app as well. I have a pre-employment transition specialist who has been really working to develop youth activities, and she's also my deaf-blind specialist as well. So, I was really excited to hear about the exact component of that app as well. And I like the RAVE program too. The one thing I had as a takeaway, that I want to go back-- that I found interesting, was that the longer the retention cases were open, the less likely that the consumer was to retain employment. So that kind of inspires when you go back to start looking at how old these cases are and why haven't we closed them? What services are they waiting on and maybe dive into that a little deeper.

- We do a lot of job retention. So what I found or what I took-- one piece of information that I'm going to take back is that we can waive the PC category, priority category, because I've been turning people away because of that stipulation (order of selection), because I couldn't make them eligible, and it's really heartbreaking to do that. I mean, I understand it's a choice, but I just wonder if they realize it's a choice. I really just grabbed onto that, and so it was like I wanted to take that back. And then also, the possible training materials for blind and visually impaired, for pre-ETS, because we are in the school system. My area has the school for the blind, so just to have that and be able to take that to them, I'm really excited about it.

- I'm coming off what she said as far as the training, I think it'd be very beneficial, especially for our CRPs, the people that are kind of actually working with our consumers, having them get some type of training with blindness or low vision would, I think, be tremendous because a lot of them don't really have that training. They're kind of just trying to figure it out, or they may kind of coordinate with us to try to figure out some services, but time sometimes doesn't allow for us to really, I guess, kind of have that one-on-one with them. So that training would be very, very beneficial.

- So, I have two things, actually. The second session, where it was talking about the first meeting between the VR counselor and the businesses. And while we are very small, and our counselors, they're always keeping their eye out for jobs for their consumers, but we have business consultants, they solely work in a team format when they're serving our consumers. So, I'm really interested in taking this back to both groups because our business consultants are really both making that first outreach to the business and telling them who VR is, and what we do, and we can do ADA training and sensitivity training and all that stuff. But I don't know that they're coming away with that next appointment, that follow-up date and really digging deep into the business to see how are you already filling your positions and meeting your bottom line, because we want to be that resource. We don't want them going to Indeed and places like that. We want them coming to us. There's a lot of relationship development but then it's like…because I'm a program administrator, I have people underneath me, so then I'm asking the questions later, "Well what was the job-- what was the outcome? Did a job come out of it? Are you going back to talk to the actual hiring managers and not just the HR person?" Things like that. Yeah, so I was really interested and excited to take that back with them as well as [what] you had said with the app.

  So, we just met, on Tuesday I think it was, we had WINTAC come in, and we are still developing our Pre-ETS policies and procedures and coding for our database system, and so I think that'll come into play with us being able to provide yet another resource to our families and our students to help with that. [*Referring to the app*] We also have our TVIs…So at one of our council meetings, one of the advocates had said, "Well, what are you doing to prepare kids for Pre-ETS?" So

that's kids 13 and under, because in our state, we identify age 14 as the start for Pre-ETS. And so, we're like, "Well, we only have the…we don't even have the capacity to serve who we're serving." So I think that will be a really good thing to take back to our advocacy councils and say, "Hey, it's still in development, but I did give my card to the young lady so that when they're looking for people to test it, or one very vocal advocate, I'm going to say, 'Hey, so and so, can you and your son test this for us?" And hopefully, she'll see the benefit, and it'll help him be prepared once he gets to…once he turns 14. So those are two things.

- Kind of along the same lines of…because our focus, currently, is the youth population and how to get them engaged. And where do we start working with them? And so just the job, the Putting Your Best Foot Forward kind of curriculum and the app, combining those kinds of things. So, the itinerant teachers, and things like that for our school district, some of the referral sources that I work with, making them aware. One of them was actually in both those sessions.

- Yeah. One of the things that was really important, I think a takeaway, for me, is the importance of communication across this agency, upward and across, in order for things to really be working. And it's really important for there to be clear communication. And not only communication but people working together. I think that's a piece that is somewhat missing in Nebraska. The Nebraska VR, the school district, our TVIs and NCBVI [Nebraska Commission for the Blind and Visually Impaired], in the past, we haven't worked well together. They haven't made referrals to us, and now that we're going through our selection, we're getting an influx of…you got to serve all these kids, and they should have been referred to us much sooner. So anyway, long story short, that is something that I've seen across…and listening to some of you, Alabama, Texas, some of you [in] North Carolina, I think I saw something on them in WINTAC. You're communicating across the board, and I don't see that as much in Nebraska, and that's a takeaway that I'm really going to try to pull when I go back to Nebraska.

- I just think what resonated with me the most is the information about multiple work experiences not being as effective to helping individuals retain or even pursue competitive employment, and it being an actual barrier. Because we do a lot of work experiences. We're working on it, and so, that's real facts for the adults as well as the youths. And I have seen isolated cases where it does impact their desire for competitive employment to be able to receive better benefits.

- I think the app information. I was going to take some of that back because they just love apps.

- For me, I was really struck. It validated…I guess, years ago, I used to focus on teaching kids job-searching skills. And now we do lots of work experience. And during the summer, we do as many programs as we can, and they're focused on independent living and not job stuff. Usually, we don't prep; we farm it out, so the job-seeking skills and the job-search skills.

- I agree with both ladies. And the other thing too is just understanding too the impact of the parental expectations and knowing that we need to focus on working with the parent as well to make sure that they're encouraging and understanding the possibilities for their children.

- I'm also excited about the business-development training that's going to [be] offered online, hopefully, in the fall or early next year. Because with the WIOA and back home, they're like, "You have to do the outreach to businesses," and we've had no training. So then you kind of cold call, and then you don't feel comfortable, and then you don't have success.

- Yeah. I'm excited about that too because we've started in Oklahoma-- well, we didn't just start it, but we've kind of revamped our business-services program, which is an outreach to businesses to service them as a client not just the clients with the disabilities. And as an AT specialist, I've been kind of asked to be the liaison for that too to help educate the business[es], so I'm excited about the business aspect of it.

- I was going to say the business training, but I was also particularly interested in the job-search training for youth. With everything we're doing with the pre-employment transition services, anything else…because again, we're learning it's not a one-and-done, and we can't expect these kids to keep their skills up. And so, we'll do some intensive stuff, for example, over the summer or in a program, and then they're back in school, and they're busy, and they're doing things. And then it still doesn't translate necessarily then into the work experience, so we're still kind of having to go back and reteach. So, I think any time we can have some people trained, so like the train-the-trainer portion of that and then work with the students. And the fact that that curriculum may be available to train the trainers is particularly interesting to me. I say all the time, "The number one indicator of employment success is work experience before exit and [inaudible]." Then it goes back to, "But, wait, are we teaching them to do it and giving them those skills?"

- I'm just excited, probably, about the Best Foot Forward program as well. There's things that we're doing that are validated by doing all the research, but there's other things that I think the key predictors, and [inaudible] can help us refocus what we're doing, and maybe just tweak in small ways to just…because there's so many changes already, right? So we can't change everything all at once, but even thinking about if it's not with our summer work experience program, adding [an] additional week for Best Foot Forward, maybe it is just leading in the job search because they do all the other stuff, or thinking about in our training center using that program for our adults. I think that and getting all the infrastructure for that, and then getting the online training for business development would be really exciting because that's a real tool that we can use, and then the app.

- I think everybody's made a lot of really good points. I think the thing for me is just kind of finding out a little bit more about how all these other agencies, and how all

the data looks back at all the things that impact employment, that don't impact employment, things that you thought would impact employment don't, and that was really interesting to me. And so, the whole data thing was really interesting to me. So not that that makes a difference in terms of going back and planning big things with our agencies. We're going through a float, because we've been merging with the general agency [since] a couple of months ago. So, we're now in a place that our home services are just looking really different, so this is kind of a good time to strike. So, it's kind of like I'm hoping all this stuff, I can kind of pull some things together, and kind of point out, "Well, maybe we need to rethink on how we're dealing with employment overall." So, it's just a lot of good content. It was a really good conference. It just was overall good. It's just hard to pick one thing. I can't pick one thing.

2. **How could you use results from the _____ project in your agency or your practice?** (*select responses*)

Job Retention & Career Advancement

- Well, I think by using the data and the information that was presented, I'm able to make the case about…so historically, we've spent a ton of time and resources and energy on people who've been on the caseloads forever versus those who maybe it's their first time. They're employed or they're about to have a job offer. We can use that information [*research results*] to be able to say that we can respond quickly, we can get them in, we can help them advance or maintain whatever it is they have now, and then just start to shift our way of thinking because that has been a big barrier for us in just making the switch and aligning our priorities with WIOA. So, although we're operating under the order of selection, and our state has opted to not embrace the job in jeopardy piece in the legislation, so we don't have a particular policy that lets us bypass the eligibility piece of it. We have to be as creative as we can about eligibility, right? So, in order to really respond…we can't respond if they're under a plan, but sometimes you can if you just provide the assessment. You can provide a good service to the business and give them the assessment and let them run with it. I mean, we might not get that number, that placement, that exit, that successful closure, but the consumer's likelihood of needing to come back six months from now because they've now lost their job, that decreases.

- We definitely, in Illinois, focus on job retention a lot. That's one of our biggest things, especially because we do physical restoration services, so we see a lot of cataracts and things like that. But the career advancement one is one that's kind of not what's [a popular solution]. And it's definitely pushed that we've already paid for a bachelor's degree, and they have their entry-level position, and that's what we…that's all we need to be doing. So, I think the career advancement piece is definitely something that's missing that I fight about a lot…

- I'd like to piggyback off that. I think if we had clear established policy on it, "what's the procedure?" type stuff, it would leave out that [inaudible].

- Because it seems like a lot of the answers…we all said we had unofficial policies. But I mean, we have unofficial policies because I mean, I don't know how to interpret WIOA. I mean, career advancement, does it have to be…is the disability the barrier, or you just want to get out to get a master's degree so that you can move up? I mean, I have a hard time with that. So, we're working on a policy for that in my agency, but we don't have an official policy, really.

- I know for us, in Maine, we don't do a lot of outreach to business. Especially we don't do outreach to our consumers for career-based advancement, and just that piece seems really something that we need, but we don't have a policy. That whole policy thing is like, "Oh, hmm."

