

Bridging the knowing-doing gap: Researching a new approach to disability and employment programming

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Abstract. Despite significant program efforts since the ADA was passed in 1990, the employment rates of people with disabilities have changed little. While the causes behind these disappointing outcomes are multi-faceted and complex, it is clear that a knowing-doing gap has limited the effectiveness of efforts to change these disappointing statistics. That is, though employers have a basic knowledge of the ADA, this knowledge is largely not being translated into actions or practices. Approaches are needed that go beyond merely disseminating information to actively engage employers in bringing about organizational change. We designed, implemented and researched a program aiming to bridge the knowing-doing gap. This program was based on a blended learning approach designed to build organizational change strategies and partnerships. A comprehensive program research effort included both a measure of immediate program impact (using the BIAT – a researcher-developed and validated tool) and longer-term impact (using a grounded theory, open-ended interviewing protocol). Implications for further research and practice are discussed using findings from both the short-term and long-term studies.

Keywords: Americans with Disabilities Act, employers, employment, intervention assessment, employment programming

1. Introduction

1.1. Purpose

In 1990, the Americans with Disabilities (ADA) was passed amidst a great collective hope that the barriers

to equal employment opportunity for people with disabilities would be diminished. Yet, despite two decades of protections and despite significant program efforts, the economic and employment lives of people with disabilities have largely not improved since 1990 [13, 24]. Though the story behind these disappointing statistics is complex and multi-causal [21–24, 26, 29, 31, 32], it is clear that employer beliefs and actions have played a key role [3, 6, 18, 19, 24, 30, 40].

Over the past two decades, significant effort has been devoted to creating and disseminating information for employers on various aspects of employing people with disabilities (see, for example [10, 29]). Research shows these efforts have been somewhat successful; employers, for the most part, do have a basic knowledge of the employment provisions of ADA [14, 24, 45]. Yet,

¹Hannah Rudstam was responsible for the overall program framework and research design as well as the first draft of the manuscript. Margo Hittleman planned, conducted and analyzed the long-term qualitative research. Sukyeong Pi planned, conducted and analyzed the short-term survey research. Wendy Strobel Gower provided feedback on the manuscript.

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as the disappointing statistics on the employment and economic life conditions of people with disabilities show, this knowledge has largely not translated into workplace practices and cultures that are truly inclusive of people with disabilities. While disseminating information to employers will always be needed, we must pose an uncomfortable question: Why have so many information dissemination efforts produced so little change?

Twenty years after the ADA, we believe we must shift gears. We must recognize the existence of a knowing-doing gap in disability and employment program efforts [36]. Over the past two decades, the disability community has largely envisioned its task as one of creating and spreading information, not as one of changing organizational cultures. Though there is a plethora of PowerPoint presentations, websites, briefs and webinars, we have little understanding of how (or even if) program messages are integrated into everyday actions and practices in on-the-ground, in everyday life in the workplace. Whereas disseminating information is relatively straightforward, changing organizations is messy and difficult.

Two thought streams informed our program architecture: organizational change and knowledge translation. The literature on organizational change is immense, spanning the spectrum from earthy advice to highly academic theories (see, for example [7, 35, 49, 50]). Likewise, the rapidly emerging literature on knowledge-in-action and knowledge translation spans a wide spectrum of approaches and theories (see, for example [1, 17, 34, 44]).

These two thought streams have recently received some attention in the disability community (see, for example [43]). Yet, few attempts have been made to meaningfully integrate the principles from these types of approaches in disability and employment programs. These two thought streams (organizational change and knowledge translation) both originated in other areas: Organizational change largely emerged from the world of business (see, for example [25]); knowledge translation largely emerged from the worlds of healthcare (see, for example [41]) and international development [8]. How might these thought streams (and the program approaches that flow from them) need to look different when applied to the world of disability and employment?

Program messages are received, given meaning and acted upon (or not) in a particular real-life context. How might the context for knowledge translation and organizational change be different in the disability world —

a world that is characterized by a greater heterogeneity of users' professional cultures, marked power differences among user groups, unique policy imperatives, and differing (or even contradictory) agendas among user groups [38].

The overall question driving this project was: Will a program based on principles of organizational change impact employer knowledge, beliefs and behaviors/practices around hiring, accommodating and retaining people with disabilities in the workplace? The goal of this study was to describe the immediate and longer term impacts of an intervention designed to bring about organizational changes to increase disability inclusiveness practices in the workplace.

1.2. Our approach

A full discussion of the literature of organizational change and knowledge translation is clearly outside the scope of this paper. In the points that follow, we provide a brief description of some concepts from these two thought streams that informed the architecture of our intervention.

Moving from training to consulting. "Needs analysis" is often a starting point for intervention planning. Yet, it must be questioned. Knowledge-users often express their "needs" with limited awareness of the full range of options. Similarly, employers, when considering disability-related interventions, often express their "needs" in as that of traditional training, such as a one-hour PowerPoint presentation. But will the traditional training sessions be likely to bring about the policy and practice changes needed to enhance disability inclusiveness in the workplace? In other words, *traditional training may impact "knowing," but what is its power in impacting "doing?"* Traditional training, whether online or in-person, is likely to be a weak intervention for bringing about organizational change [37]. Moving to a consulting approach, we focus more on the organizational context and culture of disability inclusiveness, engaging participants in a two-way conversation instead of a one-way dissemination of knowledge; focusing on change instead of information delivery. Whereas training invokes metaphors of "delivery," consulting involves metaphors of conversation.

Including the voice of the knowledge user. A defining characteristic of knowledge translation approaches is in the inclusion of knowledge users in the planning process (see, for example [4, 9, 43]). Likewise, a key thread in organizational change literature is the recognition that

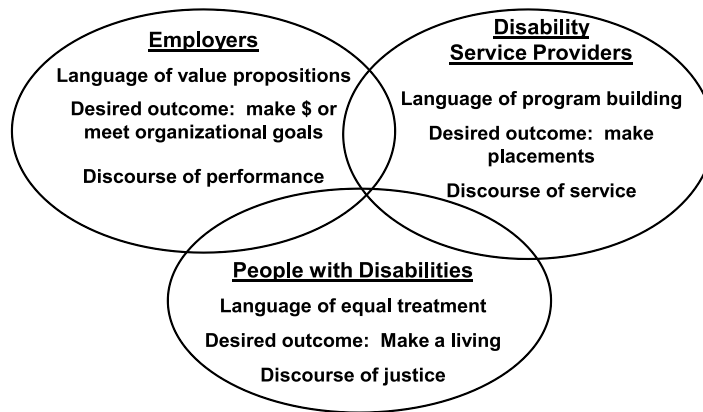


Fig. 1. Knowledge-user cultures and perspectives.

professional or stakeholder cultures filter and re-frame program messages so as to affect the uptake of change messages during real-life in the organization (see, for example [12, 39]).

A unique challenge in the arena of disability is the number and complexity of knowledge users. There are multiple professional cultures and stakeholders in the chain from knowledge generation, to knowledge application, to actions and ultimately to outcomes. Underlying our program architecture was an attempt to recognize different stakeholder cultures in this chain. Though several distinct stakeholder “worlds” or cultures could be recognized in the arena of disability, we have identified three for the purposes of this program, as illustrated in Fig. 1. Each of these stakeholder groups has a unique language, discourse, purpose, motivation and definition of “desired” outcome.

Our program design began with systematic input from representatives from these three stakeholder groups. Discussed further below, a stakeholder’s advisory group met three times during the program design phase and an additional three times as implementation unfolded. This group provided input into program design, processes, communications and evaluation.

Building partnerships and collaborations. Relatedly, organizational change is spurred less by information and more by conversation [2]. Hence, building partnerships and offering forums for conversations between stakeholder groups was a key principle informing our program. In collaboration with the Garden State Society for Human Resource Management, the New Jersey Independent Living Centers, Getting Hired, Inc., and other disability groups, the program reached out to both employers and disability service providers. Further, the

program used activities designed to foster these partnerships, such as perspective-taking, fish bowl activities, and strategy discussions. The program also included a networking lunch.

