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Short-Term Effectiveness of Job Search Skills Training:

Comparisons by Summer Work Experience Participation

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#### Abstract

We utilized a quasi-experimental pre-test-post-test design to assess the effects of job search skills training on job search knowledge, job search behavior, job search behavior self-efficacy, and job search outcomes self-efficacy. We also examined differences in outcomes based on participation in a vocational rehabilitation agency-sponsored summer work experience (SWE) program. Participants were 92 youth with visual impairments, ages 15-22 years, from three U.S. states. The intervention was an intensive job search skills training program involving 35-40 hours of content. Forty-two youth also participated in a SWE program for approximately six weeks. Intervention group participants significantly improved in job search knowledge, job search behavior, and job search behavior self-efficacy in contrast to comparison group participants, but results for job search outcomes self-efficacy did not differentiate the two groups. SWE participation by itself was related to increases in both self-efficacy measures, and participation in the intervention plus the SWE was related to larger increases in job search behavior self-efficacy. Results indicate that job search skills training and SWE programs may have differential effects on short-term outcomes. Rather than finding jobs for youth, practitioners could foster youths' competence, confidence, and preparation for the future by teaching job search skills and encouraging independent job-seeking.

# Short-Term Effectiveness of Job Search Skills Training: Comparisons by Summer Work Experience Participation

For youth with visual impairments, paid work experience in high school is one of the most salient predictors of future employment (Connors, Curtis, Wall Emerson, & Dormitorio, 2014; McDonnall, 2010; McDonnall, 2011; McDonnall & Crudden, 2009; McDonnall & O'Mally, 2012). Correlational research by McDonnall and O'Mally (2012) also supported the benefits of independent job-seeking for youth with visual impairments. The benefits of job search interventions have been well-documented among other populations (Liu, Huang, & Wang, 2014), but job search intervention research focusing on youth with visual impairments was nonexistent until recently.

#### **Benefits of Paid Work Experiences for Youth**

Part-time paid jobs have provided youth with new experiences and opportunities to learn new skills (Hirschman & Voloshin, 2007), such as time management, decision-making, interpersonal skills, and work skills (McKechnie, Howieson, Hobbs, & Semple, 2014; Raby, Lehmann, Easterbrook, & Helleiner, 2018). Social benefits of working may include meeting new people, gaining new contacts, and developing friendships with coworkers (Hirschman & Voloshin, 2007; Raby et al., 2018). Despite some assertions that early work experiences were detrimental for youth due to interference with schoolwork, researchers have generally agreed that part-time work with reasonable hours does not negatively impact academic performance (Bourdillon, 2006). In fact, working moderate hours, particularly in higher quality jobs, was associated with positive outcomes for youth (Staff & Schulenberg, 2010), and youth felt that working gave them a competitive edge over their peers (Raby et al., 2018). If working during the school year was not feasible, summers were opportune times for youth to obtain work experience without the need to balance school and work (Trainor, Carter, Owens, & Swedeen, 2008).

#### Work Experiences of Youth with Visual Impairments

Fewer youth with visual impairments have obtained paid work experiences during high school than their peers without disabilities: 50% of youth without disabilities worked for pay in high school, compared with only 38% of youth with visual impairments (Lipscomb et al., 2017b). On the other hand, more youth with visual impairments participated in school-sponsored work experiences (e.g., work-study jobs, internships, school-based businesses) than their peers without disabilities: 13% of youth with visual impairments (Lipscomb et al., 2017b) compared to 7% of youth without disabilities (Lipscomb et al., 2017a). Youth with visual impairments may also participate in short-term sponsored work experiences outside of school, which are commonly provided through vocational rehabilitation (VR) agencies and community rehabilitation providers.

Some research has supported the effectiveness of sponsored work experiences for youth with disabilities. However, according to the only available research on this topic, school-sponsored work was not associated with later employment of youth with visual impairments (McDonnall, 2010; McDonnall & O'Mally, 2012); research on the effectiveness of work experience programs sponsored by other agencies is scant. Some evidence has supported the effectiveness of these programs for youth with disabilities in general (Baer et al., 2003; Carter, Austin, & Trainor, 2012; Shandra & Hogan, 2008). Furthermore, studies of work experience programs for youth who have employment barriers have yielded mixed results; however, all programs with strong impacts had added components, including job search assistance, job placement assistance, vocational training, and additional supports (Sattar, 2010).

#### **Benefits of Independent Job-seeking**

The job-seeking process can promote youths' development of various skills, such as evaluating job openings, completing applications, "selling" their strengths and skills, negotiating the interview process, communicating with employers, and evaluating job offers. For youth with disabilities, job-seeking also provides opportunities to make decisions regarding disability disclosure and discuss accommodations with employers (Lindsay, Cagliostro, Leck, Shen, & Stinson, 2019; Lindsay, McDougall, Menna-Dack, Sanford, & Adams, 2015). From employers' perspectives, effective job search skills (e.g., having a well-organized, professional job application; demonstrating awareness of strengths and limitations; and ability to highlight key skills and attributes) are essential for youth to get interviews and jobs (Lindsay et al., 2014). Associations between job search skills and employment were evident among youth with disabilities (Benz, Yovanoff, & Doren, 1997), and a successful job search has contributed to youths' sense of independence and competence (Raby et al., 2018).

#### **Effectiveness of Job Search Interventions**

A meta-analysis of 47 experimental and quasi-experimental studies supported the effectiveness of job search interventions in improving employment outcomes; job search intervention participants had 2.67 times higher odds of securing employment than control groups (Liu et al., 2014). These interventions were especially effective for younger people and for those who face barriers to employment or have special needs (Liu et al., 2014). For youth with visual impairments, job search skills instruction may be provided as part of the career education component of the Expanded Core Curriculum (Wolffe, 2014), and job readiness and transition programs and curricula may include some content on job search skills (e.g., Lewis, Bardin, & Jorgensen-Smith, 2009; Royal National Institute of Blind People, 2014). After a comprehensive

literature review, we did not identify any empirical evaluations of job search interventions for youth with visual impairments, or for those with other disabilities, indicating that little to no research has been conducted with youth with visual impairments on the effectiveness of specific approaches or curricula for teaching job search skills.