Job Search Skills Training for Youth

- I was going to think about, at least, including, not for this coming summer, because we have most of it planned, but maybe for 2020, a way of implementing the job-search component. Because we do all those other components that we talked about in the slides. And perhaps using it for over-25 or the adult population at our training centers because that's a captive audience right there. And we do job club and have career exploration already, and we can teach them skills, so it might not be very hard to implement. We also have a project with University of Kentucky and the rural population. So that might be another captive audience for potentially eligible students.

- Yeah, I was actually thinking [of] the vendors that provide pre-employment transition services that we could purchase the services from, and I could see them maybe doing a Saturday seminar or something over multiple weeks or months. Again, and the idea of it going that little bit deeper dive than on some of the topics, or I don't know, doing tours of businesses where they actually get you an informational interview or just adding a little more, because some of our vendors, I don't think what they're doing is, again, teaching the student to do the job search, it's more of this other…so I just think that would be neat.

- Part of it's good, and then part of it is in-between. It's not like it's a bad thing. And we have a transition program for our pre-ETS in summer. We piggyback with our school for the blind too, and they work at the Kentucky Kingdom, which is our big amusement park, or the zoo, or whatever. It's just almost like…I wish it could be just a little more real. A little more real. Or maybe the next step, that's what you do for a sophomore, but maybe then at junior, it gets a little more real than that, but this is like seniors and it's over, and then we get them. And we're like, okay? So, it's not bad. It's not bad. I just see things that could [improve] too.

- I was actually thinking about that beyond implementing it with the youth, what topics can I take from there and use it for homework assignments for some of my young adults, the 20- to 30-year-olds. Them finding them [jobs] instead of relying on me to find their jobs for them. And using those for [crosstalk]--

Experiment to Evaluate Approaches to Meeting Between a VR Professional & Employer

- My biggest takeaway again is that collaborative piece with the workforce solutions, with the businesses in our area. I'm working with a lot of other agencies, and so really taking away…my biggest takeaway is to be able to not only develop a relationship but helping our workforce understand how to talk to the businesses that they talk to and include people with disabilities and make sure that in their conversations, these are things that they make them clearer when they're working with the particular—what's the word I'm looking for?—business industries.

- Probably just the different approaches. I'm not really sure exactly what they use or if there's even like a sort of policy. I really don't know. But maybe just bringing that information to them, just the different options, that would be helpful to them.

- Yeah, I thought it was interesting that it seemed like the sensitivity training, so it's somewhat effective than the business-needs approach, the dual-customer approach, to a degree, and then I think the follow-up piece was very important. At our agency, our counselors do some job development. We have employment consultants. They do sensitivity trainings, but I don't really know to what degree they follow up. If they walk out of there and say, "Thanks. Well, we'll call if we have any openings." I don't know if that's actually happening. So, I think that's one thing I'll take back to that team, to say, "Evidence shows that this is really working. Are you following up though? Are you continuing to build that relation[ship]?" Because I doubt they are.

- For me, I think the biggest take home was one that I already kind of knew, but then your study, of course, reinforced that, which is the idea that you can't expect to develop a relationship with a business and then let it sit and then come back, and they still have that intent to hire. It's like any other relationship, it takes time. It takes commitment, effort, energy, and those types of things. And figuring out how to do that, and the pipeline…again, being a smaller agency, is the idea we actually have a wonderful business team, so lucky. But our director of business initiatives, she's just very, very talented. But what she has done, is really gone to that piece we learned about this morning, about the networking, and she makes sure all of our WIOA partners and our general agency, that we're all set so that if that business has a job, and we don't have the person, we've got a pipeline for them. And she's developing these relationships, and then they trust her. But I think that's the piece

that got reinforced for me, so if she goes out and makes these connections, we've got to keep that relationship warm, and we're super cool with them.

<u>Business Development Training for Rehabilitation Counselors for the Blind</u>

- When you're talking to businesses at night, even though we could've done away with 26s, so to speak, we're still outcome-based, right. So, whether it's a business consultant or a counselor, you still have that in the back of your mind. So, I think a lot of times, business consultants or implement specialists, are going in thinking, "All right. I need a job for Joe Schmo." And it's like, "Oh, somebody's got a job for Joe Schmo." And they were saying, put that kind of on the back burner for a minute, and it's not really about our immediate need but what this can be for the business. And so that's just something I want to take back to Delaware to say, "As much as you really want the job, develop, relationship develop, and go deeper," and then see if you can help them meet their needs. It's going to be hard because we're always thinking of getting people jobs and careers. So that was one thing that really kind of stuck out to me is don't be self-serving. Try to focus on the business.

- Require CRPs to complete the training. I feel like they're always asking for training, so we do disability-awareness training. This is very, very specific.

- And I think VRCs, just for them to understand. Even though we have business liaisons, we don't have that many, and so the VRCs are really in it. And it's on their job description, yet they don't know how to do it because they're trying to reach their head count, not a business person.

- Yeah. It's a problem for us too. Our counselors are pushed to do more marketing and more marketing, and don't really know what...they give them all these brochures and everything, and they're like, "I don't know how to do this."

- Because I would want them to do that training, and I would want all of them to come, and I want all the counselors to come, and we would all be happy about it. Because even with some job retention, if they call they should be able to talk to them. And they get a little nervous. I get that but...yes, everybody should do it. I mean, I know you can't do it every day, but just be familiar with it.

- But I do think that you follow up once we have somebody that's placed. I know in Nebraska we talk about supply-side, demand-side, which is basically the same thing as dual customers. But the follow-up piece is, we still have to follow-up with them. So one of the takeaways that I'm taking away is, even though I've had people that are placed, business engagement is still important because then I'm still maintaining periodic follow-up with that business to make sure that there's communication, to make sure that, "Hey, are things going well with this one? Do you still feel comfortable?" If something happens, I need to be...they'll call. I still have to be able

to come out, and I think that's still important. Not to pull out so quick, but kind of fade out a little bit.

3. **What do you see as barriers to adopting or using these research results?**

- Time.

- Time. When I just asked you how long it would take, and you said, "Three days," I was just like, "[Blah?]." I don't see the agency being willing to do three full days. I don't see the counselors wanting to take off doing their work for three full days. They already complain about one day of mandatory training, so.

- The way we're structured, when an individual is ready for placement, they actually get transferred. The case gets transferred to the employment team who has their own CRC that would write any [inaudible] or any accommodation and things like that. But what I hear from the director of the employment team, in regards to visual impairment and blindness, is that we know that that's your specialty, but I'm not hearing from them when they are talking to employers. Then if they don't know the information, how are they then sharing it with an employer, because they're not reaching out to us to help out with awareness training and things like that?

- I know in our state, it's very rural. I'm in the populated area, but when we try to do any group…we have a very small population of people who want [inaudible]. To do anything in a group is really challenging. We'd have one student at one school, one student at one…and there are no groups.

- Geography is a huge…and no transportation. So, it's just always the same thing. And their time too.

- The barrier I would probably run into is how much is it going to cost us? (*Others agreed with this*.)

   a. How can those barriers be addressed? (*question not asked due to lack of time*)

4. **What issues related to employment for people who are B/VI would you like to see addressed with future research?**

- Parent engagement because often parents are like, "Oh, my son or daughter, they can't do that." They're so used to being told, "You can't do this." And really trying to work with them at the young, young ages, like we were saying elementary school, and trying to assist their child in realizing that really you can do whatever you want as long as you have the supports in place and put your mind to it kind of thing. And finding ways to tap into that with parents because I think a lot of us are parents. So even though I don't have a child with a visual impairment, I still have that same concern and fear like, "All right. What's going to happen to my child if I'm not here?"

- And I'm going to say on the opposite spectrum is some data, some strategies, for the older worker. I know in Maryland, our adult program, I think that probably the

average age is 55, 60? And it just keeps going up and up, and we have 70- and 80-year-olds who want to continue or return to work. And they may not have worked in 10 years, or they may have just recently left; that could be three years. But the older worker has specific needs. And there's just very little strategies. At least I'm not aware of a whole lot of strategies, but just trying to serve that population.

- I know one thing I'd like to see is, we're going to do a pilot program with NFB as a service provider for one-to-one peer mentoring. So, I'd like to see the impact of blind-peer mentoring on success, if that makes sense, even for adults. Even for adults who maybe have acquired blindness to be partnered with a blind mentor who maybe works in an area of interest. So, we're going to do that to spend some of our pre-ETS. Pay for some one-to-one peer mentoring. So, I'll be interested to see how that plays out.

- One of the things I see with youth is that education and differences between IDEA and ADA, coming from what they're given at high school level versus what they're provided at the college level, those parts and combination. So, transition from high school to college, the differences in the systems.

- … Accessibility with speech. Specifically, JAWS, voice over, trying to articulate that working with employers. That's one of the biggest barriers. Because we can train them. They can get the interview, and then when they get them and they go [to work], the JAWS doesn't work. (*Several others agreed*.)

- When you're talking about barriers to employment, I don't know how you were doing your research in this, but I know in Oklahoma, being such a rural state, I would say the biggest barrier to employment for people in Oklahoma with blindness and low vision is transportation, getting to work.

Conference Sessions

4to24: Development of App to Help Parents and Youth Focus on Employment

Principal Investigator

Dr. Karla Antonelli

Presentation Team

Dr. Karla Antonelli, Dr. Jennifer Cmar, Anne Steverson, Kasey Markoski

Presentation Summary

This development project was based on an old and very popular NRTC product, the Transition Activity Calendar (TAC), which is a checklist of activities to help youth prepare for the transition from high school to college. The TAC has been available in print or online from the NRTC since the 1990s and covered information for youth from middle school to high school graduation, with the intention of transitioning to college.

The app project, 4to24, was based on this concept with the idea of widely expanding the content covered and the ages targeted, going from age 4 to age 24. The app is intended to focus not just on transition to college but on building skills over time to ultimately result in successful employment. For this reason, it was developed to cover all of a young person's education years into early career. It was also conceived as a mobile app instead of a static checklist, making it interactive for users and encouraging engagement.