Contextualizing program messages. A well-developed literature exists around how innovations and organizational change efforts unfold in organizational life (see, for example [1, 5, 7, 35]). Yet, this literature remains largely untapped in the arena of disability. Program messages do not exist in a vacuum; they are given meaning and acted upon (or not) in the real-life context of the workplace. How do participants make decisions about acting on program messages when they return to their everyday work lives? Thus far, much of the research on disability and employment has treated organizational context as a “black box.” That is, we have largely used research methods, which render invisible the real-life context within which participants make decisions about program messages. Hence, we have little understanding of organizational change related to disability and of the conditions for turning knowing into doing. Our program design embraced these concepts in two ways. First, our program experiences contained a variety of ways to help participants think through and plan within the context of their own organization’s culture, climate and policies. Second, our program research design involved the use of mixed methods in order to both capture immediate program gains and intentions of participants and the longer-term impacts of the program on the choices and actions of participants after they returned to their workplace.

Using mixed methods to research the program. We believe that one of the most significant contributions of this project is in its attempt to put forth tools

and frameworks for program research in disability and employment. As discussed above, the near total reliance on survey methods have rendered invisible the question of how (or whether) participants act upon program messages in the real-life context of the organization. Hence, we know little about the longer-term impacts of these programs and about how program messages are translated (or not) into organizational changes that could bring about longer term outcomes for people with disabilities in employment. Our research plan included the use of mixed methods to study both immediate and longer-term program impact. To study immediate impact, we developed a survey instrument called the Northeast ADA Barrier Intervention Assessment Tool (BIAT). To study longer-term impact, we developed a method called key event analysis which used open-ended inquiry to describe the actions participants took within their own organizations four to six months after implementation. These methods are further described below.

Using multiple modalities for follow-up: Blended learning. Research suggests that blended learning is more effective than either in-person learning or online learning alone [11, 15, 16, 27]. Our program design included both in-person and online modalities. After participating in the in-person program, each participant got a unique log-in for the online learning component of the program. Described more fully below, the online component was designed as a follow-up to the in-person program.

1.3. Program description

Figure 2 illustrates the logic model for our program design. Called “Discovering Untapped Talent,” the program was implemented twelve times in New Jersey from 2007–2009, reaching a total of 477 participants. Data collection and analysis continued into 2010. The program has since also been implemented in New York State, with research focusing on the impact of the blending learning component of the program design [16].

As described above, our program design was further refined with input from a stakeholder advisory group. This advisory group (AG) contributed to our refining our program design in several ways as described below:

Engaging in strategy building. Not surprisingly, the AG was unanimous in wanting to focus on action instead of “awareness” and on conversation instead of “telling.” By focusing on what could be done in both the short- and long-term, it was felt that program participants would leave the program more ready to set change in motion in their own organizations.

Providing fuel to make the case. Another idea widely agreed upon by the AG was the need to enable participants to advocate for change in their own workplaces. This meant providing them with answers to the “right” questions — the questions organizational leadership would pose around disability inclusiveness. The questions identified by AG members were: How will it add value?; How much will it cost?; What other indirect

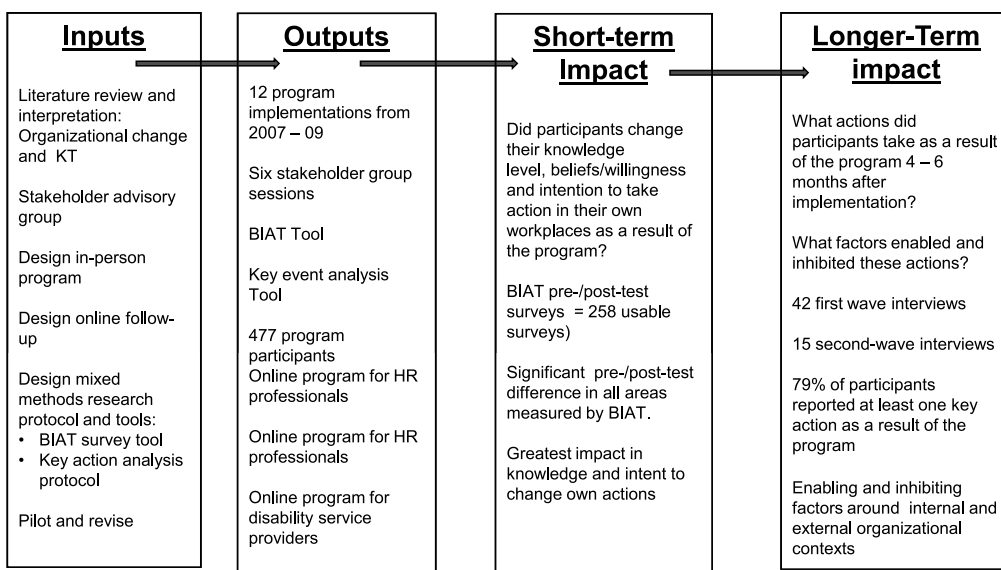


Fig. 2. Logic model of discovering untapped talent program.

benefits might it bring to the table?; What practices have the “biggest bang for the buck?”; What have other organizations done that have both benefited the organization and people with disabilities?; How can we connect qualified candidates with disabilities with employers?; and What partners or supports are available?

Beyond legal compliance. AG members generally felt that most employers already had an overall awareness of disability workplace laws and that resources around legal compliance were already available. What was less available were programs enabling participants to act as change agents within their own organizations. The exception to this was the fact that the AG members felt there was a need to provide an overview of the new ADA Amendments Act and its implications for employers and disability service providers.

Beyond “a minute in a wheelchair” approaches. Some disability programming uses a “vicarious experience” approach, with each participant taking a few minutes to, for example, use a wheelchair, experience the world without hearing or vision, or complete a task with fingers bound to simulate fine-motor disabilities. Though the employer members of the AG initially wanted such an approach at the outset of planning, we discouraged this. Though we know of no research in this area, our own prior experience with disability programming suggested that participants who go through these types of activities largely do not emerge from these experiences with heightened attention to the talents or potential contributions of workers with disabilities. Rather, we have noted that these experiences often seem to result in a feeling of pity for people with disabilities and a sense of the “helplessness” of workers with disabilities. Though these types of activities are “engaging,” they draw attention away from the fact that people with disabilities have developed coping skills that someone who only experiences the “disability” for a few minutes cannot imagine. In this way, these activities might direct participants’ attention more to the limitations of the disability than to the person’s coping skills, talents, strengths, resilience, flexibility and competence. After discussions with the AG, we developed a different perspective-taking activity that was more grounded in the workplace and encompassed a broader view of disability.

Assessing organizational practices. AG members pointed out the need to have a means to assess their own organizational practices around key points for disability inclusiveness. In this way, AG members believed they would be better able to both build upon their current strengths and address their challenges.

Using these points from our literature review and from input from the AG, we designed both an in-person program and a follow-up online program. The in-person portion of the program consisted of the following modules:

- Module 1. Introduction and warm-up (Interactive).
- Module 2. The many faces of talent (Interactive).
- Module 3. Disability as diversity, not as deficit (Film clip analysis & discussion).
- Module 4. It’s not just about the law: Disability inclusiveness as a source of competitive advantage or organizational effectiveness (Guided discussion).
- Module 5. Perspective taking (Interactive “Fish Bowl” activity).
- Module 6. Strategies for a disability inclusive workplace (Interactive).
- Module 7. Strategy conversations (Interactive).
- Module 8. Closing: Finding partners; taking action.