To address this gap, we created a job search skills training program based on two programs that have extensive evidence of effectiveness for unemployed adults (Caplan, Vinokur, Price, & van Ryn, 1989; Vinokur, Price, & Schul, 1995; Vinokur, Schul, Vuori, & Price, 2000; Vinokur, van Ryn, Gramlich, & Price, 1991) and transition-age youth (Koivisto, Vuori, & Nykyri, 2007; Koivisto, Vuori, & Vinokur, 2010). A previous study provided preliminary evidence from a single state of our program's effectiveness for youth with visual impairments who also participated in a summer work experience (SWE) program (Authors, 2019). During the SWE, which was sponsored by a state-federal VR agency, youth spent approximately six weeks working for an employer in the community. Because all youth in the previous study participated in the SWE, we were unable to decouple the impact of our program from the impact of the SWE on outcomes.

For the present study, we expanded upon the previous study by comparing the sample from that study with a new sample of youth who did not participate in the SWE. In addition to providing a larger overall sample, the present study also involved the addition of youth from two other states, which can enhance the external validity of our results. The purpose of this study was to assess the effectiveness of job search training on short-term outcomes (i.e., job search knowledge, behavior, and self-efficacy) and the potential contribution of the SWE to these outcomes. Our research questions were:

- 1. Does participation in a job search skills training program lead to increases in job search knowledge, behavior, and self-efficacy for youth with visual impairments?
- Does participation in the SWE contribute to improved job search knowledge, behavior, and self-efficacy?
- 3. Does participation in a job search skills training program and participation in a SWE interact to improve job search knowledge, behavior, and self-efficacy?

#### Method

#### **Research Design**

We utilized a quasi-experimental pre-test-post-test design for this study. Participants resided in three U.S. states (two in the South, one in the West). Five cohorts of youth enrolled in the study from 2016 to 2018. Youth were assigned to the intervention group based on participation in an existing transition program in which the intervention curriculum was being utilized or, for the state that offered the SWE, based on location within the state. For youth who signed up for the SWE, the job search skills training program was offered in two larger cities in the state; the comparison group participants who signed up for the SWE resided in other locations across the state. A few youth who signed up for the SWE did not ultimately participate in that program. See Table 1 for more information about program implementation and group assignment for each state.

#### **Participants**

The Institutional Review Board overseeing human subjects research at the authors' university approved this study. Criteria for participation included (a) having a significant visual impairment (for which they qualified for special education or VR services), (b) not having a moderate or severe cognitive disability, and (c) being between the ages of 15 and 22 years.

Ninety-two youth participated in the study: 44 in the intervention group and 48 in the comparison group. A portion of each group also participated in the SWE program: 19 (43.2%) of the intervention group and 23 (47.9%) of the comparison group. The average age of participants was 17.41 years (*SD*=1.50, range 15-22). Most of the participants (81.5%, n=75) had never held a paid job at pre-test. Additional participant characteristics, overall and by group, are provided in Table 2.

#### Procedure

Potential participants were identified by staff from the organizations implementing the intervention or other organizations in the state; staff from these organizations provided information about the study to eligible youth and their parents/guardians. Interested youth provided consent, or if youth were under age to provide consent, parental permission was obtained before inviting youth to participate in the study and obtaining assent. Pre-test data were collected from participants up to three weeks before the intervention began, and post-test data collection took place approximately two months after the pre-test. This two-month time span was implemented to allow participants from the SWE state to complete their SWE program. The pre-tests and post-tests were the same as those used in Authors (2019). Participants completed their pre-tests and post-tests by phone interview. Trained research staff conducted the interviews, which took approximately 30 to 45 minutes apiece. Participants were offered a \$20 gift card for completing each interview.

#### **Intervention Description**

*Putting Your Best Foot Forward* is an intensive job search skills training program that is based on the JOBS (Curran, Wishart, & Gingrich, 1999) and School-to-Work (Nykänen et al., 2014) programs. In developing *Putting Your Best Foot Forward*, we modified these successful

job search programs to ensure thorough inclusion of six research-based critical components of effective job search interventions established by Liu and colleagues (2014): teaching job search skills, improving self-presentation, boosting self-efficacy, encouraging proactivity, promoting goal-setting, and enlisting social support. We also incorporated disability-specific examples and content into the program to make it more applicable to youth with visual impairments. Topics covered in *Putting Your Best Foot Forward* include identifying and presenting strengths and skills, understanding the employer's perspective, locating job vacancies, developing a polished resume, using disability disclosure strategies, identifying job accommodations, and preparing for job interviews.

The *Putting Your Best Foot Forward* program consisted of about 20 hours of group sessions and 15 to 20 hours of supported individual activities. The group sessions followed the JOBS program's group training model, which utilizes the following learning processes: active learning, trainer referent power, enhancing self-efficacy, social support, and overcoming barriers to success (Curran et al., 1999). The group sessions addressed various job search topics through activities such as large-group discussions, small-group exercises, role play exercises, and brainstorming. During the individual activities, youth obtained hands-on experience with the material covered in the group sessions. For example, they completed a personal data sheet, wrote a resume, called personal contacts to inquire about job leads, and interviewed with at least two employers (at the end of the program).

At each intervention site, administrators selected staff members from their organization or a partner organization to implement the program (i.e., lead trainers) and provide support (i.e., facilitators). The group activities were implemented by two lead trainers who received a one-day training on program implementation, which was conducted by the researchers. The lead trainers had expertise in the program content areas and previous experience implementing short-term group programs with youth with disabilities or providing direct instruction to youth with visual impairments. During the individual activities, facilitators provided assistance to the youth in completing specific job search activities, with an approximate 3-to-1 youth-to-facilitator ratio. In some cases, the facilitators were the youths' VR counselors. The researchers provided all program materials, which included a student workbook, trainer's manual, facilitator's manual, PowerPoint presentation file, and other supporting materials.