Information about how the app will function was presented. The app content will be customized based on particular areas the youth needs to work on. Rather than being strictly based on grade in school as the TAC was, the app will provide information to youth and parents that is based on the youth's age, grade, and skill or experience level in several different topic areas. This app resource is intended to bring information and attention to youth and families early on and to cover a broad range of topics that are necessary for employment. The app will be interactive, in that users can check off information received, track their progress, and receive active notifications when new information is sent. The app is intended for use by parents of youth with B/VI, ages 4 to 24, and by youth with B/VI, ages 16 to 24. The app is still in development and will continue to be updated based on tester feedback until it is ready for release in 2020.

The informational content created for the app was described, as well as the extensive content-preparation process, from its beginning through final completion. Content-planning stages started with the original information that was offered in the TAC. Then, the content was greatly expanded to include topic areas other than academics that build skills toward employment, such as independent living, social skills, and technology. A team of

writers created content for the topic areas identified, for ages 4 to 24, totaling over 400 individual informational modules. After content was written, it was sent to an advisory board that included professionals in the blindness field, parents, and youth, who reviewed the content to provide an external validation of the information. Validators rated the content on accuracy, relevance, and age-appropriateness and provided feedback and recommendations to strengthen the information. Content was then edited to incorporate feedback from validators.

How the app will function was described. Information will be provided to users in the form of modules of information on particular topics. Each module will include an overview that is a brief synopsis of the topic and why it is important for a youth with B/VI in preparing for employment. Modules will also contain a drop-down link where the user can read more in-depth information on the subject if they choose and a list of suggested activities the parent or youth can complete to work on that particular area. Modules will also have a list of links to resources, such as websites, articles, or books, where users can find more information, activities, and support. Users of the app will have an account dashboard that lists any modules they are currently working on. Users will be able to check off any module they complete, and a new module will be sent to the user to work on next. Topic areas included in the app were also discussed.

How the user will work progressively through the modules once they begin using the app was described, noting that modules are intended to build on skills over time. The app will provide information that is based on the youth's experience and skill levels in the different areas. Users will set a youth's "benchmarks" when an account is created. These benchmarks will determine where in the sequence of modules a user will start for each topic area. In the later ages, modules will expand to include preparation for college for those youth who plan to attend, as well as work preparation and early career topics for youth who become employed. Examples of app modules of varying topics and at different ages were provided, to give an idea of what a module might include.

The next step for the development process will be field testing the app, beginning in Summer 2019. The field test will involve a group of parents and youth users who will be asked to use the app for six months and provide feedback on how the app works for them. The fact that a version of the app for parents of deaf-blind youth with other significant disabilities is also in development was acknowledged.

Evaluation

1. How applicable was the information to your agency or your professional practice?
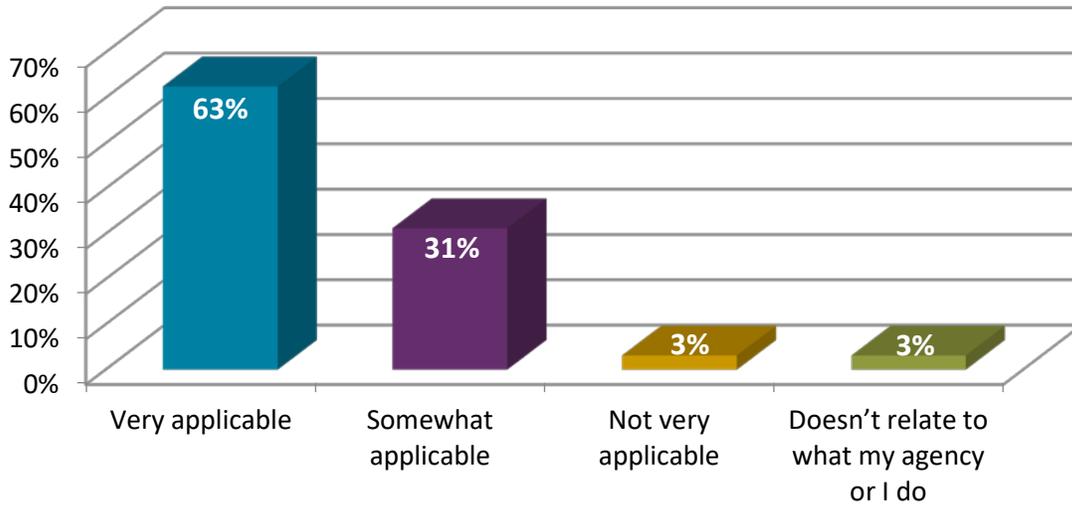
2. I have ideas about how I could actually use this information in my agency or professional practice.
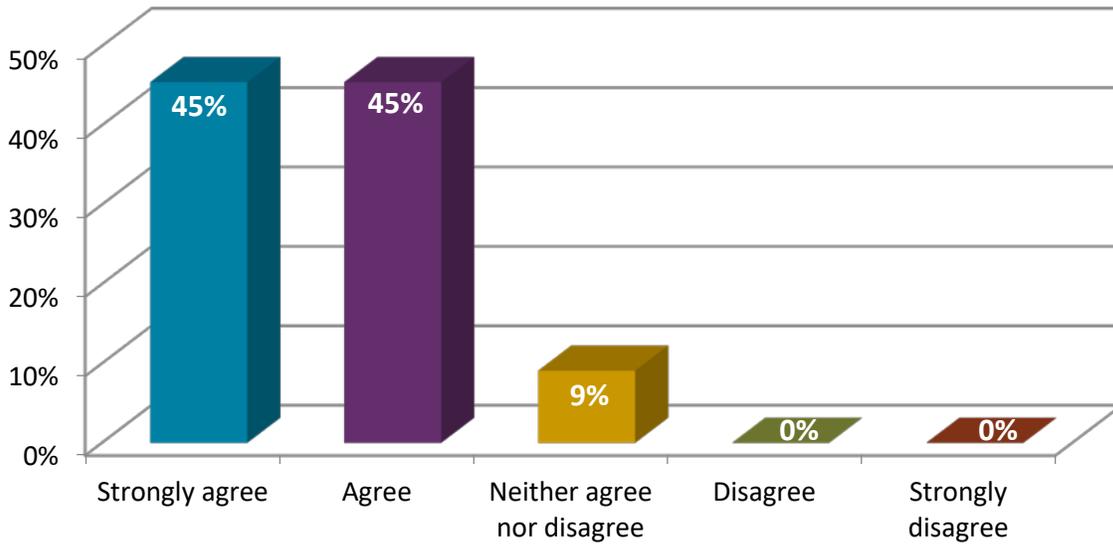
A Job Search Intervention for Youth with Visual Impairments: Results and Trainer Perspectives

Principal Investigator

Dr. Jennifer Cmar

Presentation Team

Dr. Jennifer Cmar, Dr. Michele McDonnall

Presentation Summary

The purpose of the project was to create a job-search skills training program for youth with visual impairments and evaluate the effectiveness of the program. The rationale for teaching job-search skills to youth with visual impairments were provided. First, research shows that early, paid jobs are associated with future employment for youth with visual impairments. Second, many youth with visual impairments are not getting paid jobs. Third, sponsored work experiences may not be effective for these youth. Fourth, research indicates it's more beneficial for youth to find jobs independently. And finally, job-search interventions are effective if they include critical components, but these components have not been used with youth with visual impairments.

An overview of our job-search skills training program, Putting Your Best Foot Forward: Job Search Skills Training for Youth with Visual Impairments (PYBFF) was provided. PYBFF is based on two job-search programs: JOBS and School to Work. The goals of our program are to (a) help youth develop job-search skills, (b) increase job-search self-efficacy and self-confidence, (c) encourage a proactive approach to finding employment, and (d) help youth develop strategies for overcoming employment barriers. PYBFF uses a train-the-trainer model and can be implemented in a flexible manner (e.g., 5 full days, 10 half days, standalone program, or integrated into a longer program). It contains about 40 hours of content, including group and individual activities. The materials include a trainer's manual, PowerPoint slides, facilitator's manual, student workbook, and certificate of completion.

Method and results for the research study were provided. We implemented the program in three U.S. states at a VR agency and three schools for the blind. Participants were 92 youth with visual impairments, ages 15 to 22 years. The intervention group (n = 44) did PYBFF, and the comparison group (n = 48) did not. Some youth in both groups also did a VR agency-sponsored summer work experience. Data collection involved phone surveys with youth at four time points: pretest, 2-month posttest, 6-month follow-up, and 12-month follow-up. The primary outcome measures were job-search knowledge, job-search behavior, job-search behavior self-efficacy, job-search outcomes self-efficacy, and job obtainment.

Results from the study were presented, focusing on short-term outcomes (i.e., differences

from pretest to 2-month post-test). For job search knowledge, there was no statistically significant change for the comparison group, but the intervention group had a statistically significant increase from 36% to 45%. For job search behavior, there was no change for the comparison group, but the intervention group had a statistically significant increase from 4.3 to 6.9. Both groups had increases in job search behavior self-efficacy; the comparison group increased from 7.2 to 7.4, but the intervention group increased from 7.4 to 8.0 (a statistically significant increase). Neither group had a statistically significant change in job search outcomes self-efficacy. Additional analyses indicated that youth who did the summer work experience increased their self-efficacy. Only 9% of the intervention group and 2% of the comparison group had paid jobs at the 2-month post-test. Some youth had trouble differentiating between sponsored work experiences and paid jobs, particularly youth who did the summer work experience. About 83% of those youth initially reported their summer work experience as paid job, which may explain their increase in self-efficacy.

In a video, Faye Miller and Allison Garner from the Oklahoma School for the Blind discussed their experience implementing PYBFF. In another series of short video clips, six youth who participated in PYBFF shared their thoughts on the program.

Results of this study indicate that PYBFF was effective in improving short-term outcomes (job-search knowledge, behavior, and behavior self-efficacy). We are still collecting data on long-term outcomes, but preliminary findings are mixed so far. Trainers and youth gave positive program feedback, and most trainers expressed interest in using it again.

Our findings have several implications for practice. First, youth may need guidance so they can distinguish between sponsored work experiences and paid jobs. Second, youth who receive Supplemental Security Income (SSI) may need benefits counseling to help them understand the impact of paid work on their SSI benefits. Third, offering repeated sponsored work experience to youth may have unintended consequences. For example, youth may be less likely to search for and accept paid jobs. Several situations in which youth declined opportunities for paid jobs in favor of sponsored jobs were described.