The online learning experience was asynchronous and could be accessed at any time by participants, allowing users to proceed at their own pace. Also, the online learning experience was non-linear; users could at any time select any part of the online offering. The online learning experience consisted of two programs, each with ten modules. One online learning experience was for employers; one was for disability service providers. Each program took about two hours to complete. Each of the ten modules consisted of the following four features:

1. Overview — what you most need to know.
2. Assess yourself — a three part assessment of your own organization’s disability inclusiveness capability in the topic focused on in the module.
3. Strategies for moving forward.
4. Further resources.

Each online offering was accredited: The employer online program was accredited through HRICI; the disability service provider program was accredited through CRCC.

2. Methods: Describing immediate and longer-term impact

A key purpose of our study was to demonstrate the use mixed methods to evaluate impact in disability programming. In keeping with our overall aim of bridging the knowing-doing gap, we applied an evaluation protocol that would go well beyond simply measuring

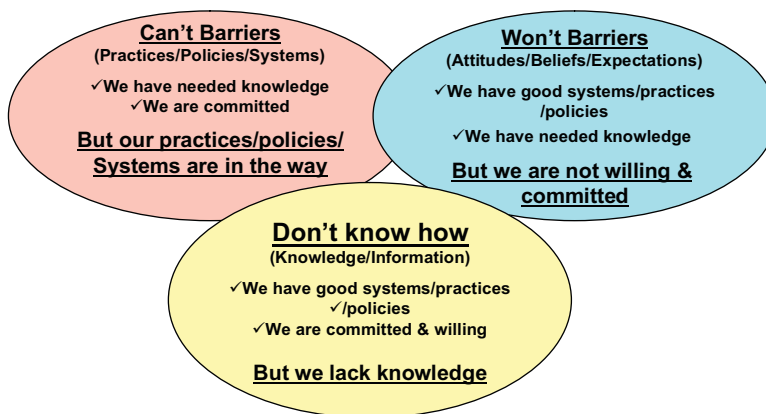


Fig. 3. The conceptual model of the BIAT instrument.

the immediate knowledge gains of participants and go beyond “smile sheets” measuring whether participants found the program enjoyable. Rather, we wished to both capture immediate changes across a broader range of impacts and to provide a deeper picture of the longer-term impacts of the program on participants’ actions to bringing about organizational change. To this end, our evaluation effort consisted of two parts: 1. A researcher-designed and validated tool, The Barrier Intervention Assessment Tool (BIAT), to measure immediate program impacts and 2. A qualitative grounded theory approach to describe longer term program impacts we called key action analysis. Both these evaluation efforts are described below.

2.1. Measuring immediate program impact

Figure 3 depicts the conceptual framework informing the BIAT. Beginning with the question: “What are the barriers to disability inclusiveness in the workplace?” The model identifies three types of barriers:

- Don't know barriers. Do employers have the **knowledge/information** (of laws, policies and practices) needed to create a disability inclusive workplace?
- Won't barriers. Are employers **willing and committed** to creating a disability inclusive workplace? Do they believe disability inclusiveness will benefit their organization?
- Can't barriers. Do employers have in place the **behaviors, practices or processes** needed to create a disability inclusive workplace? “Can't”

barriers were further broken down in our model and in the BIAT Tool into individual behaviors/actions and collective or organizational practices/actions.

Two ideas flow from this model. First, in keeping with the knowing-doing gap concept, the model attempts to hold programs accountable for impacts beyond simple information dissemination or knowledge gain. We cannot assume that knowledge change translates unproblematically to belief/attitude change or to practice change [20]. Hence, we must measure a broader range of impacts. Second, the model addresses the alignment of barriers to interventions. Each of the three areas identified in the model call for different types of interventions. Further, in the field of disability programming, most of our interventions have been directed toward “don't know” barriers; most of our program efforts have knowledge/information delivery as their goal. Yet, many of the barriers are in the areas of “Won't” or “Can't” [30, 37].

In addition to being an evaluation tool, the model and the BIAT are an attempt to provide a framework for aligning barriers with interventions. Fundamentally different types of program interventions flow from each of the three areas of the model [38]. Though there are many information-based efforts around disability inclusiveness, there are fewer efforts to impact the “Won't” and “Can't” areas of the model. A first step in generating these efforts is to create a tool that can measure employer readiness and program impact beyond just knowledge gain. Finally, it must be acknowledged that in real-life most employer organizations will have some types of barriers across all three areas of the model. Further, barriers in each of the three areas of the model are

in a dynamic inter-relationship that can be unique to each organization.

BIAT tool and validation. The DBTAC-NE *Barrier Intervention Assessment Tool (BIAT)* is an investigator-developed instrument designed to assess respondents' general disability knowledge, past behavior towards people with disabilities, attitudes towards people with disabilities and views of their organization's practices. The BIAT consists of three demographic questions and 26 Likert-type questions. In line with the model described above, these 26 Likert-type questions measured pre-test/post-test changes in:

1. Participants' knowledge of laws and policies around disability and employment.
2. Participants' willingness to adopt disability inclusiveness practices and their beliefs that these practices would benefit their workplace.
- 3a. Participants' intention to change their own actions/behaviors toward people with disabilities (What we called behavioral intention).
- 3b. Participants' intentions to change the actions/practices of their organization to improve disability inclusiveness (What we called behavioral estimation).

Nine of the items on the survey measured knowledge change. To check for factors of the rest of 17 items, a principal component analysis clearly identified three factors (with Eigen values), which accounted for 99.9% of the total variance. We named three factors as attitude change (change in willingness/beliefs), behavior intention (change in intention to change own behavior), and behavior estimation (change in intention to change organizational practices). Internal consistency reliability was tested for each domain and Cronbach Alpha were ranged .94 to .95, which indicates the consistency of results across items within each domain.

The sample. We implemented the BIAT in a pre-/post-test format before and after the in-person session. Of the 477 participants going through the in-person program, we were able to get 258 completed BIAT surveys that were usable for analysis, giving a return rate of 54%. Several reasons led to our inability to get data from all 477 participants. First, we changed the instrument after the second implementation (rendering data prior to this incomparable). Second, the instrument required participants to give pre- and post-test identifiers (first 5 letters of mother's maiden name and last four digits of birthday) to match surveys within individuals. If participants used even slightly different identifiers between their pre- and post-test surveys, we were unable to use

the data. Finally, some data was lost when participants did not complete the full instrument.

Figures 4 and 5 show a breakdown of survey participants by role, job role and type of organization. These tables show that most participants were employers. Also, participants represented a range of sector types, with the 35% from the non-profit sector and 21% from the public sector. The remainder was from a range of organizations, including medical/health, finance/banking and human services. Figure 4 shows that 43% of participants were from smaller organizations, 23% were from medium organizations and 24% were from large organizations.

2.2. Describing long term impact: The qualitative inquiry

The survey data was designed to describe immediate impacts of the program. But what happened to these impacts over time? Could participants apply what they gained during the program to making changes in their organizational and workplace cultures?

To describe longer-term program impact, we used a semi-structured interview protocol and a "constructivist grounded theory" analytical approach to help illuminate the "black box" of organizational change. Increasingly, qualitative research – with its rich descriptive capacity – is recognized as a powerful tool for understanding the impact of a program in the context of a complex flow of events. The patterns identified can be used to create broader conceptual frameworks and to identify opportunities for enhancing desired impacts.

Grounded theory offers qualitative researchers a set of guidelines from which to build explanatory frameworks that examine the inter-relation of concepts. Rather than coding data according to preconceived, standardized codes, grounded theory allows the codes to emerge from the research data. *Constructivist* grounded theory applies grounded theory methods as flexible interpretive strategies rather than as rigid procedures. Rigor stems from looking across cases and finding patterns and commonalities that can shed light on a complex phenomenon (such as personal and organizational change) [28, 42].