In two of the three states, *Putting Your Best Foot Forward* was implemented as a 5-day intensive program, with morning hours consisting of group activities and afternoon hours consisting of individual activities related to the group activities. In the third state, the program was implemented over the course of 10 days, covering the same content in the same sequence, but alternating the group and individual activities each day. In that state, it was implemented as one component of a three-week summer transition program, which also included career exploration, independent living skills, college preparation, and recreational activities.

#### **Summer Work Experience Description**

The SWE, sponsored by the state VR agency, consisted of up to six weeks of paid work (minimum wage) with an employer in the youths' community. Agency representatives approached employers to request that a youth with a visual impairment be allowed to work at their business during the summer. The agency, rather than the employer, paid the youths' salary. Youth could request specific employers or specific types of jobs, and agency representatives attempted to honor these requests.

#### Measures

Participants first answered a series of questions related to their personal characteristics, work experience, and job search activities. Formal measures were then utilized to assess their job search knowledge, job search behavior, job search behavior self-efficacy, and job search outcomes self-efficacy. Descriptors for Cronbach's alpha coefficients in the following sections correspond with George and Mallery's (2003) rules of thumb.

Job search knowledge. Because we could not identify an adequate existing job search knowledge measure, we developed a multiple-choice measure consisting of 22 items, each with four answer choices. One point was assigned to each correct answer, and scores reflect the proportion of correctly-answered items. A sample item is: When preparing a resume you should (a) ask someone to review its formatting; (b) use passive language to describe your skills; (c) include your name, address, and social security number; or (d) make it at least one page long.

The process used to develop the knowledge measure included pilot testing and item analysis. First, we devised 38 questions that addressed the following six topics: strengths and skills, finding job vacancies, resumes and cover letters, job applications, interviews, and disclosure and accommodations. Second, we pilot tested the questions with nine adults, obtained their feedback on the questions and answer options, and made minor changes as needed. Next, we evaluated the revised questions through a second pilot test conducted with 20 high school and college students. We then analyzed response patterns for each item and item means (percentage of correct responses). Utilizing those data, we eliminated extremely easy or difficult questions and chose 22 final items that covered the six topics and had varying difficulty levels.

**Job search behavior.** The job search behavior measure was based on the job-seeking behavior scale from JOBS program research (Caplan et al., 1989; van Ryn & Vinokur, 1992), with one item added from Blau (1994). Previous research supports the job-seeking behavior

scale's predictive validity (Vinokur & Caplan, 1987) and indicates that reliability of the scale is good:  $\alpha = .83$  (Vinokur & Price, 1999). For this 10-item measure, participants reported the number of times they performed a series of job search activities during the past 6 months (at pretest) or since the last interview (at post-test). Because the time periods were different, we created a job search behavior score that included the number of activities that the participant performed one or more times during the time period (range of 0 to 10). Sample items include (a) contacted an employment agency, search firm, or state employment service; (b) called, emailed, or visited a potential employer; (c) sent resumes to potential employers; and (d) filled out paper or online job applications. This measure had acceptable reliability for our sample at pre-test ( $\alpha = .77$ ) and good reliability at post-test ( $\alpha = .86$ ).

**Job search self-efficacy.** We utilized two measures of self-efficacy: job search behavior self-efficacy and job search outcomes self-efficacy. Saks, Zikic, and Koen (2015) proposed and tested this two-dimensional job search self-efficacy model and found evidence supporting its construct validity (based on confirmatory factor analysis) and predictive validity (based on differential relationships with antecedents and consequences).

Our job search behavior self-efficacy measure was constructed from the job-seeking selfefficacy scale used with JOBS program studies, which had good reliability ( $\alpha = .87$ ; Caplan et al., 1989; van Ryn & Vinokur, 1992). We expanded the original 6-item measure into a 9-item measure by separating three items representing multiple behaviors into two different items. For example, we changed "contacting and persuading potential employers to consider you for a job" to "contact potential employers to consider you for a job" and "persuade potential employers to consider you for a job." Following Bandura's (2006) guidelines, we also expanded this measure's original 5-point scale to an 11-point scale in an effort to increase its reliability and sensitivity. Participants rated their confidence in their capability of performing each of 9 behaviors on a scale of 0 (not at all confident) to 10 (extremely confident)—for example, (a) complete a good job application, (b) complete a good resume, and (c) get your points across in a job interview. Reliability of our job search behavior self-efficacy measure was good for our sample (pre-test  $\alpha = .85$ ; post-test  $\alpha = .88$ ).

Our job search outcomes self-efficacy measure was based on the job search self-efficacy outcomes (JSSE-O) subscale of Saks and colleagues' (2015) job search self-efficacy scale. The JSSE-O subscale had excellent reliability ( $\alpha = .96$ ) in a previous study (Saks et al., 2015). We modified the original 10-item JSSE-O by excluding three items that were not relevant to our target population (e.g., be invited for site visits), which resulted in a 7-item measure. Furthermore, we expanded the original 5-point scale to an 11-point scale (Bandura, 2006). Participants rated their confidence in their capability of accomplishing each of 7 behaviors on a scale of 0 (not at all confident) to 10 (extremely confident)—for example, (a) obtain more than one good job offer, (b) get a job quickly, and (c) get a job with a very good salary. Reliability of our job search outcomes self-efficacy measure was excellent for our sample (pre-test  $\alpha = .91$ ; post-test  $\alpha = .91$ ).

**Social validity.** At the end of the program, *Putting Your Best Foot Forward* participants did an evaluation in which they rated the information provided, the workbook, the activities, and the trainers. They also provided open-ended comments about the program. The lead trainers provided written comments during the program to document their thoughts and experiences each day. They also participated in an interview with the lead researcher after the training was complete to share feedback and provide suggestions to improve the program.