Instead of only providing work experiences to youth, we propose an alternative model: (1) provide sponsored work experiences, but limit the number of them; (2) teach youth how to find a job on their own; and (3) have youth find their own jobs with support as needed. Potential intermediate steps may involve having youth find their own sponsored jobs or competing for them.

The next steps for this project include finishing data collection and revising PYBFF. Then, the curriculum will be publicly available to people who complete a train-the-trainer session. Several people in the audience expressed interest in the program and provided their contact information to receive updates about program availability and future train-the-trainer sessions.

Evaluation

1. How applicable was the information to your agency or your professional practice?

Very applicable: 66%
Somewhat applicable: 20%
Not very applicable: 6%
Doesn't relate to what my agency or I do: 9%

2. I have ideas about how I could actually use this information in my agency or professional practice.

Strongly agree: 43%
Agree: 40%
Neither agree nor disagree: 17%
Disagree: 0%
Strongly disagree: 0%
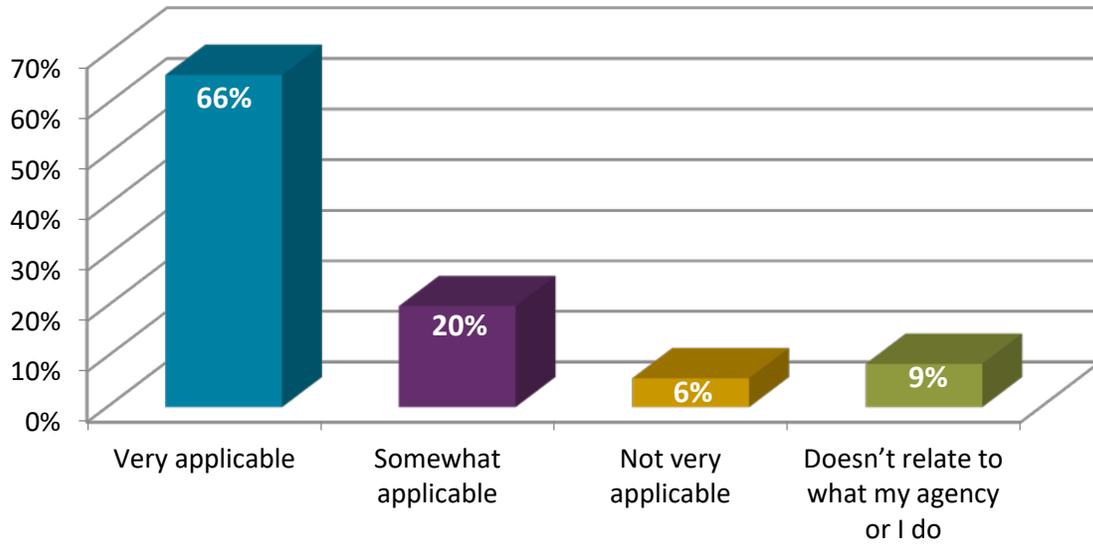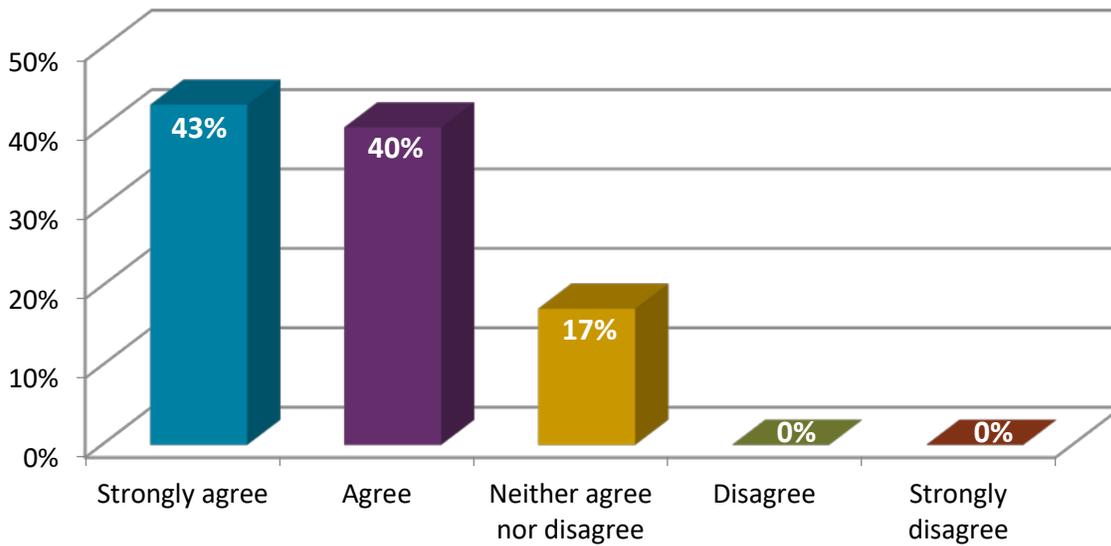
An Experiment to Evaluate Approaches to a First Meeting Between a VR Professional and Employer

Principal Investigator

Dr. Michele McDonnall

Presentation Team

Dr. Michele McDonnall, Dr. Karla Antonelli, Bobby Druesedow

Presentation Summary

The rationale for the study focused on the employment barrier of negative employer attitudes and the fact that VR professionals are expected to engage with employers. There are different ideas about which approach works best with employers, but no there is no evidence to support one approach over another. The purpose of the study was to determine whether a dual-customer approach or an educational approach worked better, and whether the vision status (blind or sighted) of the VR professional who met with the employer mattered. Participants were 59 hiring managers employed by a large financial services company in the South. Employer outcomes that were evaluated were attitudes, both explicit (self-report) and implicit; knowledge about how B/VI people can perform typical work tasks; intent to hire someone who is B/VI; and interest in a follow-up contact with VR.

The intervention consisted of a one-hour, face-to-face meeting between the hiring managers and VR professional. The VR professionals created scripts to follow for the two approaches being evaluated. The dual-customer approach script consisted of a brief overview of VR services that were available and 21 questions designed to determine the business's needs. The educational approach consisted of (1) questions to gather basic company information, (2) general information about B/VI, (3) typical misconceptions about B/VI, (4) assistive technology and alternative techniques used by people who are B/VI, (5) reactions of coworkers to hiring someone who is B/VI, and (6) tips for interviewing someone who is B/VI.

Hiring managers were randomly assigned to one of four groups: (1) dual-customer approach with a blind VR professional, (2) dual-customer approach with a sighted VR professional, (3) educational approach with a blind VR professional, or (4) educational approach with a sighted VR professional. Managers completed measures at three times: (1) pretest at one week to three days before the meeting, (2) posttest at one day to two weeks after the meeting, and (3) a follow-up four months after the posttest. A repeated-measures ANOVA was used to analyze the data.

To assess social validity of the intervention, managers rated the VR professionals who implemented the intervention on a scale of 1 (none/low) to 7 (high) in three areas:

engaging (M=6.69, SD=0.56), knowledgeable (M=6.80, SD=0.47), and competent (M=6.81, SD=0.39). Improvement was indicated in all outcome measures from pre- to posttest, and most of these changes were retained at the four-month follow-up. No differences were found based on the vision status of the VR professional; however, there were differences based on type of approach used in terms of knowledge. Knowledge gain from pre- to posttest for the educational approach was about twice that of the dual-customer approach. Knowledge gain was maintained over time, from pretest to follow-up for the educational approach, but the knowledge gain from pre- to posttest for the dual-customer approach was not maintained at follow-up. Employer's intent to hire was the only outcome measure for which significant differences were not retained at follow-up.

There was also no significant difference among the groups relating to interest in follow-up with a local VR provider. Overall, about half (29 of 59) of the managers indicated interest in VR follow-up. According to participant feedback, only six had communication with a VR provider following the intervention. The local VR agency partner reported attempts to contact 19 of the 29 interested participants. Almost all the managers indicated that they preferred to be contacted by email, but many emails from VR providers were ignored or replies indicated no further interest in meeting. Although many attempts to contact the participants were not successful, VR providers were able to meet with a higher-level supervisor within the company, which they had not been able to arrange in the past.

The study results indicate that meeting with an employer is effective at improving attitudes, increasing knowledge, and increasing intent to hire. Both approaches, educational and dual-customer, are effective, and the vision status of the VR professional did not matter. What does this mean for VR agencies? One meeting with an employer is not enough to increase intent to hire over time, so providers need to maintain contact with employers as much as possible. Providers can use the approach, or a hybrid approach, that is most comfortable for them. Given that the focus of the dual-customer approach is to develop ongoing relationships, there may be some advantage to using this approach.

Bobby Druesedow, retired Employment Assistance Program Specialist with the former Texas Department of Assistive and Rehabilitative Services provided information about how their agency approached employer interactions. The agency began by training their staff to use the educational approach and later trained all their staff to use the dual-customer approach. The agency's rehabilitation professionals used either the dual-customer approach or a hybrid approach, which allows flexibility to respond to each employer in the most effective manner. Bobby also discussed the importance of a timely response to employers and ongoing follow-up.