The interview protocol we used was designed to elicit deep descriptions of key actions taken by participants as a result of participating in the program. Hence, this protocol focused more on what participants actually *did* as a result of participating in the program, as opposed to what they *thought*. We aimed to describe program impact by eliciting in-depth descriptions of

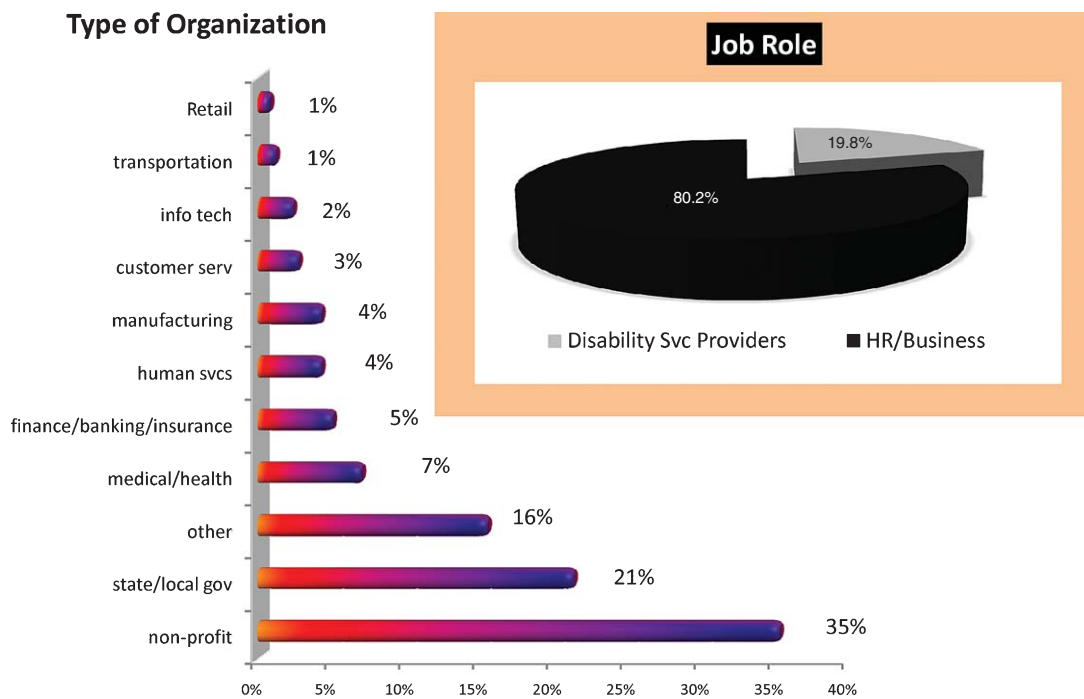


Fig. 4. Survey sample by type of organization and job role.

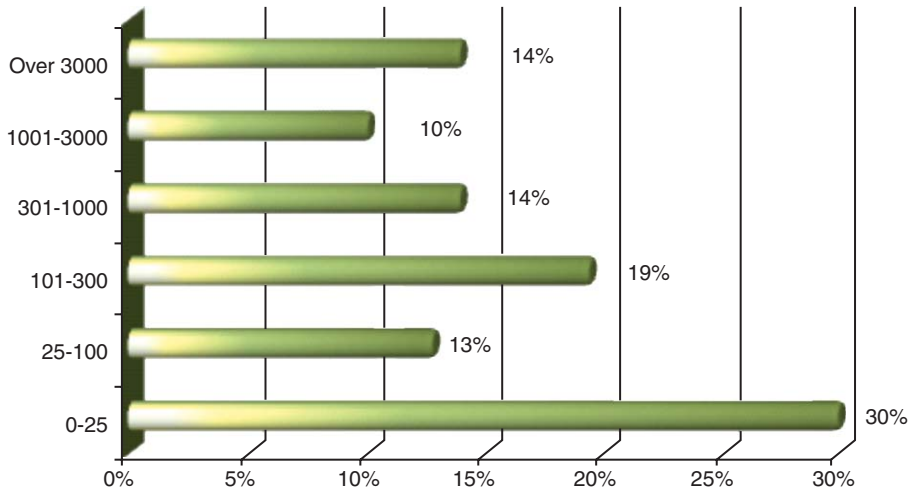


Fig. 5. Size of participants' workplace.

actions or events undertaken by participants after the program implementation. Three questions guided the inquiry:

- What actions, if any, did participants take as a result of the Discovering Untapped Talent program that could lead to improved hiring or employment conditions for people with disabilities? For each action/event, further data was collected to describe why this action/event was undertaken, who was involved in the action/event, what happened as the action/event unfolded, and what happened as a result of this action/event.
- What conditions inhibited and facilitated participants taking these actions — what conditions affected uptake of program messages?

- What are the opportunities for furthering these events/actions?

We conducted two stages of interviewing. The first stage consisted of a larger sample and focused on analyzing key events four to six months post-implementation. The second stage consisted of a smaller self-selecting sample and was conducted six to eight months post-implementation. This two-stage approach to interviewing allowed us to both further pursue themes emerging from the first stage of interviewing and to describe key events undertaken a longer time post-implementation.

Sampling. Forty-two participants were interviewed by telephone four to six months after they participated in the program. We selected every third name on the program roster, then corrected to ensure an approximate balance between employers and disability service providers in the sample. Each interview lasted 45–60 minutes. Sixty percent of the respondents for this study were employers, nearly all were human resource professionals. The remaining respondents were disability service providers (20%), independent consultants (17%) or currently unemployed (2%). Respondents were offered a \$25 gift card in appreciation of their time and participation. Respondents in the sample tended to

have significant professional experience in their roles; the median professional experience was about 14 years.

In addition, fifteen respondents volunteered for the second interview, carried out six to eight months post-implementation and also lasting 45–60 minutes. The individuals re-interviewed came from nearly all the industries represented in the original sample (except for construction, state agencies and self-employed consultants). Their average and mean work experience in their field was 14 and 16 years respectively, close to the original respondent sample as a whole.

Interview process. The interviewer took extensive notes during each interview and wrote detailed reports following. A two-step coding process was used:

- Line by line coding. Interview reports were initially coded line-by-line, enabling us to develop a set of “sensitizing concepts” – ideas that offered ways of seeing, organizing and understanding participants’ reported experiences. As the study progress, we turned to “focused coding” – developing categories that enabled us to synthesize and explain the outcomes reported.
- Extensive memo writing and critical conversations among the researchers enabled us to capture and refine emerging categories, check