#### **Intervention Fidelity**

We used several methods to facilitate and monitor intervention fidelity. First, the *Putting Your Best Foot Forward* program materials were designed to promote standardized delivery of the intervention (Horner, Rew, & Torres, 2006). For example, the trainer's manual contains detailed instructions for implementing the program, including relevant background information, time allotted for each session, and implementation steps for the group sessions and individual activities. The facilitator's manual also contains implementation steps for the facilitators who support youth during the individual activities.

Second, the trainers received standardized program implementation training that was modeled after the JOBS program training (Curran et al., 1999). The training covered the program's learning processes, training techniques, topics, activities, and materials. A few extra professionals participated in the training so they could fill in if necessary if the primary trainers were sick or otherwise unable to deliver the intervention (Bellg et al., 2004). After the training, the researchers supported the trainers as needed to help them prepare for and implement the program. To prevent the comparison group's exposure to the intervention, the trainers agreed to refrain from using or sharing the program materials outside of the research context until after completion of data collection for all groups.

Third, the trainers tracked participant attendance each day of the program, documented the completion of each program activity, kept notes regarding how long the group activities took to complete, and documented all deviations in the completion of the activities (Bellg et al., 2004). Most participants (n = 36; 81.8%) were in attendance for the entire program; the remaining eight participants completed between 70% and 95% of the program. The trainers covered all topics with each group but did not cover all activities in their entirety due to some

taking longer than the time allotted. For example, many youth needed extra time and one-on-one support for the resume development and online job search activities.

#### **Data Analysis**

We utilized descriptive statistics to report means and standard deviations for our outcome measures for each group. To answer our research questions, we conducted repeated-measures ANOVAs. Time was the within factor, and group (intervention vs. comparison), SWE, and group x SWE were our between factors of interest. We included state in the models as a control variable to account for any differences in participant outcomes by state in which the program was implemented. Simple effects analyses were conducted to investigate significant interactions of interest. An a priori type I error rate of .05 was established and partial eta-squared was used as a measure of effect size. SAS 9.4 was used for all statistical analyses.

#### Results

The following section includes repeated-measures ANOVA results pertaining to our three research questions for each of the four outcomes: job search knowledge, job search behavior, job search behavior self-efficacy, and job search outcomes self-efficacy. First, we evaluated whether participation in the intervention resulted in increases in each outcome (time x group interaction). Second, we evaluated whether participation in the SWE contributed to increases in each outcome (time x SWE interaction). Third, we evaluated whether participation in the intervention and the SWE interacted to increase each outcome (time x group x SWE interaction). Simple effects analyses are reported for statistically significant interactions. Means and standard deviations for the outcome measures are displayed in Table 3 and full repeated-measures ANOVA results are provided in Table 4.

#### Job Search Knowledge

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For job search knowledge, the time x group interaction was statistically significant, indicating that changes in knowledge scores over time were dependent upon group. Simple effects analyses showed a large, significant increase in knowledge for intervention group participants, F(1,40) = 10.97, p = .002,  $\eta_p^2 = .22$ , and no change in comparison group participants, F(1,44) = 1.44, p = .24,  $\eta_p^2 = .03$ . The time x SWE interaction was not significant, which indicates that changes in job search knowledge did not differ based on SWE participation. The time x group x SWE interaction was also not significant; thus, changes in knowledge scores did not depend on the combination of group and SWE.

#### **Job Search Behavior**

Changes in job search behavior across time differed by group, as signified by the significant time x group interaction. Simple effects analyses showed a large, statistically significant increase in behavior for intervention group participants, F(1,40) = 14.52, p < .001,  $\eta_p^2 = .27$ , and no change in comparison group participants, F(1,44) = 0.12, p = .73,  $\eta_p^2 = .00$ . Changes in job search behavior did not differ according to SWE participation, as indicated by the nonsignificant time x SWE interaction. Furthermore, the nonsignificant time x group x SWE interaction indicates that changes in behavior did not differ based on the combination of group and SWE.

#### **Job Search Behavior Self-Efficacy**

For job search behavior self-efficacy, both time x group and time x SWE interactions were significant, indicating differential changes over time in behavior self-efficacy based on group and SWE. Simple effects analyses by group indicated a large, statistically significant increase in job search behavior self-efficacy from pre-test to post-test for intervention group participants, F(1,40) = 14.18, p < .001,  $\eta_p^2 = .26$ , but no difference among comparison group participants, F(1,44) = 3.27, p = .08,  $\eta_p^2 = .07$ . Additionally, the time x SWE interaction was statistically significant for intervention group participants, F(1,40) = 5.26, p = .03,  $\eta_p^2 = .12$ ; youth who participated in the intervention plus SWE had a larger increase in behavior selfefficacy than youth who only did the intervention. Simple effects analyses by SWE showed a large, statistically significant increase in job search behavior self-efficacy for SWE participants, F(1,40) = 15.11, p < .001,  $\eta_p^2 = .27$ , and a medium, significant increase for youth who did not do the SWE, F(1,46) = 6.03, p = .02,  $\eta_p^2 = .12$ . The time x group x SWE interaction for behavior self-efficacy was not significant.

#### Job Search Outcomes Self-Efficacy

For job search outcomes self-efficacy, the time x group interaction did not reach statistical significance, which indicates that changes in outcomes self-efficacy did not differ by group. However, the time x SWE interaction was significant, indicating that increases in outcomes self-efficacy differed by SWE participation. Simple effects analyses showed a medium, significant increase in outcomes self-efficacy for SWE participants, F(1,40) = 5.13, p =.03,  $\eta_p^2 = .11$ , but no change for youth who did not do the SWE, F(1,46) = 0.02, p = .88,  $\eta_p^2 =$ .00. Finally, the time x group x SWE interaction was not significant for outcomes self-efficacy. **Social Validity** 

Youth indicated that the *Putting Your Best Foot Forward* program information was important, understandable, and that it will be helpful when they look for a job. Specific aspects of the program that youth liked included learning interview skills, working on their resumes, calling employers, and participating in group discussions and roleplay activities. Overall, the trainers enjoyed the program and felt that youth benefited from participation. Several trainers acknowledged that successful implementation required preparation and organization; most expressed interest in implementing the program or using the materials again in the future. Some youth and trainers felt that the sessions or days were too long; several suggested shorter sessions spread out over a longer time period, such as a semester.