Evaluation

1. How applicable was the information to your agency or your professional practice?

Very applicable	58%
Somewhat applicable	31%
Not very applicable	0%
Doesn't relate to what my agency or I do	11%

2. I have ideas about how I could actually use this information in my agency or professional practice.

Strongly agree	11%
Agree	54%
Neither agree nor disagree	29%
Disagree	3%
Strongly disagree	3%
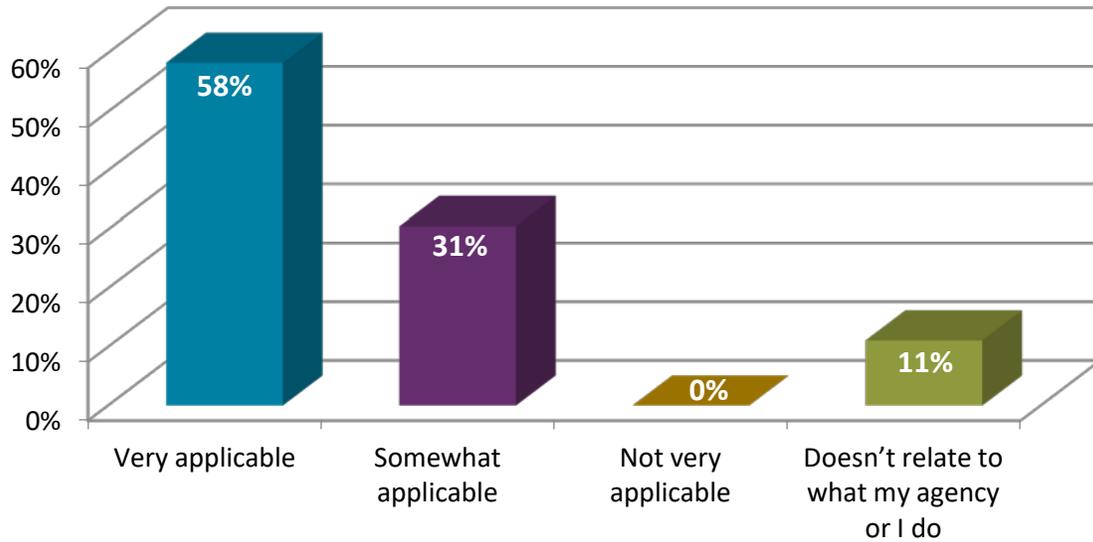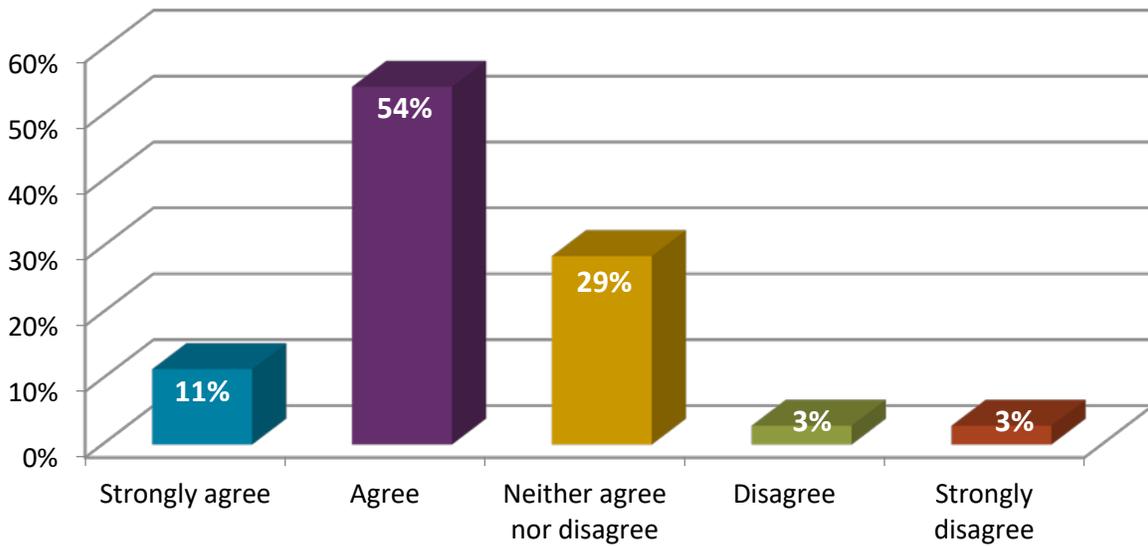
Effectiveness of a Business Development Training for Rehabilitation Counselors for the Blind

Principal Investigator

Dr. Michele McDonnall

Presentation Team

Dr. Michele McDonnall, Anne Steverson, Sophie Kershaw-Patilla, Timothy Jefferson

Presentation Summary

The rationale for the study was that VR professionals are expected to engage with employers and businesses, yet many counselors don't feel comfortable with this activity and are not doing it. The purpose of the study was to determine whether a business-development training for counselors can improve (a) business-development knowledge; (b) self-efficacy for business development; (c) use of dual-customer approach techniques; (d) frequency of business-development activities; and (e) self-perceived knowledge, skills, and comfort with business development. An additional purpose was to provide technical assistance to agency administrators to improve training implementation.

The training is based on two primary sources: the former Texas Department of Assistive and Rehabilitative Services business-development curriculum and results from an NRTC 5-year research study about how VR agencies interact with businesses and outcomes of those interactions. The training did not focus on a sales approach but instead focused on using existing counseling skills to develop relationships with employers. The training was implemented as a three-day workshop that included lecture, discussion, and many hands-on activities. Training topics covered five broad areas:
1. Importance of business development and recommended approach
2. Knowledge needed before connecting with employers
3. How to connect with employers
4. Being prepared for a first meeting
5. After the first meeting and other issues

Study participants included VR counselors from four agencies for the blind. Ninety people completed at least one survey, but many left the agency before receiving the training or before taking another survey. Our final usable sample size was 76, with 57 people who had data at all major time points. Three formal outcome measures were utilized: the Business Development Knowledge Scale (BDKS), the Job Development Efficacy Scale (JDES), and the Business Relations Scale-13 (BRS-13). Self-report items for knowledge, skills, and comfort level were also utilized.

A quasi-experimental switching replications design was used. Agencies were divided into two groups. Group A received the training in 2017, and nine months later Group B received the training. Data were collected at Time 1 (pre for both groups), Time 2 (post for Group A,

pre2 for Group B) and Time 3 (post2 for Group A, post for Group B). Data were also collected from both groups immediately after they received the training.

Analyses of the immediate effects of the training (all within-subjects comparisons) provide support for its effectiveness. There were significant increases in formal measures (the BDKS and the JDES) and self-report measures (knowledge, skills, comfort level) with medium to large effect sizes. Only preliminary results for the longitudinal analyses were available. These included between-group and within-subject comparisons over an approximately 18-month period. These results indicate limited changes in formal measures but significant increases in self-perceived knowledge and skills that were retained over time and increases in comfort level that were only significant for Group B over time.

These results were interpreted to indicate that the training had a positive immediate effect on counselors. The positive impact was generally retained for self-perceived variables but not for formal measures. It was noted that one agency did have positive impacts that were retained over time, and there were significant differences by agency. More analyses are needed, and will be conducted, with the longitudinal data. Challenges to conducting the study and to counselors doing business development were mentioned.

Tim Jefferson, one of the training participants, provided a personal perspective on the training. What he appreciated most about the training was that it provided a structured foundation for business-development activities and evidence-based strategies that speak a common language. He utilized the training to help him develop and maintain working relationships with potential employers, integrate into the collaborative efforts of other VR and workforce agencies, and collaborate with other counselors within his agency to increase effective business-engagement strategies. Tim felt the training impacted his agency by increasing the comfort level of staff when speaking to employers, increasing various types of services that the agency offers to employers, and placing more of an emphasis on the relationship with the business versus job placement. He also noted that confidence grows with skill acquisition and that he allocated specific time for business-development activities.

Evaluation

1. How applicable was the information to your agency or your professional practice?

Response	Percentage
Very applicable	70%
Somewhat applicable	19%
Not very applicable	3%
Doesn't relate to what my agency or I do	8%

2. I have ideas about how I could actually use this information in my agency or professional practice.

Response	Percentage
Strongly agree	38%
Agree	38%
Neither agree nor disagree	19%
Disagree	3%
Strongly disagree	3%
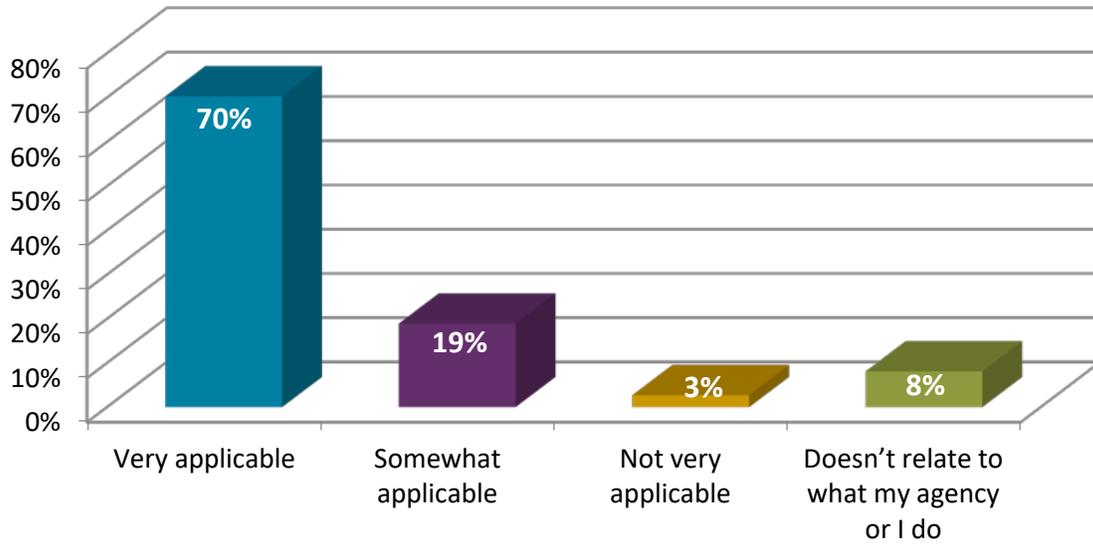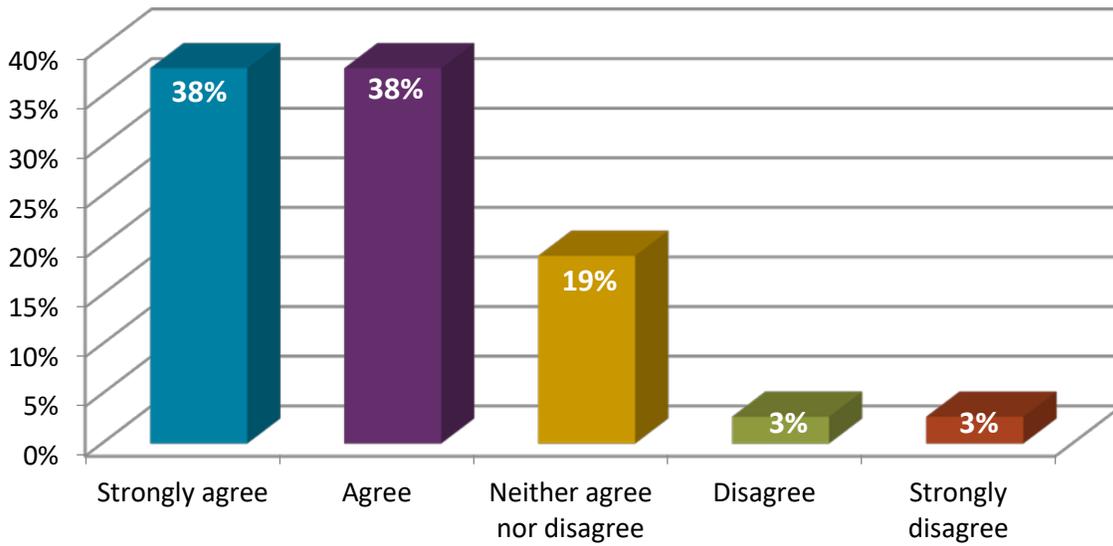
What We Know About Job Retention and Career Advancement