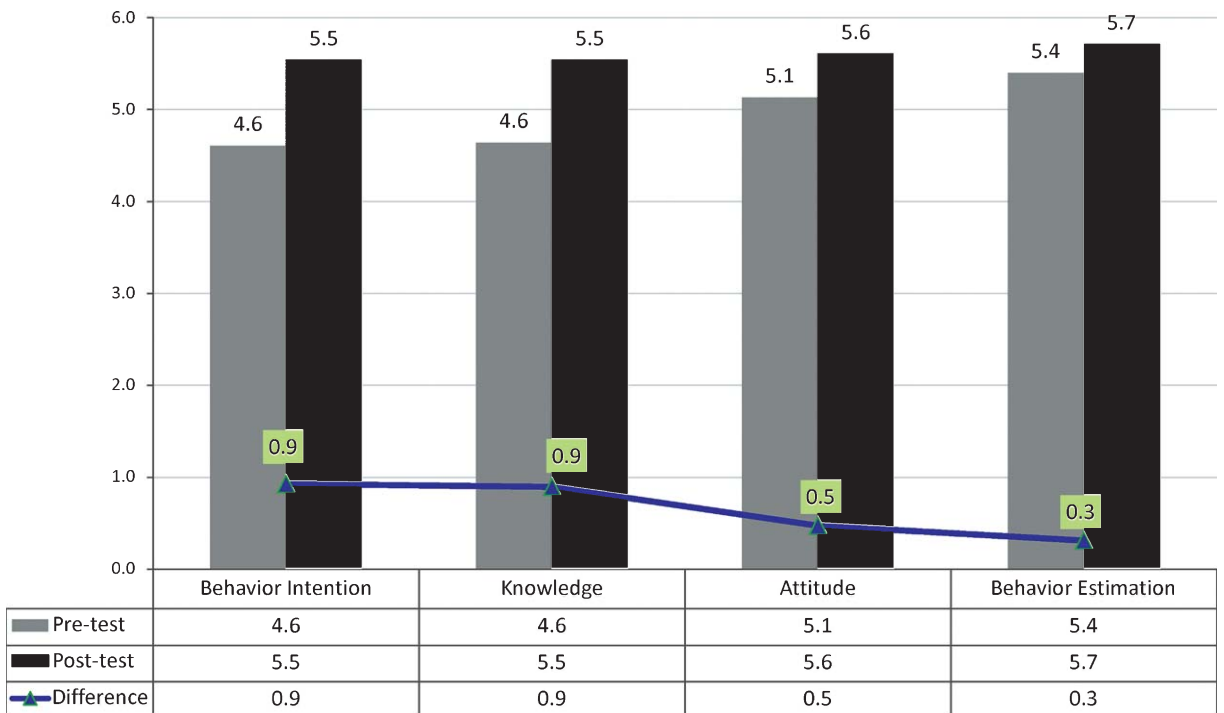


Fig. 6. Immediate impact: Findings of BIAT Survey.

assumptions, and define the relationship among the categories.

3. Findings

3.1. Survey findings: Immediate impact of the program

Shown in Figs. 6 and 7, the results of the BIAT indicated that participants had significant pre-/post-test gains across all the domains specified in the barrier intervention model described above. The strongest gains, however, were in the domains of individual practices/behaviors (intention to change as an individual) and knowledge. Still significant but weaker gains were found in the domains of willingness/beliefs and intent to change organizational culture.

Figure 8 ranks immediate program impact by job role and impact type. The program had the strongest immediate impact on HR professionals' intention to change their own professional practices and on HR professionals' knowledge. The program had the weakest immediate impact on disability service providers' attitudes and disability service providers' intent to change the practices of their organizations.

Overall, these findings indicate statistically significant positive immediate impacts of the program. The areas with the greatest difference between pre- and post-test scores were in knowledge and behavioral intention (intent to change own professional practices), indicating that participants gained knowledge and intended to change their own behaviors as a result of the program experience. Less impact was found in the areas of willingness/belief change and behavior estimation (intent to change organizational practices). In both these areas of lower-impact, it is clear that weaker gains were found in this area not because of low post-test scores,

| | Mean Difference | t | df | p |
|---------------------|-----------------|-------|-----|-------|
| Behavior Intention | 0.93 | 13.59 | 257 | 0.000 |
| Knowledge | 0.91 | 18.58 | 218 | 0.000 |
| Attitude | 0.48 | 13.54 | 228 | 0.000 |
| Behavior Estimation | 0.31 | 7.24 | 257 | 0.000 |

Fig. 7. Paired T-test Results.

but because of higher pre-test scores. This indicates participants probably self-selected for this workshop because they were already positively pre-disposed to disability issues. Additionally, these issues are further illuminated in the findings from the qualitative study where it was shown (also not surprisingly) that changing organization-level actions/practices is more difficult than changing one's own actions or behaviors.

3.2. Interview findings: Longer-term impact of the program

Seventy-nine percent of respondents ($N=34$) reported at least one key action; twenty-one percent of respondents ($N=8$) had not yet undertaken an action as a result of the workshop. The main reasons given for not undertaking an action were: 1. The respondent was still deciding what actions to take; 2. The respondent was not in a position within an organization to undertake an action; 3. Actions around creating a disability inclusive workforce were already in place and the respondent merely participated in these actions.

Of the respondents who did report a key action, four categories of key actions emerged after coding the data: Individual action, teaching others, building partnerships and changing organizational policies or practices. These are offered in descending order of frequency.

3.2.1. Individual action

Examples of key actions in this category include:

- *Becoming more "aggressive" in handling cases.* An HR professional in a major corporation made changes to ensure that individuals with mental health disabilities can get needed accommodations and have better employment outcomes.
- *Encouraging co-workers to seek accommodations.* A social worker disseminated information about the ADA to staff in her own agency, as well as to clients.
- *Researching people with disabilities when advertising positions.* A manager at a scientific lab reviewed job openings and ensured their job openings are advertised on websites that target people with disabilities.
- *Reassessing job requirements.* A manager reassessed job requirements to ensure that they do not inadvertently screen out candidates with disabilities.
- *Advocating for recruiting.* A former recruiter for a staffing agency advocated in several venues to

| Impact Area and Role | Difference Pre-/Post Scores | Rank Impact Strength |
|---|-----------------------------|----------------------|
| HR Behavioral Intention | 1.1 | 1 |
| HR Knowledge | 1.0 | 2 |
| HR Attitude | .6 | 3.5 |
| Disab. Serv Provider Knowledge | .6 | 3.5 |
| HR Behavioral Estimation | .4 | 5.5 |
| Disab. Serv Provider Behavioral Intention | .4 | 5.5 |
| Disab Serv Provider Attitude | .3 | 7 |
| Disab Serv Provider Behavioral Estimation | .1 | 8 |

Fig. 8. Strength of impact by impact type and job role.

ensure that people with disabilities are included in recruitment efforts and now serves on a local committee to that end.

- *Providing accommodation.* A staffing specialist became more in integrating disability into his existing commitment to diversity and is working with hiring managers to be disability inclusive in their hiring practices.
- *Working with diversity and disability groups in organization.* A recruitment professional has reached out and established regular contact with the diversity group in his workplace to ensure disability is included in diversity efforts.
- *Advocating for disability law and rights.* A teacher newly realized that mental health issues were covered by law and would use this information to advocate for the legal rights of students.
- *Newly attending to issue.* A university recruitment manager reached out to the university's vice president to encourage recruiting people with disabilities in their organization – something she would not have done prior to the program.
- *Increased awareness.* An insurance industry executive reported that disability issues were now “on his radar” and he is now considering how he can educate others in his organization.
- *Greater sense of what's possible.* A senior program director at a community organization has changed her beliefs about hiring people with disabilities and will explore the resources for hiring obtained during the program.
- *Re-energized.* A vice president of HR in a Fortune 500 company and several HR professionals

reported a renewed sense of purpose around their already existing efforts related to disability inclusiveness in the workplace.

3.2.2. Teaching others (e.g., planned sharing of knowledge in new contexts, such as training or online systems)

Examples of key actions in this category include:

- *Knowledge sharing during meetings.* A recruiter had conversations about recruiting people with disabilities with “industry friends” at an annual gathering.
- *Reframing conversations.* A senior HR professional at a college initiated a number of meetings with colleagues, sharing materials and ideas from the program. She is trying to bring the program to her statewide professional organization and will create a professional development session for her organization.
- *Disseminating workshop materials to promote discussion.* A state policy analyst shared information, resources and relationships from the program with the state Disability Issues Committee. She distributed handouts from the workshop hoping to help service providers learn new ways to talk with potential employers.
- *Integrating disability focus into other training.* Many disability service providers and self-employed consultants reported integrating information from the program in their own presentations, marketing or training.