#### Discussion

We conducted a quasi-experimental study with 92 youth with visual impairments to investigate the effects of job search skills training and SWE program participation on four shortterm outcomes. Intervention group youth participated in a job search skills training program called *Putting Your Best Foot Forward*, while comparison group youth did not. Some youth from both groups also participated in a VR-sponsored SWE program. Our findings suggest that both *Putting Your Best Foot Forward* and the SWE program contribute to improved outcomes for youth, although the outcomes they affect may differ.

We first assessed the effects of *Putting Your Best Foot Forward* on four short-term outcome measures: job search knowledge, job search behavior, job search behavior self-efficacy, and job search outcomes self-efficacy. Our results support the intervention's effectiveness in increasing three of the four outcomes. Specifically, the intervention group had large, statistically significant increases in job search knowledge, job search behavior, and job search behavior selfefficacy. Participation in *Putting Your Best Foot Forward* did not, however, result in increased job search outcomes self-efficacy. This finding aligns with Saks and colleagues' (2015) hypothesis that job search behavior self-efficacy is a precursor to job search outcomes selfefficacy, which develops over time through successful job-seeking experiences. Initial evidence of effectiveness of *Putting Your Best Foot Forward* for SWE program participants was documented in a previous study (Authors, 2019). The current study extends those results by providing evidence of *Putting Your Best Foot Forward*'s effectiveness without the SWE. Next, we examined whether SWE program participation was associated with differences in short-term outcomes. Results indicated that participation in the SWE program contributed to increases in two of the four outcomes. Namely, SWE participation was not associated with increased job search knowledge or behavior, but it was associated with statistically significant increases in job search self-efficacy, in terms of both behavior and outcomes. Youth who did the SWE had a large increase in job search behavior self-efficacy and a medium increase in job search outcomes self-efficacy. These results add to the limited literature on sponsored work experiences for youth with visual impairments (McDonnall, 2010; McDonnall & O'Mally, 2012) by documenting the association between a short-term outcome and VR-sponsored work.

In general, *Putting Your Best Foot Forward* and SWE participation did not interact to improve short-term outcomes. However, the combination of *Putting Your Best Foot Forward* and the SWE program was superior for one outcome; youth who did both *Putting Your Best Foot Forward* and the SWE exhibited larger increases in job search behavior self-efficacy than those who only participated in *Putting Your Best Foot Forward*. This finding indicates that *Putting Your Best Foot Forward* is just as effective at increasing job search knowledge and behavior when implemented alone as when paired with the SWE, although implementing *Putting Your Best Foot Forward* with the SWE may be beneficial in improving youths' job search behavior self-efficacy.

These results provide some insight into the unexpected finding from our previous study (Authors, 2019) that self-efficacy increased for all youth, whether they participated in *Putting Your Best Foot Forward* or not. However, given the primary mechanisms through which self-efficacy is anticipated to increase (mastery experiences, vicarious experiences, verbal persuasion; Bandura, 1982), it is not entirely clear why SWE participation was associated with higher job

search self-efficacy. Because youth were not involved in obtaining their own SWE (someone else made the contacts and handled arrangements), they would not have had mastery or vicarious experiences for job search behaviors or outcomes unless they also searched for a non-SWE job. Furthermore, *Putting Your Best Foot Forward* relied heavily on verbal persuasion and encouragement provided by the trainers to improve youths' self-efficacy, but this mechanism was not part of the SWE.

Potential positive aspects of SWE participation include new transferable skills, contacts in the community, experience to include on a resume, exposure to careers, and opportunities to increase soft skills. Perhaps if youth experienced these gains or recognized these benefits, SWE participation could have resulted in a perceived better ability to obtain a job. Potential negative aspects of the SWE are that youth were confused about whether the SWE is a real job, which became evident at the post-test when some youth reported their SWE as a job (Authors, 2019). Because they were provided the SWE without having to search or compete for it, youth may have the inaccurate perception that obtaining a job is easy. They may assume that the next time they need a job, one will again be handed to them. The fact that many youth were able to perform their SWE at an employer or job-type of their choice may accentuate this perception. Additionally, these youth had relatively high job search self-efficacy at pre-test, despite the vast majority never holding a paid job. While higher self-efficacy is valuable for encouraging one to engage in behaviors, if one does not have adequate skills to accomplish those behaviors, high self-efficacy may be a detriment rather than an asset.

#### **Limitations and Future Research Directions**

Several limitations should be acknowledged when interpreting this study's results. First, because this study was a formal test of the *Putting Your Best Foot Forward* program, for which a

quasi-experimental design was used, but was not a formal test of the SWE program, any effects found for the SWE cannot be considered causal. Second, the trainers documented intervention fidelity throughout the program, but the research team did not directly observe program implementation to document fidelity. Another limitation is utilization of short-term outcome measures. Although relationships between proximal job search intervention outcome measures and employment have been documented in other populations (Liu et al., 2014), additional research is needed to investigate longer-term effects of Putting Your Best Foot Forward. Followup data collection is underway, which will allow us to investigate the effects of Putting Your Best Foot Forward over time, including whether participants achieve better employment outcomes. Finally, to our knowledge, no other studies have involved evaluation of SWE program outcomes. Given our findings and the increase in these types of programs due to the Workforce Innovation and Opportunity Act (2016), VR-sponsored work experiences warrant attention by researchers. Future studies could provide additional information about the effectiveness of these programs for youth with visual impairments and for those with other disabilities. It would also be valuable to explore the mechanisms underlying the increase in self-efficacy for SWE participants (e.g., perceived benefits of SWE participation, inaccurate perceptions of the job-seeking process).