Principal Investigator

Dr. Adele Crudden

Presentation Team

Dr. Adele Crudden, Anne Steverson, Ashley Townsend

Presentation Summary

The Workforce Investment and Opportunity Act (WIOA) prioritized VR services for persons at imminent risk of losing their jobs, gave guidance to VR agencies regarding consumers seeking services for career advancement, and emphasized the importance of economic self-sufficiency for persons with disabilities. Job retention and career advancement are important topics for persons with visual disabilities, who are more likely to be employed when they apply for VR services. However, agencies vary from having 11% to 51% of their applicants employed at application.

An analysis of the Rehabilitation Services Administration Case Service data from fiscal year 2015 found that 24,470 persons with vision loss applied for services. Of the 14,229 who were between 18 and 75, had signed IPEs, and received at least one service, 32.2% were competitively employed at application and 3,787 were employed at closure. Competitively employed applicants tended to be White (non-Hispanic), older, more educated, and less likely to have cognitive disabilities. Compared to non-Hispanic White persons, persons who were African American had about a 25.5% lower likelihood of being employed at application and, if of multiple races, about 32.6% lower. If a person had a noncognitive secondary disability, odds of competitive employment at application were 23.2% lower. Likelihood of employment for persons receiving SSDI were 57.2% lower and 70.5% lower for SSI recipients. Employed persons were more likely to receive the following services: short-term on-the-job support, supported employment on-the-job support, rehabilitation technology, and information and evaluation.

Persons employed at application who lost employment were more likely to be female, have a secondary disability, and to have had a previous closure that was not successful. There was an interaction between age and the length the VR case was open. As the age of the consumer increased, the odds of losing employment for persons who stayed in VR for additional time also increased. For example, at the age of 20 years old, the odds of losing employment among those receiving services for more than two years were 3.56 times higher than the odds for those staying in VR less than one year. At the age of 60, these odds increased to 12.27.

A survey of state VR agencies serving persons with vision loss found that 51% had official policies to address job retention and, of the agencies without an official policy, 75% had unofficial policies. Almost half of the agencies reported attempting to expedite job-retention cases. Only 39.2% of state agencies had an official policy regarding career

advancement and, in some cases, the policy was just that career-advancement services were a possibility.

Ashley Townsend, the Director of Specialized Programs, Blind and Deaf Services from the Alabama Department of Rehabilitation Services described his agency's statewide program for managing disability in the workplace. Alabama's RAVE – *Retaining A Valued Employee* program is for applicants whose jobs are in jeopardy and whose performance or promotional opportunities are affected by their disability. The program helps the employer retain a valued employee as well as helping the VR applicant. RAVE recognizes the employer as a customer, uses a team approach, provides services within 48 hours of referral, coordinates resources and information, and waives financial-need criteria. Alabama has found that this program is cost effective, increases average wage at closure for consumers, and creates new business partners who may work with VR in the future.

Attendees were asked to assist in recruiting participants for a national survey of consumers regarding job retention and career advancement.

Evaluation

1. How applicable was the information to your agency or your professional practice?
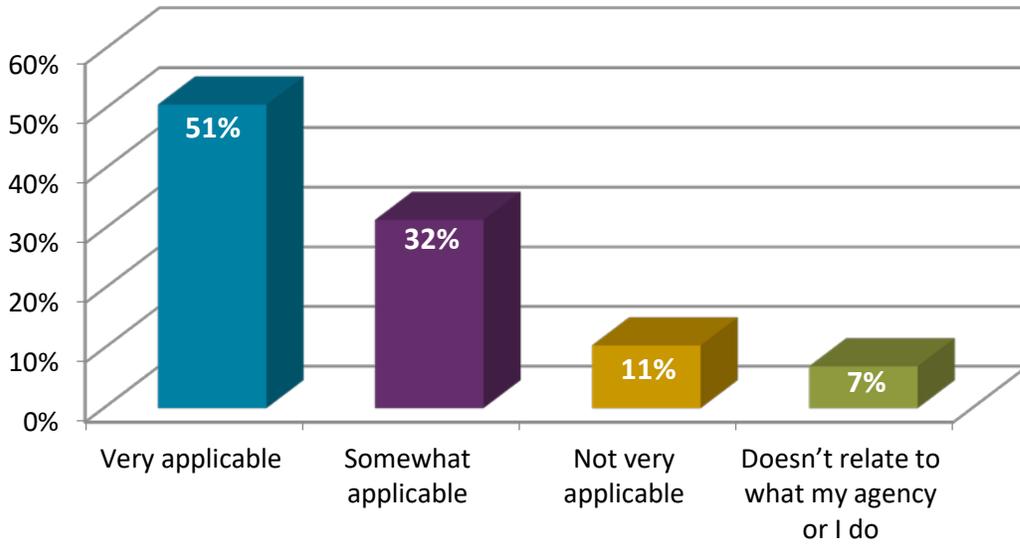
2. I have ideas about how I could actually use this information in my agency or professional practice.
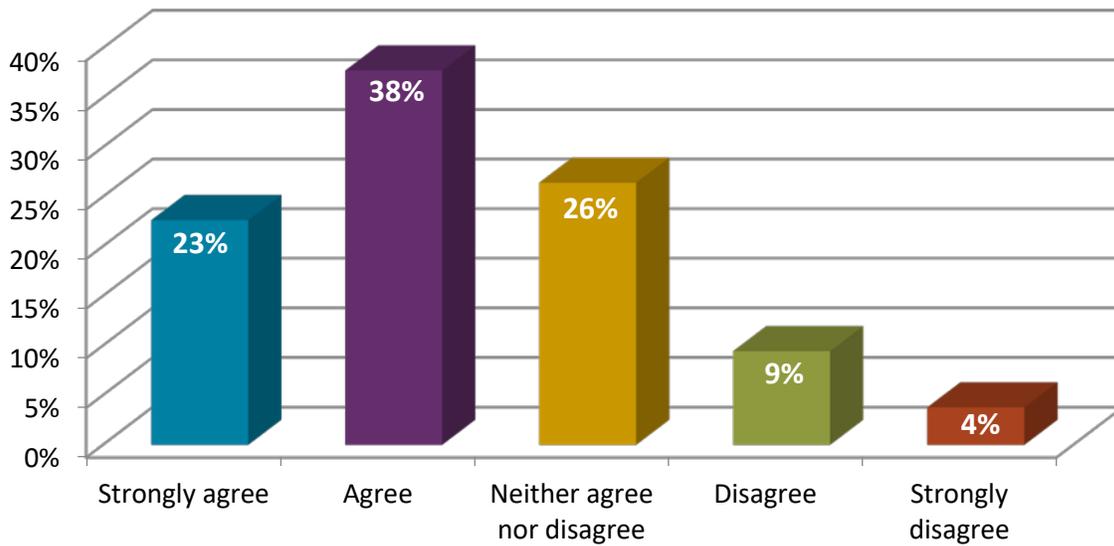
Employment for Youth who are Blind or Visually Impaired and Deaf-Blind: Key Predictors and Current Status

Principal Investigator

Dr. Michele McDonnall

Presentation Team

Dr. Stephen Lipscomb, Dr. Michele McDonnall, Dr. Jennifer Cmar

Presentation Summary

The presentation was based on one component of a larger study that involves utilizing secondary data to investigate employment for several subpopulations of individuals who are B/VI. This presentation focused on predictors of employment for youth who are B/VI and youth who are deaf-blind (DB). It also included the latest data from the current National Longitudinal Transition Study 2012 (NLTS 2012) with comparisons to the previous National Longitudinal Transition Study-2 (NLTS2).

Findings from a systematic review of predictors of employment for youth who are B/VI were provided. Ten articles met inclusion criteria and were included in the review. Most were published in the *Journal of Visual Impairment & Blindness* from 2009-2015, and the most common data source was NLTS2. Outcome variables included employment, number of paid jobs, hours worked, and job quality. The most commonly studied predictor variables were severity of vision loss, work experience, education level, gender, disability benefits, additional disabilities, and race/ethnicity. Excluding personal characteristics, the most commonly studied predictors were work experience, education level, and disability benefits.

Key predictors of employment identified in the systematic review were work experience and education level, both of which had consistent evidence in multiple studies and analyses. Predictors with limited or emerging evidence included academic competence, assistive technology, social skills, parental support, youth expectations, self-determination, braille and orientation and mobility instruction, independent travel, transportation difficulty (risk factor), college/university training, rehabilitation technology, and diagnosis and treatment. Predictors with mixed evidence included vocational education services, locus of control, several VR services, and disability benefits (risk factor).

Findings from a study of predictors of employment for youth who are DB was presented next. Because there were no previous studies of predictors of employment for this population, we used previous research for three groups (i.e., youth with disabilities, youth who are B/VI, and youth who are deaf or hard of hearing) to identify possible predictors for youth who are DB. The data source for this study was NLTS2 (conducted from 2001-2009). The sample included youth with DB as their primary disability (N = 100; weighted N =

2,820). Outcome variables were post-high school employment and continuous employment. We used logistic regression to analyze the data. Due to the small sample size, the number of predictor variables included in the multiple logistic regression models were limited. Thus, extensive preliminary analyses were conducted to select variables for inclusion in the multivariate models. The final five predictor variables were additional disabilities, paid work experience, vocational education services, parent expectations, and independent travel.