- *Including in “diversity” presentation.* A former HR director incorporated material from the program into a workshop for HR professionals on hiring. In the past, he did not include disability at all in trainings on hiring or diversity.
- *Including in “diversity” conversations & in college health courses.* A self-employed HR consultant and adjunct instructor incorporated material from the program in a healthcare class.
- *Including in train-the-train programs.* An international consultant offering executive and performance coaching described an “aha” moment in the program around the issue of invisible disabilities. She reported introducing discussions of this “segment of talent” in her own programs for corporate trainers: including disability in discussions of diversity, helping trainers consider individual disabilities in designing and delivering trainings, and bringing more specificity to the topic, rather than just covering the legal ramifications.
- *Developing internal partnership with benefits analyst.* An HR generalist collaborated with the benefits function in her company leading to better outcomes for people with mental health disabilities.
- *Exploring partnerships with a vocational training site.* A recruiter for a major airline arranged to tour a vocational training site with a colleague to explore a potential partnership. They have not yet established the partnership due to a hiring freeze, layoffs and pending corporate merger.
- *Exploring a corporate partnership.* A high school transition teacher met an HR professional during the program and is now creating a partnership to place her students in unpaid internships.
- *Partnering with a recruitment firm.* An HR director reached out to the recruitment function in her company and used resources she got during the program to research new recruitment partners to hire people with disabilities. As a result, the company now uses firms specializing in disability inclusion as “preferred providers.”

3.2.3. Building partnerships

Examples of key actions in this area include:

- *Learning about & pursuing partnership opportunities.* An HR executive from a large corporation established a partnership with a disability service provider she met during the program to employ veterans with disabilities. She also investigated other partnership resources given during the program and formed another ongoing partnership with Gettinghired.com.
- *Referrals to Independent Living Centers (ILCs).* An HR director began researching local ILCs and made several referrals and has built a sustained employment referral partnership with halfway house career centers.
- *Extending current partnerships.* A community program director reported becoming more proactive in working with an existing partner (a local high school). Thus, the number of students using the programs and services at her community agency has increased.
- *Developing internal partnership with recruiter.* A corporate benefits manager proactively reached out to her company’s recruitment function. As a result, this company now includes these materials in their own training within the company and in their recruitment processes.

3.2.4. Changing organizational policies or practices

Examples of key actions in this category include:

- *Creating a task force.* A recruiter joined a task force with two managers to create a plan for hiring people with disabilities. She also wrote a report about the program and task for a company president who contacted her to praise her efforts.
- *Analyzing job descriptions.* A recruiter analyzed company job descriptions for disability inclusiveness and reached out to hiring managers with these changes.
- *Improving recruiter training.* An HR professional integrated disability information the company’s recruiter training packet.
- *Improving managerial training; making accommodation policy more visible.* A university director for Equal Opportunity Programs incorporated disability inclusiveness into a management development certification course – a course which might be made mandatory for all managers.
- *Changed accommodation policy.* A diversity professional reviewed and changed the accommodation policy of his employer, made the policy easier to find in new hire materials and reached out to hiring managers about accommodations.

- *Planned outreach to disability organizations.* A diversity and HR professional reached out to several disability organizations to: 1. Create a program within the company for hiring managers and 2. Develop a conduit for hiring referrals from these disability organizations.
- *Creating a reasonable accommodation workshop for company managers.* An HR professional involved in a work team to create a workshop for the company's managers.
- *Creating an accessible call center.* An HR executive from a major corporation was in the process of partnering with a disability organization to develop a conduit for hiring people with disabilities in the company's call and customer-care center as well as in other areas of the company's functions.

3.2.5. Enabling and inhibiting factors

What factors inhibited and facilitated the uptake of program messages and the translation of these messages into actions to enhance disability inclusiveness? In analyzing interview data, we found the following patterns and trends:

- *Participants' professional experience.* Respondents with two years of experience were as likely to act upon program messages as those with twenty. The extent of professional experience did not predict uptake of program messages.
- *Prior personal or professional commitment a catalyst.* Not surprisingly, participants who had a personal or emotional connection to disability were most likely to uptake program messages and use these messages to promote change in a more focused, strategic way. Though this catalyst would seem self-evident, the implications of it have not been fully applied to disability programming, a point more fully described in the discussion section of this paper.
- *Organizational readiness.* Also not surprising is the fact that, no matter what the respondent's level of pre-commitment, organizational readiness was a key factor in enabling or inhibiting uptake of program messages. Respondents simply could not "go it alone" to work their key actions. For example, a very committed airline recruiter took a great deal of initiative on her own, (e.g., analyzing job descriptions and organizing a visit to a vocational center). But she cited the surprising (to her) support she received from her supervisor and other

company managers as making it possible for her to pursue initiatives. As she noted: "I have to follow directions. It has to come from top down and someone has to understand where I am coming from." Similarly, a newly inspired university staffing specialist who went to great lengths to provide a bilingual sign language interpreter for a job applicant had a leader who recommended that all staff (including the director) attend the program together. Conversely, respondents who operated within organizations with little authentic top leadership commitment to disability or diversity could not make any of their key actions "stick."

- *Overall strength of people processes.* Any kind of organizational change must ride the rails of already existing tracks. A key feature of organizational readiness was the strength and flexibility of the internal HR processes within the workplace. In organizations where there were robust communication and social networks, key actions related to disability inclusiveness were facilitated. Where these rails and networks do not exist, any sort of change is impeded, including disability inclusiveness. Similarly, respondents reported entrenched recruiting practices and the pressure to recruit more candidates for less time and cost. Changing these recruiting practices in ways that required more time would not be undertaken without a clearly communicated priority or other direct benefits to staffing professionals.
- *The current economic climate.* Respondents pointed out the difficulty of acting upon program messages in an organizational climate of "simple survival." Organizations fighting to stay in business generally do not prioritize disability inclusiveness. The need to connect the disability inclusiveness message **organizational/business** advantage is more apparent in this climate.
- *Managers/supervisors.* A part of organizational readiness involves being able to reach face-to-face leaders who are key gatekeepers of disability inclusiveness: managers/supervisors. Respondents struggled with formulating actions that would reach these key arbiters of disability inclusiveness in the organization.
- *Industry-/Sector-specific strategies.* Respondents reported a need for industry- or sector-specific disability inclusiveness strategies. For example, workplaces that operate internationally will have different disability inclusiveness issues than those who operate locally. Similarly, workplaces that

operate in a union environment have a different framework for disability issues than those who are not unionized. Finally, workplaces who have 24/7 operations and shift work will need a unique approach to disability inclusiveness.

- *The challenge of follow-up.* As described earlier, this program had both an in-person and an online component that could be accessed by participants at anytime following the in-person program. Further, all participants were given access to free, confidential technical support in the form of the Northeast ADA Center's services. Respondents indicated, though, that this follow up was not enough. To follow through with their key actions, respondents needed: 1. Sustained, ongoing contact long after program implementation; and 2. Two-way conversations about their efforts with people within or outside of their organizations.

4. Discussion

At the outset of this article, we referred to a knowing-doing gap that has limited the power of programs aiming to improve the employment lives of people with disabilities. We believe that addressing this knowing-doing gap is one of the central imperatives for our field. Also, we believe that the most important contribution of this project was to begin a conversation around shifting our attention from basic research toward program research: toward finding out "what works and why."

Most efforts to improve the employment opportunities of people with disabilities have focused on information dissemination, not on organizational change. Information dissemination is straightforward, easily measurable and can readily build upon prior efforts. Organizational change is non-linear, difficult to measure, deeply embedded in context and often follows a trajectory unique to each organization. Given these challenges, we have been faced with a "black box" characterizing our understanding of the unfolding of organizational change around disability inclusiveness. That is, there is little understanding of the on-the-ground processes of organizational changes to promote disability inclusiveness and of on-the-ground factors influencing the uptake of program messages. Though this project was an effort to understand organizational life and context for disability programming, it is only a start. The field of disability has largely not tapped the vast literature that could shed light upon the role of professional cultures, organizational climates and

on-the-ground realities in impacting how program messages are acted upon (or not).

This project has been an attempt to begin to unpack this black box. Prior efforts related to disability and employment have focused on "pure" research, such as employers' level of ADA knowledge or disability employment practices. Little scholarship has been developed, though, around applied intervention research that systematically examines the short- and longer-term impact of programs and the uptake of program messages in real life in the organization. We need a shared, actionable repository of intervention research around organizational change in the disability arena.