#### **Implications for Practice**

Putting Your Best Foot Forward is a structured program that practitioners could use to teach job search skills to youth with visual impairments. It was designed as an intensive 5-fullday intervention, but, as illustrated through this study, program implementation can be flexible. For example, *Putting Your Best Foot Forward* could be implemented as a standalone week-long residential or day program, or it could be integrated into a longer transition program or curriculum. Although not tested empirically, *Putting Your Best Foot Forward* may also work well as a semester course, which could give youth more time to digest the information and complete activities. Ideally, the program would be offered in late spring or early summer, with ongoing support available to youth until they find a summer job, to maximize youths' available time and energy for job search and work activities. The *Putting Your Best Foot Forward* materials will be available free of charge to professionals who complete program implementation training. Contact the first author or visit [INSERT WEBSITE LINK] for more information about this training.

SWE programs may increase job search self-efficacy for youth with visual impairments, particularly if they take place in the community with real employers. However, if youth are continually offered sponsored work experiences and are not expected to learn and utilize job search skills, they may develop high self-efficacy without the corresponding knowledge and skills, potentially leading to unrealistic expectations about what it takes to search for and find a job. Job-seeking involves many steps and nuances that youth with visual impairments need to understand. In addition to having a visually-appealing, error-free resume and dazzling cover letter, job-seekers need to answer interview questions extemporaneously, follow social conventions, dispel employers' doubts as they arise, dress and groom properly, and find transportation to and from interview sites. Lack of knowledge and experience with these skills during high school may put youth at a disadvantage when they compete for jobs with peers who have previous experience navigating the job search process.

Finding jobs for youth may require considerable time and effort for school and agency staff (Carter, Trainor, Ditchman, Swedeen, & Owens, 2009). We contend that a more beneficial use of staff resources would involve teaching and supporting youth to find their own jobs or

sponsored work placements. As youth gain more experience and progress through their job search, the role of professionals can shift to encouragement, which helps job-seekers handle rejection and maintain a positive attitude (Bainbridge & Fujimoto, 2018). The experience of finding their own jobs will foster youths' competence and confidence, and prepare them for future job search success.

#### References

- Baer, R. M., Flexer, R. W., Beck, S., Amstutz, N., Hoffman, L., Brothers, J., ... & Zechman, C. (2003). A collaborative followup study on transition service utilization and post-school outcomes. *Career Development for Exceptional Individuals*, 26, 7-25.
- Bainbridge, H. T., & Fujimoto, Y. (2018). Job seekers with musculoskeletal or sensory disabilities: Barriers and facilitators of job search. *British Journal of Management*, 29(1), 82-98.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*, 122-147.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds.), Self-efficacy beliefs of adolescents (Vol. 5, pp. 307-337). Greenwich, CT: Information Age Publishing.
- Bellg, A. J., Borrelli, B., Resnick, B., Hecht, J., Minicucci, D. S., Ory, M., ... & Czajkowski, S. (2004). Enhancing treatment fidelity in health behavior change studies: Best practices and recommendations from the NIH Behavior Change Consortium. *Health Psychology*, 23(5), 443-451.
- Benz, M. R., Yovanoff, P., & Doren, B. (1997). School-to-work components that predict postschool success for students with and without disabilities. *Exceptional Children*, 63, 151-165.
- Blau, G. (1994). Testing a two-dimensional measure of job search behavior. Organizational Behavior and Human Decision Processes, 59(2), 288-312.
- Bourdillon, M. (2006). Children and work: A review of current literature and debates. Development and Change, 37(6), 1201-1226.

- Caplan, R. D., Vinokur, A. D., Price, R. H., & van Ryn, M. (1989). Job seeking, reemployment, and mental health: A randomized field experiment in coping with job loss. *Journal of Applied Psychology*, 74(5), 759-769.
- Carter, E. W., Austin, D., & Trainor, A. A. (2012). Predictors of postschool employment outcomes for young adults with severe disabilities. *Journal of Disability Policy Studies*, 23, 50–63.
- Carter, E. W., Trainor, A. A., Ditchman, N., Swedeen, B., & Owens, L. (2009). Evaluation of a multicomponent intervention package to increase summer work experiences for transition-age youth with severe disabilities. *Research and Practice for Persons with Severe Disabilities*, 34(2), 1-12.
- Connors, E., Curtis, A., Wall Emerson, R., & Dormitorio, B. (2014). Longitudinal analysis of factors associated with successful outcomes for transition-age youths with visual impairments. *Journal of Visual Impairment & Blindness, 108*, 95-106.
- Curran, J., Wishart, P., & Gingrich, J. (1999). JOBS: A Manual for Teaching People Successful Job Search Strategies. Michigan Prevention Research Center, Institute for Social Research, University of Michigan, Ann Arbor, MI.
- George, D., & Mallery, P. (2003). SPSS for Windows step by step: A simple guide and reference. 11.0 update (4th ed.). Boston, MA: Allyn & Bacon.
- Hirschman, C., & Voloshin, I. (2007). The structure of teenage employment: Social background and the jobs held by high school seniors. *Research in Social Stratification and Mobility*, 25(3), 189-203.
- Horner, S., Rew, L., & Torres, R. (2006). Enhancing intervention fidelity: A means of strengthening study impact. *Journal for Specialists in Pediatric Nursing*, 11(2), 80-89.