Significant predictors of post-high school employment were paid work experience (*OR* = 2.96) and parent expectations (*OR* = 1.59). Significant predictors of continuous employment were vocational education services (*OR* = 2.65), parent expectations (*OR* = 1.68), and additional disabilities (*OR* = 1.43). Parent expectations was highly correlated with self-care skills, independent travel, computer use, and communication. Did parent expectations form because of youth skills, or did youth develop better skills because of parent expectations?

NLTS 2012 findings on employment and related in-school experiences were presented next by our external expert, Dr. Lipscomb. NLTS 2012 included a representative sample of 13,000 youth in grades 7-12 (age 13-21); 81% of youth in the sample had IEPs, and 19% did not have IEPs. The sample of youth with IEPs included youth who are B/VI (*N* = 260) and DB (*N* = 140). Parent and youth surveys were conducted in 2012 and 2013, and administrative outcome data are currently being collected. This presentation included nationally representative means for four groups in 2012: (1) youth with IEPs overall, (2) youth who are B/VI, (3) youth who are DB, and (4) youth without IEPs overall. It also included a discussion of trends from 2003 to 2012. The following topics were covered: work experience, SSI receipt, parent expectations about independence and postsecondary education, challenges to getting postsecondary education, parent involvement, communication and understanding others, activities of daily living, independent travel, youths' perceptions about autonomy, social involvement, and school activities.

Detailed NLTS 2012 findings are available in three volumes published by the Institute of Education Sciences: https://ies.ed.gov/ncee/projects/evaluation/disabilities_nlts2012.asp. A summary of the main statistically significant NLTS 2012 findings for youth who are B/VI and DB follows. Compared to all youth with IEPs in 2012, (a) a smaller percentage of youth who are DB worked for pay in the past year, (b) larger percentages of parents of B/VI and DB youth reported that SSI is a challenge for their child's future employment, (c) parents of B/VI youth had higher expectations about postsecondary education, (d) a smaller percentage of B/VI youth and a larger percentage of DB youth had difficulties with communication and understanding, (e) smaller percentages of B/VI and DB youth were independent in their activities of daily living, and (f) youth who are B/VI and DB had higher self-reported autonomy.

General conclusions and implications for practice were discussed. Common predictors of

employment for youth who are B/VI and youth who are DB are work experience, education, and vocational education services. Unique predictors of employment for youth who are B/VI include parental support, assistive technology, and youth expectations. Parent expectations is a unique predictor for youth who are DB. More research is needed for both groups, particularly for variables with limited or mixed evidence (for B/VI youth) and variables correlated with parent expectations (for DB youth). Research with newer data is needed, such as NLTS 2012.

Postsecondary education is important for youth who are B/VI and DB, but parents identified challenges related to their child's participation in postsecondary education. Professionals can encourage and support postsecondary completion. Several potential areas of concern for youth who are B/VI and DB were identified in NLTS 2012. First, youth lack independence in their activities of daily living and travel skills. Second, parents identified SSI as a challenge to working. Third, many youth are not getting work experience. Fewer youth worked for pay during NLTS 2012 compared to NLTS2 (which may relate to the recession), and even fewer youth obtained paid jobs in a recent NRTC study sample of B/VI youth. Professionals can encourage youth to obtain paid jobs and teach them how to find their own jobs.

Evaluation

1. How applicable was the information to your agency or your professional practice?
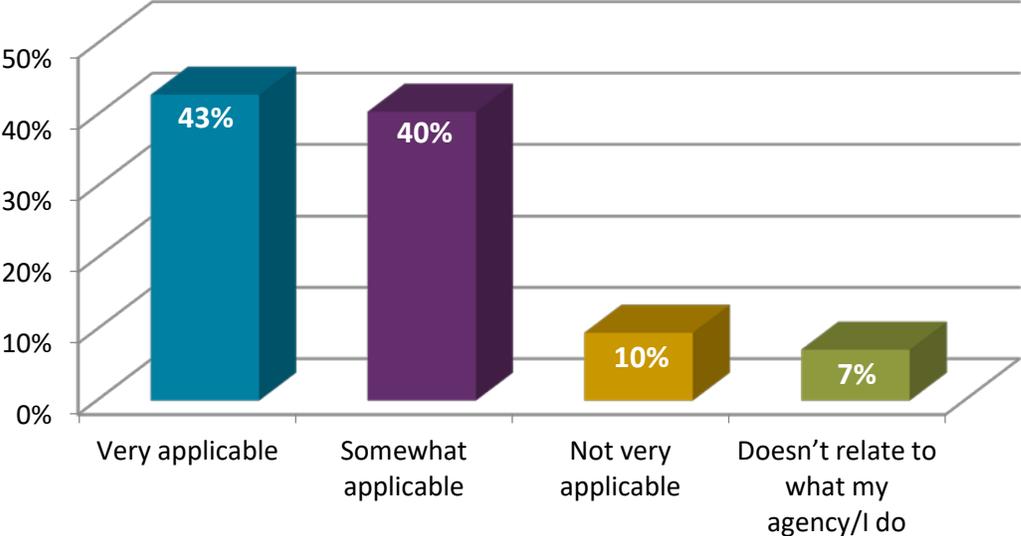
New and Emerging Technology to Improve Workplace Accessibility

Presentation Team

Sassy Outwater-Wright, Paul Schroeder, Daniel Frye

Presentation Summary

Sassy Outwater-Wright's portion of the presentation focused on the quest to eliminate barriers in the workplace by using new and emerging technology, which she referred to as "disruptive assistive technology." She began by examining barriers to and through employment, such as appropriate preparation, education and training on the use of the assistive technology (AT), and openness/willingness to use the AT. Training, not the hardware, is often the missing ingredient – hardware should follow the training, not the other way around, and training should focus on technical literacy, not ability to use one specific device.

Workplace cultures must be considered when it comes to AT and workplace accessibility. Part of workplace accessibility involves training the company's employees to share materials ahead of time, for example. New and emerging technology can be a tool to destigmatize disability in company culture. Reasonable accommodations should be thought of as inclusive company culture.

The audience was encouraged to think about what AT solutions they are considering for their clients and to not just rely on the standard technology that has been around for a long time. Open-source solutions should be considered, and competition in the AT field should be considered a good thing. There are some benefits to older technology, but newer options should be considered, and free options should not be ruled out. The presenter wondered why we as a field seem to be reluctant to support open-source (i.e., free) AT.

Myths associated with AT, including high costs, were discussed next. Open-source technology not being appropriate for the workplace is another important myth that was debunked. "Trying new technologies is asking for problems" and "VR won't support requests for new technology" were other myths that were discussed.

The presenter strongly encouraged VR to make ubiquity a priority when considering technology solutions. Mainstream, ubiquitous, familiar tech for IT departments is the future of AT in the workplace. Dedicated AT devices are not ubiquitous – think agile. She strongly encouraged the use of apps, web-based AI [artificial intelligence], and cloud-based support as workplace accessibility solutions.

Next, Paul Schroeder and Daniel Frye focused their presentation on Aira as a tool to enhance employment. What Aira is and how it works was first described. Some uses for Aira in the workplace were mentioned, such as allowing the agent to share the computer

screen of the user (i.e., directly access their computer) to do such things as assist with PowerPoint development, solve a JAWS hang-up, or read/maneuver through an inaccessible website.

Aira's special programs related to employment were described. The Aira Employment Program consists of free calls to agents for job-search tasks, from applications to interviews. The Intuit Quickbooks Small Business Owner Program provides support for business-related tasks for self-employed and small business owners. Vispero Product Access provides free assistance with anything on the computer screen that is not available with the Vispero software.

More than half of Aira users are employed (56.6%). A majority have a postsecondary degree, and their average age is 47. Twenty-six percent of users have completed a call tagged as job-seeker or work, for about 100,000 minutes of use. The top five work-related call categories are (1) online tasks, (2) reading, (3) describing, (4) technical assistance, and (5) navigation. Of the work-related tasks, 31% involved reading printed materials, 25% involved supporting digital access, and 13% involved navigation.

Evaluation

-evaluation items not completed due to lack of time-

SOS Posters

4to24: Development of App to Help Parents and Youth Focus on Employment

A Job Search Intervention for Youth with Visual Impairments: Results and Trainer Perspectives

NRTC

Effectiveness of *Putting Your Best Foot Forward*, a Job Search Intervention for Youth with Visual Impairments

Jennifer L. Cmar, PhD, COMS and Michele C. McDonnall, PhD

Purpose

Create a job search intervention for youth with visual impairments and examine effectiveness of the intervention.

Research Hypotheses

Compared with non-participants, intervention participants will have increases in
. job search behavior
. job search knowledge
. job search behavior self-efficacy
. job search outcomes self-efficacy

Method

Sample

92 youth with visual impairments
Ages 15 to 22 years
From 3 U.S. states

Research design

Quasi-experimental
Comparison group (n = 48)
Intervention group (n = 44)

Data collection & analyses

Pre-test & 2-month post-test
Repeated-measures ANOVAs

Intervention

Putting Your Best Foot Forward is a 5-day intensive job search skills training program for youth with visual impairments. The program uses a train-the-trainer model and includes group sessions and individual activities.

NRTC researchers developed the materials based on the *School-to-Work* program. The method is based on the principles of active learning and the group activity model developed for the *JOBS* program by the Michigan Prevention Research Center.