4.1. The limitations of our findings

Our project was limited in several ways. First, the mixed methods we applied were only articulated temporally (short and longer term findings), with only a weak articulation as far as concepts and themes. Second, we lost significant survey data as we changed the BIAT instrument mid-stream. Third, the BIAT instrument clearly needs further validation and refinement. Though we believe the model underlying the BIAT is useful in enabling us to describe program impact beyond simple knowledge gains, the items in the survey need further clarification and more external validation. Also, the BIAT takes significant program time to complete (about 20 minutes for both the pre- and post-survey). Hence, the instrument needs to be streamlined to be more broadly usable. Fourth, we have only limited process data and need a more systematic way to capture lessons learned as the implementation unfolds. Finally, all our implementations took place in the state of New Jersey, possibly limiting the application of our program and findings in other states or regions.

4.2. Implications for research

Research tool development for disability program research. We believe our attempts to put forth systematic tools and inquiry frameworks to study the impact of our interventions may ultimately be as useful as our findings. We hope that these two methods (the BIAT and the key action analysis) can begin a conversation around finding cross-intervention tools and inquiry frameworks so to build a shared, systematic language around "what works and why" for disability-specific interventions.

Value of unified mixed methods. We believe we have not fully tapped the power of unified mixed methods in

program research. Future research could further articulate these two methods by using open-ended inquiry methods to drill deeper into understanding program message uptake.

Research on organizational readiness. Relatedly, our findings suggest the need for more research on organizational readiness for disability inclusive messages. Our findings suggest that some organizations simply do not have the conditions in place to make disability inclusiveness “stick.” Some of these pre-conditions are related to disability; others have more to do with general communication, climate and processes in the organization. It is unlikely any training or knowledge dissemination effort will be successful if certain features of organizational readiness are not in place. Further research to describe these features will enable us to better deploy our resources and efforts.

Need for longer-term research. Organizational change takes time – possibly more time than what many research projects can encompass. Our findings suggest that translating program messages into actions or practices takes longer than the four to six month framework we used in our study. Many key actions either in process or had not yet been put into place. Future research may need to employ longer follow-up times to allow for key actions to unfold.

4.3. Implications for practice

Involving stakeholders in program design. From the outset of this project, employers, disability service providers and people with disabilities were involved in program design and actively assisted with the implementation of the program. We believe this has not only made for a stronger program design, but has also improved levels of program participation. The knowing-doing gap we described earlier exists, in part, because we are largely planning programs “at” instead of “with” those who are expected to act upon program messages.

Consulting vs. training. Our findings suggest that a “spray and pray” approach (“spray” out information or training and “pray” that it will somehow stick) may result in a considerable waste of resources. Though traditional training is still needed, our findings call for a fundamental re-framing of our efforts from training to consulting. A key finding of this study was that the effectiveness of our efforts will be bolstered by considering organizational readiness for the program message. Several implications flow from this finding: 1. Consider

the possibility of being more selective for the targets of our efforts; 2. Consider that training may not be the most powerful intervention, or may even reduce disability inclusiveness by giving the appearance of “doing something.” 3. Re-frame our role, moving away from seeing ourselves as “trainers” and move toward seeing our role as that of strategically co-creating the conditions right for change. In other words, there is a need to shift from training to consulting. In the field of disability, there are several models for dissemination and training, but few for consulting. A key implication for practice is in developing consulting models that take into account organizational readiness and have an expanded repertoire of interventions that can be aligned with organizational climates and challenges.

Since this project was implemented, recent research conducted by the National TA, Policy and Research Center and the U.S. Business Leadership Network, in collaboration with the U.S. Office of Disability Employment Policy, has further illustrated what is needed to make the move from training to consulting across several employer sectors [46–48]. In conjunction with our findings, these types of efforts can begin to build a consulting model unique to disability and employment issues.

Strengthening program impact by customization. Relatedly, our findings suggest that the program could be made more powerful by customizing our approach to the unique purposes and climates of different sectors and industries. A key component of our program was in focusing on making the case and the return on investment for disability inclusiveness. Clearly, making the case for disability inclusiveness will be different for public and private sector organizations. Also, sectors such as healthcare or education will have a very different set of concerns around disability inclusiveness than, for example, retail or financial services sectors. Finally, our program could be customized for unionized vs. non-unionized environments as disability inclusiveness in these two spheres might be characterized by different strategies and processes.

The role of blended learning and the issue of follow up. Our program used a blended learning design, with two follow up online learning experiences: One for employers and one for disability service providers. A companion research project to the one reported here compared the impact of two conditions: 1. For participants who only went through the in-person program and 2. For participants who went through both the in-person and online programs. This study showed statistically significant impacts on participants’ knowledge levels

and intentions of improving employment outcomes for people with disabilities across both conditions. However, those participants who had gone through both the in-person and online programs were more likely to advocate for disability inclusive practices than those who had only attended the in-person program [16]. Hence, the blended learning model for this program did strengthen its impact. We believe, however, that our findings suggest how a blended learning approach could be made even more effective. Though these online learning experiences were somewhat interactive, our interview findings indicate a more active follow up was needed that engaged participants in a two-way conversation around actions toward organizational change in their own workplaces. Creating these kinds of follow up activities will be a programming challenge. On one hand, respondents indicated this kind of follow up was desired; on the other hand, sustaining this follow-up is labor intensive, costly and may not always be welcomed by all participants. Finding workable and effective follow up processes is a key challenge for this type of programming.

Reaching managers/supervisors. Our findings indicated that a challenge for respondents was in reaching out to face-to-face leaders who are key arbiters of disability inclusiveness in the workplace: managers and supervisors. Various conditions of the modern workplace make it difficult to reach these key arbiters: They are working longer hours with more varied tasks; they have shorter tenure in their roles; and they are often working in dispersed or remote teams [33]. These conditions are not conducive to the prioritizing of disability inclusiveness by managers/supervisors. Also, these conditions render traditional training an ineffective option. New approaches are needed to enable disability inclusiveness champions to reach more deeply within their organizations to change on-the-ground practices such as recruitment, hiring, performance evaluation, development and accommodation.

Reaching top leadership. Both the in-person and online segments of our program contained themes around making the case for disability inclusiveness in the workplace in order to strengthen participants' ability to convince top leadership in their workplaces of the potential value-add of disability inclusiveness for their organization. Yet, our interview data showed that respondents continued to struggle with getting leadership of their organizations on board. Part of the consulting process described earlier needs to include a description of the level of top leadership commitment to disability inclusiveness and the challenges unique

to this organization that might stand in the way of a commitment to this issue.

5. Conclusion

The mission of this project was not to provide a recipe for disability and employment interventions that can promise results in any time or any place. Rather, the mission was more centered on opening new paths of understanding and new types of conversations around what works and why. Especially in the field of disability, knowing does not translate unproblematically into doing. An imperative for disability and employment programming lies in reframing the purpose of our efforts – in moving away from “delivering training” or “disseminating information” and in moving toward holding ourselves accountable for organizational change. We do not have the luxury of operating with simple, linear models of dissemination – we do not have the luxury of assuming our actions translate unproblematically into organizational change. The project described in this article was an attempt to put forth more powerful program research frameworks to systematically unpack the black box of organizational change as it relates to disability inclusiveness.

Our program did have immediate impacts (participants significantly changed their knowledge, beliefs, intent to change their own behavior and intent to change organizational practices in their workplace) and longer-term impacts (participants for the most part did engage in key actions around changing their own behaviors, communicating program messages to others, and trying to change practices in their workplace). Yet, with our experience of this program, we have found ways to make this programming even more powerful. The next iteration of this program will build upon the lessons we have learned about translating knowing into doing.