- Koivisto, P., Vuori, J., & Nykyri, E. (2007). Effects of the school-to-work group method among young people. *Journal of Vocational Behavior*, *70*(2), 277-296.
- Koivisto, P., Vuori, J., & Vinokur, A. D. (2010). Transition to work: Effects of preparedness and goal construction on employment and depressive symptoms. *Journal of Research on Adolescence*, 20(4), 869-892.
- Lewis, S., Bardin, J. A., & Jorgensen-Smith, T. (2009). After one year: Self-reported transition skills of teens with visual impairments. AER Journal: Research and Practice in Visual Impairment and Blindness, 2, 84-96.
- Lindsay, S., Adams, T., Sanford, R., McDougall, C., Kingsnorth, S., & Menna-Dack, D. (2014). Employers' and employment counselors' perceptions of desirable skills for entry-level positions for adolescents: How does it differ for youth with disabilities? *Disability & Society*, 29(6), 953-967.
- Lindsay, S., Cagliostro, E., Leck, J., Shen, W., & Stinson, J. (2019). Employers' perspectives of including young people with disabilities in the workforce, disability disclosure and providing accommodations. *Journal of Vocational Rehabilitation*, 50, 141-156.
- Lindsay, S., McDougall, C., Menna-Dack, D., Sanford, R., & Adams, T. (2015). An ecological approach to understanding barriers to employment for youth with disabilities compared to their typically developing peers: Views of youth, employers, and job counselors. *Disability and Rehabilitation*, *37*(8), 701-711.

Lipscomb, S., Haimson, J., Liu, A. Y., Burghardt, J., Johnson, D. R., & Thurlow, M. L. (2017a).
Preparing for life after high school: The characteristics and experiences of youth in special education. Findings from the National Longitudinal Transition Study 2012.
Volume 1: Comparisons with other youth: Full report (NCEE 2017-4016). Washington,

DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.

- Lipscomb, S., Haimson, J., Liu, A. Y., Burghardt, J., Johnson, D. R., & Thurlow, M. L. (2017b).
  Preparing for life after high school: The characteristics and experiences of youth in special education. Findings from the National Longitudinal Transition Study 2012.
  Volume 2: Comparisons across disability groups: Full report (NCEE 2017-4018).
  Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.
- Liu, S., Huang, J. L., & Wang, M. (2014). Effectiveness of job search interventions: A metaanalytic review. *Psychological Bulletin*, *140*(4), 1009-1041.
- McDonnall, M. C. (2010). Factors predicting post-high school employment for young adults with visual impairments. *Rehabilitation Counseling Bulletin*, *54*, 36-45.
- McDonnall, M. C. (2011). Predictors of employment for youth with visual impairments: Findings from the second National Longitudinal Transition Study. *Journal of Visual Impairment & Blindness*, 105, 453-466.
- McDonnall, M. C., & Crudden, A. (2009). Factors affecting the successful employment of transition-age youths with visual impairments. *Journal of Visual Impairment & Blindness*, 103, 329-341.
- McDonnall, M. C., & O'Mally, J. (2012). Characteristics of early work experiences and their association with future employment. *Journal of Visual Impairment & Blindness, 106*, 133-144.
- McKechnie, J., Howieson, C., Hobbs, S., & Semple, S. (2014). School students' introduction to the world of work. *Education* + *Training*, *56*(1), 47-58.

- Nykänen, M., Klemola, S., Koivisto, P., Koski, M., Larvi, T., Silvonen, J., & Vuori, J. (2014). *School to work: Trainer's manual.* Helsinki: Finnish Institute of Occupational Health.
- Raby, R., Lehmann, W., Easterbrook, R., & Helleiner, J. (2018). "I'll be more prepared than most people:" Very young Canadian workers talking about their first jobs. *Childhood*, 25(2), 237-252.
- Royal National Institute of Blind People. (2014). *Pre-employment programme*. London, England: Author. Retrieved from https://www.rnib.org.uk/services-we-offer-adviceprofessionals-employment-professionals/pre-employment-programme
- Saks, A. M., Zikic, J., & Koen, J. (2015). Job search self-efficacy: Reconceptualizing the construct and its measurement. *Journal of Vocational Behavior, 86*, 104-114.
- Sattar, S. (2010). *Evidence scan of work experience programs*. Oakland, CA: Mathematica Policy Research.
- Shandra, C. L., & Hogan, D. P. (2008). School-to-work program participation and the post-high school employment of young adults with disabilities. *Journal of Vocational Rehabilitation*, 29, 117-130.
- Staff, J., & Schulenberg, J. E. (2010). Millennials and the world of work: Experiences in paid work during adolescence. *Journal of Business and Psychology*, *25*(2), 247-255.
- Trainor, A. A., Carter, E. W., Owens, L. A., & Swedeen, B. (2008). Special educators' perceptions of summer employment and community participation opportunities for youth with disabilities. *Career Development for Exceptional Individuals*, 31(3), 144-153.
- van Ryn, M., & Vinokur, A. D. (1992). How did it work? An examination of the mechanisms through which an intervention for the unemployed promoted job-search behavior. *American Journal of Community Psychology*, 20(5), 577-597.

- Vinokur, A. D., & Caplan, R. D. (1987). Attitudes and social support: Determinants of jobseeking behavior and well-being among the unemployed. *Journal of Applied Social Psychology*, 17, 1007-1024.
- Vinokur, A. D., & Price, R. H. (1999). JOBS II preventive intervention for unemployed job seekers, 1991-1993: Southeast Michigan (Codebook). Ann Arbor, MI: Survey Research Center, Michigan Prevention Research Center, University of Michigan.
- Vinokur, A. D., Price, R. H., & Schul, Y. (1995). Impact of the JOBS intervention on unemployed workers varying in risk for depression. *American Journal of Community Psychology*, 23, 39-74.
- Vinokur, A. D., Schul, Y., Vuori, J., & Price, R. H. (2000). Two years after a job loss: Long term impact of the JOBS program on reemployment and mental health. *Journal of Occupational Health Psychology*, 5(1), 32-47.
- Vinokur, A. D., van Ryn, M., Gramlich, E. M., & Price, R. H. (1991). Long-term follow-up and benefit-cost analysis of the JOBS Projects: A preventive intervention for the unemployed. *Journal of Applied Psychology*, 76, 213-219.
- Wolffe, K. E. (2014). Career education. In C. Allman & S. Lewis (Eds.), *ECC essentials: Teaching the expanded core curriculum to students with visual impairments* (pp. 411-469). New York, NY: AFB Press.
- Workforce Innovation and Opportunity Act; State Vocational Rehabilitation Services Program, 81 Fed. Reg. 55630 (August 19, 2016) (to be codified at 34 C.F.R. pt. 361).