Program Principles

. Active learning
. Building social support
. Referent power
. Overcoming barriers to success
. Enhancing self-efficacy

Program Topics

1. Strengths and skills
2. Finding jobs
3. Thinking like an employer
4. Cover letters and resumes
5. Disability disclosure
6. Job interviews
7. Starting a new job

Results

Job Search Behavior

Job Search Knowledge

JS Behavior Self-Efficacy

JS Outcomes Self-Efficacy
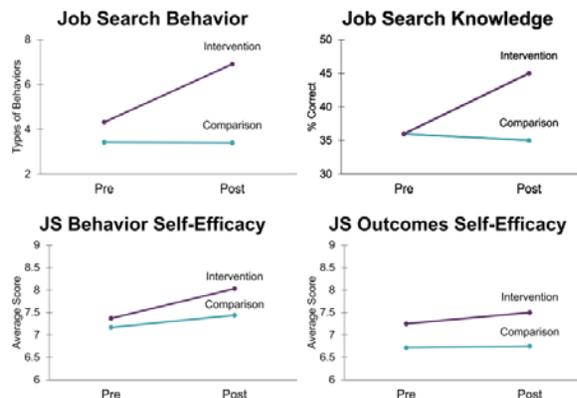
Table 1: *ANOVA Results*

Variable	Behavior F	p	Knowledge F	p	Behavior Self-Efficacy F	p	Outcomes Self-Efficacy F	p
Group	23.67	<.001	4.24	.04	1.87	.18	3.60	.06
Time	18.86	<.001	9.18	<.01	20.90	<.001	1.23	.27
Time*Group	19.48	<.001	11.37	<.01	3.68	.06	0.70	.41

Trainer Feedback

"I was able to see so much growth and change in each student that participated."

Youth Feedback

"If it weren't for this program, I never would have been confident enough to fill out a job application, and my resume would still be really bad."

"We learned so much that will help us in the future."

Conclusions & Implications

The intervention was effective in increasing job search knowledge and job search behavior:
→ Short-term training can be effective in improving these outcomes.

The intervention was effective in increasing self-efficacy, but comparison group youth also had a modest increase in job search behavior self-efficacy.
→ Additional research is needed to examine this phenomenon.

Future Research

Follow-up data collection (6-month and 12-month post-test) is ongoing, and will be used to evaluate effects of the intervention over time.

To learn more about this project, scan this QR code:

An Experiment to Evaluate Approaches to a First Meeting Between a VR Professional and Employer

An Experiment to Evaluate Approaches to a First Meeting Between a VR Professional and an Employer

Michele C. McDonnall, PhD, CRC and Karla Antonelli, PhD

Purpose

Determine whether a one-hour meeting between a VR professional and an employer can change attitudes toward, knowledge about, and intent to hire people who are blind or visually impaired (B/VI) and evaluate the relative effectiveness of two approaches to the meeting (dual customer vs. educational) and the impact of the VR professional's vision status (blind or sighted).

Research Hypothesis & Questions

- Participation in a meeting with a VR professional will change employer attitudes toward, knowledge about, and intent to hire people who are B/VI.
- Does approach used to interact with the employer result in different effects on these outcomes?
- Does vision status of the VR professional result in different effects on these outcomes?
- Does approach used and VR professional vision status interact to influence these outcomes?

Method

Sample

59 hiring managers employed by a large company located in the South

Data collection & analyses

Pre-test, post-test, & 4-month follow-up
Repeated-measures ANOVAs

Results

Legend: Dual Customer - Blind; Dual Customer - Sighted; Educational - Blind; Educational - Sighted; All

Explicit Attitudes

Knowledge

IAT-BVI: Implicit Attitudes
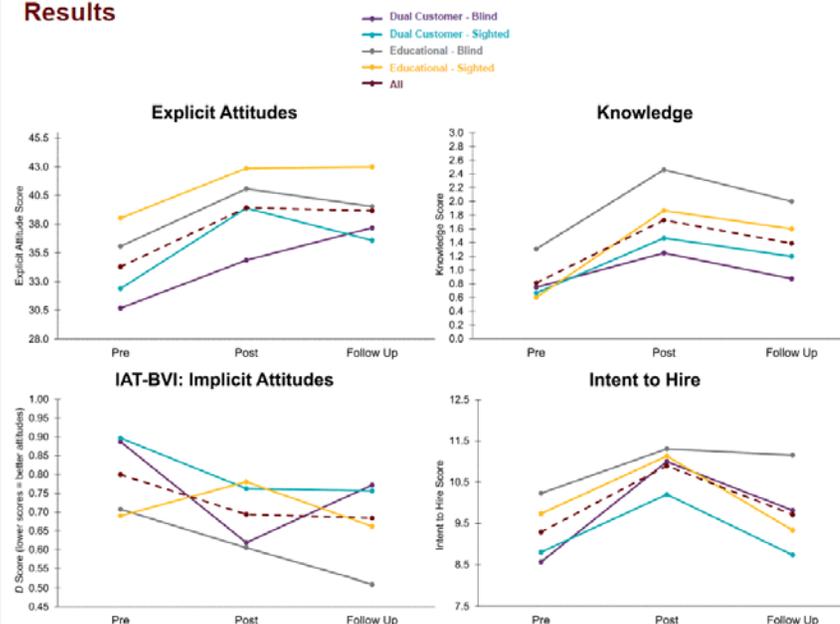
Intent to Hire

Table 1: ANOVA Results

Variable	Explicit Attitudes		Implicit Attitudes		Knowledge		Intent to Hire	
	F	p	F	p	F	p	F	p
Time	18.35	<.001	2.71	.07	11.15	<.001	5.31	.01
Time*Approach	0.38	.69	1.89	.16	1.28	.28	0.23	.79
Time*Vision Status	0.54	.58	1.07	.35	0.39	.68	0.93	.40
Time*Approach*Vision Status	1.85	.16	0.40	.67	0.05	.95	0.31	.73

Conclusions & Implications

Participating in a meeting with a VR professional resulted in improvement for all outcomes of interest:

→ VR professionals should interact with employers as often as possible to improve employment opportunities for consumers who are B/VI.

Intent to hire someone who is B/VI increased at post, but went back to pre-levels at follow-up:

→ A one-time meeting with an employer is not sufficient to increase intent to hire, VR professionals should follow-up with employers and establish an ongoing relationship.

Both approaches were effective at changing outcomes:

→ The approach used for the meeting is not as important as getting out and interacting with employers.

To learn more about this project, scan this QR code:

39

Effectiveness of a Business Development Training for Rehabilitation Counselors for the Blind

Michele C. McDonnall, PhD, CRC, Anne Steverson, and Sophie Kershaw-Patilla

NEED

Rate the importance of your business development activities to your consumers' success in obtaining employment.

78.8% considered it important or very important

I would benefit from additional training on conducting business development activities.

90% agreed or strongly agreed

Improving my business development knowledge and skills is a priority for me.

71.3% agreed or strongly agreed

GOAL OF TRAINING

Help counselors realize they have the skills to engage with business and increase their comfort level and confidence.

3-DAY IN-PERSON TRAINING

Lecture, Discussion, & Hands-on Activities:
- Provides a model to follow when conducting business development activities
- Specific guidance on each step of the process

Five Broad Topic Areas:
- Importance of business development & recommended approach
- What you need to know before connecting with employers
- How to connect with employers
- Being prepared for a first meeting
- After the first meeting & other issues

RESEARCH DESIGN

- Quasi-experimental switching replications design
- Group A (counselors from two VR agencies) received training after Time 1
- Group B (counselors from two VR agencies) received training after Time 2

Group A Training — Group B Training

TIME 1 PRE — (9 months) — TIME 2 PRE/POST — (9 months) — TIME 3 FINAL POST
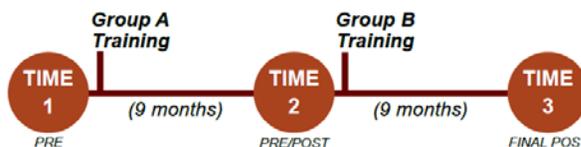
Funded by NIDILRR grant #90RT5040.

RESULTS (N=57)

Self-rated knowledge, skills and comfort significantly increased after the training, although increases in comfort were not retained for Group A.

→ Group A → Group B

I have the **knowledge** needed to conduct business development activities.

I have the **skills** needed to conduct business development activities.

Rate your **comfort level** with conducting business development activities.

Job Retention and Career Advancement among Individuals with Blindness and Visual Impairments

Adele Crudden, PhD, CRC, Michele C. McDonnall, PhD, CRC, Anne Steverson, & Zhen Sui, PhD

VR Applicants RSA-911 FY 2015

24,470 Applied for Services

14,229 Applicants Ages 18 to 75 who Received Services

4,586 Employed at Application

3,787 Employed at Closure

Differences in Services by Employment Status at Application

Diagnosis & Treament 1.29
Rehab technology 1.70
Counseling & Guidance 1.37
On-the-job supports (Short-term) 1.88
On-the-job supports (Supported employment) 1.48
Technical assistance 1.38
Employed 32.2 %
Unemployed 67.8%
Job placement assistance .53
Community college training .47
Misc training .62
Job search assistance .55
Academic remedial or literacy training .54
Job readiness training .59

Significant Predictors of Employment Status at Closure

Previous unemployment closure 2.19
Secondary disability 1.40
Female 1.30
Age X Case length
Lost Employment 15.8%
Previous employment closure .62
BEP .17
Retained Employment 84.2%
On-the-job supports (Short-term) .33
Weekly work hours at application .99
Diagnosis & Treatment .63
Bachelor's or above .62
Rehab technology .74

Competitively employed applicants with visual impairments have different characteristics and service patterns from unemployed applicants. Employed applicants tended to receive on-the-job supports, rehabilitation technology, counseling and guidance, technical assistance, and diagnosis and treatment. VR counselors can anticipate applicants' service delivery needs based on their employment status while considering individual goals and circumstances. Logistic regression contrasts characteristics and VR services for consumers at application based on employment status. Numbers represent odds ratios for employed and unemployed applicants. N = 14,229.

Characteristics that put employed applicants at increased risk of losing their jobs included being female, having a secondary disability, working fewer hours, having less education, or having a previous unsuccessful VR employment outcome. There was a significant interaction between VR case length and age: those served for longer periods were more likely to lose employment, particularly older consumers. Logistic regression identifies characteristics and services associated with employment status at VR closure. Numbers represent odds ratios for persons who lost and retained employment. N = 4,499.

For both studies, satellite bubbles indicate significant explanatory factors in the logistic regression models. The bigger the bubble, the larger the impact of the factor.

Funded by NIDILRR grant #90RT5040

41