Table 1

# Program Implementation and Participant Distribution by State

				Group Ass	ignment (n)		
	Program	Offered	Comparison	Comparison	Intervention	Intervention	
State	Duration	SWE	(no SWE)	plus SWE	(no SWE)	plus SWE	Total ( <i>n</i> )
1	5 full days	Yes	7	23ª	13	19 <sup>a</sup>	62
2	5 full days	No	12	0	9	0	21
3	10 half days	No	6	0	3	0	9

*Note.* N = 92. SWE = summer work experience. <sup>a</sup>SWE participants from State 1 (n = 42) were also included in an earlier study (Authors, 2018).

## Table 2

# Participant Characteristics by Group and Summer Work Experience (SWE)

	Compa	arison	Intervention		No SWE		SWE	
Variable	п	%	п	%	n	%	n	%
Gender								
Male	25	52.1	19	43.2	25	50.0	19	45.2
Female	23	47.9	25	56.8	25	50.0	23	54.8
Race								
White	24	50.0	21	47.7	31	62.0	14	33.3
African American	19	39.6	21	47.7	14	28.0	26	61.9
Asian American	2	4.2	1	2.3	2	4.0	1	2.4
Mixed or Multiracial	3	6.3	1	2.3	3	6.0	1	2.4
Hispanic ethnicity	6	12.5	1	2.3	6	12.0	1	2.4
Highest level of education								
Less than high school diploma	24	50.0	32	72.7	37	74.0	19	45.2
High school diploma or equivalent	20	41.7	7	15.9	13	26.0	14	33.3

### SHORT-TERM EFFECTIVENESS OF JOB SEARCH SKILLS TRAINING

Some college, no degree	4	8.3	4	9.1	0	0	8	19.1
Bachelor's degree	0	0.0	1	2.3	0	0	1	2.4
Level of vision								
Totally blind	9	18.8	6	13.6	11	22.0	4	9.5
Legally blind	31	64.6	34	77.3	35	70.0	30	71.4
Less severe visual impairment	8	16.7	4	9.1	4	8.0	8	19.1
Has additional disability	17	35.4	19	43.2	17	34.0	19	45.2
Receives Supplemental Security Income	24	50.0	23	52.3	31	62.0	16	38.1

*Note.* N = 92. Variables measured at pre-test.

### Table 3

Means and Standard Deviations for Job Search Knowledge, Behavior, and Self-Efficacy by Group, SWE, and Group x SWE

-		Know	ledge Beha		avior Behavior s		elf-efficacy	Outcomes s	elf-efficacy
		M(	SD)	M (SD)		M (SD)		M(SD)	
Group	п	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Comparison	48	0.36 (0.12)	0.35 (0.10)	3.42 (2.44)	3.40 (2.92)	7.17 (1.57)	7.44 (1.57)	6.72 (1.78)	6.75 (1.75)
Intervention	44	0.36 (0.12)	0.45 (0.18)	4.32 (2.62)	6.91 (2.34)	7.37 (1.44)	8.03 (1.22)	7.25 (1.79)	7.50 (1.56)
No SWE	50	0.36 (0.12)	0.42 (0.15)	3.78 (2.33)	4.92 (3.06)	7.19 (1.63)	7.49 (1.54)	6.85 (1.92)	6.78 (1.87)
SWE	42	0.36 (0.13)	0.38 (0.15)	3.93 (2.82)	5.26 (3.35)	7.35 (1.35)	7.99 (1.28)	7.11 (1.66)	7.51 (1.38)
Comparison (no SWE)	25	0.33 (0.13)	0.36 (0.10)	3.32 (2.14)	3.48 (3.04)	7.05 (1.81)	7.24 (1.73)	6.70 (2.07)	6.42 (2.09)
Comparison plus SWE	23	0.39 (0.11)	0.35 (0.10)	3.52 (2.78)	3.30 (2.85)	7.30 (1.30)	7.66 (1.38)	6.74 (1.46)	7.11 (1.24)
Intervention (no SWE)	25	0.39 (0.10)	0.48 (0.17)	4.24 (2.47)	6.36 (2.34)	7.34 (1.46)	7.74 (1.30)	7.01 (1.78)	7.13 (1.59)
Intervention plus SWE	19	0.33 (0.14)	0.41 (0.18)	4.42 (2.87)	7.63 (2.19)	7.42 (1.44)	8.40 (1.03)	7.56 (1.80)	7.98 (1.42)

*Note.* N = 92. SWE = summer work experience.

## Table 4

Repeated-Measures	ANOVA Results	for Job S	Search Knowledg	e, Behavior,	and Self-Efficacy
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Measure	Effect	F	df	р	$\eta_p^2$
Knowledge	Time	5.48	1,86	.02	.06
	Time x Group	13.18	1,86	<.001	.13
	Time x SWE	0.02	1,86	.90	.00
	Time x State	3.76	2,86	.03	.08
	Time x Group x SWE	0.95	1,86	.33	.0
Behavior	Time	10.30	1,86	<.01	.1
	Time x Group	20.74	1,86	<.001	.1
	Time x SWE	1.07	1,86	.30	.0
	Time x State	0.74	2,86	.48	.0
	Time x Group x SWE	1.20	1,86	.28	.0
Behavior self-efficacy	Time	15.74	1,86	<.001	.1
	Time x Group	5.35	1,86	.02	.0
	Time x SWE	5.69	1,86	.02	.0
	Time x State	1.31	2,86	.28	.0
	Time x Group x SWE	0.66	1,86	.42	.0
Outcomes self-efficacy	Time	6.12	1,86	.02	.0
	Time x Group	1.66	1,86	.20	.0
	Time x SWE	9.38	1,86	<.01	.1
	Time x State	3.25	2,86	.04	.0
	Time x Group x SWE	1.21	1,86	.27	.0

*Note.* N = 92. SWE = summer work experience.