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References

- [1] Argyris, C. (1993). *Knowledge for action: A guide to overcoming barriers to organizational change*. Hoboken, NJ: Wiley.
- [2] Axelrod, R. (2010). Terms of engagement: *New ways of leading and changing organizations*, San Francisco, CA: Berrett-Koehler.
- [3] Baldwin, M. L., & Johnson, W. G. (2006). A critical review of studies of discrimination against workers with disabilities. In W.M. Rodgers III (Ed.), *Handbook on the economics of discrimination*. Northampton, MA: Edgar Elgar Publishing.
- [4] Banister, E., Leadbeater, B., & Marshall, A. (2011). *Knowledge translation in context: Indigenous, policy and community settings*. Toronto, Ontario: University of Toronto Press.
- [5] Bartunek, J. (2007). Academic-Practitioner collaboration need not require joint or relevant research: Toward a relational scholarship of integration. *Academy of Management Journal*, 50(6), 1323-1333.
- [6] Bruyère, S., Erickson W., & Ferrentino, J. (2003). Identity and disability in the workplace. *William and Mary Law Review*, 44(3), 1173-1196.
- [7] Burke, W. (2011). *Organization change: Theory and practice*. Thousand Oaks, CA: Sage Publications.
- [8] Campbell, S., Schrye-Roy, A., Jessani, N., & Bennett, G. (2008). *The Research Matters' Knowledge Translation Toolkit*, International Development Research Centre.
- [9] Canadian Institute of Health Research (CIHR). (2009). *About knowledge translation*. Retrieved from <http://www.cihr-irsc.gc.ca/e/29418.html>
- [10] Del Russo, J. (2009). Employment and disability resources. *Catherwood Library Resource List*. Ithaca, NY: Cornell University ILR Catherwood Library. Retrieved from <http://www.ilr.cornell.edu/library/research/subjectguides/employmentanddisability.html>
- [11] DeLacey, B., & Leonard, D. (2002). Case study on technology and distance in education at the Harvard Business School. *Educational Technology & Society*, 5(2).
- [12] Denis, J., Hebert, A., Lozeau, D., & Trottier, L. H. (2002). Explaining diffusion patterns for complex health care innovations. *Health Care Management Review*, 27(3), 60-73.
- [13] Erickson, W., Lee, C., & Von Schrader, S. (2011). 2009 Disability Status Report for United States. Ithaca, NY: Cornell University Employment and Disability Institute EDI.
- [14] Fusilier, M., & Williams, J. (1996). Awareness of the Americans with Disabilities Act (ADA) among personnel managers. *Journal of Individual Employment Rights*, 7(4).
- [15] Garrison, R., & Vaughn, N. (2008). *Blended learning in higher education: Framework, principles, and guidelines*. San Francisco, CA: John Wiley & Sons.
- [16] Golden, T., & Karpur, A. (2012, In press). Translating knowledge through blended learning: A comparative analysis of face-to-face and blended learning methods. *Rehabilitation Research, Policy, and Education*.
- [17] Graham, I., Logan, J., Harrison, M., Straus, S., Tetroe, J., Caswell, W., et al. (2006). Lost in knowledge translation: Time for a map? *Journal of Continuing Education in the Health Professions*, 26, 13-24.
- [18] Hernandez, B. (2000). Employer attitudes toward workers with disabilities and their ADA employment rights: A literature review. *Journal of Rehabilitation*, 66(4), 4-16.
- [19] Hernandez, B., Balcazar, F., & Keys, C. (2004). Disability rights: Attitudes of private and public sector representatives. *Journal of Rehabilitation*, 70(1), 28-37.
- [20] Hernandez, B., Keys, C., & Balcazar, F. (2003). The Americans with Disabilities knowledge survey: Strong psychometrics and weak knowledge. *Rehabilitation Psychology*, 48(2), 93-99
- [21] Hotchkiss, J. L. (2004). A closer look at the employment impact of the Americans with Disabilities Act. *Journal of Human Resources*, 39(4), 887-911.
- [22] Houtenville, A., Stapleton, D., Weathers, R., & Burkhauser, R. (2009). *Counting working age people with disabilities: What current data can tell us and options for improvement*. Kalamazoo, MI: Upjohn Institute for Employment Research.
- [23] Houtenville, A. J., & Burkhauser, R. V. (2004). Did the employment of people with disabilities decline in the 1990s, and was the ADA responsible? *Research Brief*. Ithaca, NY: Research and Rehabilitation Training Center for Economic Research on Employment Policy for Persons with Disabilities, Cornell University.
- [24] Kessler Foundation, National Organization on Disability. (2010). *Survey of employment of Americans with disabilities*. Retrieved from <http://www.2010disabilitysurveys.org/octsurvey/index.html>
- [25] Kotter, J., & Cohen, D. (2002). *Heart of change: Real-life stories of how people change their organizations*, Boston, MA: Harvard Business School Press.
- [26] McMahon, B., Hurlley, J., Chan, F., Rumrill, P., & Roessler, R. (2008). Drivers of hiring discrimination for individuals with disabilities. *Journal of Occupational Rehabilitation*, 18(2), 133-139.
- [27] Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. Washington, DC: U.S. Dept. of Education Office of Planning, Evaluation, and Policy Development.
- [28] Mills, J., Bonner, A., & Francis, K. (2006). The development of constructivist grounded theory. *International Journal of Qualitative Methods*, 5(1), Article 3.
- [29] National Council on Disability. (2007). *Empowerment for Americans with disabilities: Breaking barriers to careers and full employment*, October.
- [30] Nishii, L., & Bruyère, S. (2009). *Employer best practices in employing people with disabilities*. Presentation to Cornell University Discrimination and Harassment Advisors, December 10, 2009, Ithaca, NY: Cornell University.
- [31] O'Day, B., Mann, D., & Stapleton, D. (2012). The transition to 21st century disability policy in an era of fiscal austerity: A road map [Webinar]. *Center for Studying Disability Policy: A Mathematic Issue Forum*. Presented January 20, 2012.
- [32] O'Neill, J., Vandergoot, D., Sevak, P., & Martin, F. (2012). Causes of the chasm: Factors that impact employment among persons with disabilities [Webinar]. Mathematica Policy Research, Center for Studying Disability Policy. *Forum Number 18*. Presented March 15, 2012.
- [33] Osterman, P. (2008). *The truth about middle managers: Who they are, how they work, why they matter*. Boston, MA: Harvard Business School Press.
- [34] Ottoson, J. (2009). Knowledge-for-action theories in evaluation: Knowledge utilization, diffusion, implementation, transfer and translation. In J.M. Ottoson & P. Hawe (Eds.), *Knowledge utilization, diffusion, implementation, transfer, and translation: Implications for evaluation*. *New Directions for Evaluation*, 124, 7-20.
- [35] Pettigrew, A., Woodman, R., & Cameron, K. (2001). Studying organizational change and development: Challenges for future research. *Academy of Management Journal*, 44(4), 697-713.

- [36] Pfeffer, J., & Sutton, R. (1999). *The Knowing—Doing Gap: How Smart Companies Turn Knowledge Into Action*, Boston, MA: Harvard Business School Press.
- [37] Robinson, D., & Robinson, J. (2008). *Performance consulting: A practical guide for HR and learning professionals*. San Francisco, CA: Berrett-Koehler, Inc.
- [38] Rudstam, H., & Gower, W. S. (2010). *Reaching employers: New Intervention Approaches for Enhancing Disability Inclusiveness in the Workplace*. National Council on Rehabilitation Education Annual Conference, Presented April 2010 in Los Angeles, CA.
- [39] Rynes, S., Bartunek, J., & Daft, R. (2001). Across the great divide: Knowledge creation and transfer between practitioners and academics. *Academy of Management Journal*, 44(2), 340-355.
- [40] Schur, L., Kruse, D., & Blanck, P. (2005). Corporate culture and the employment of people with disabilities. *Behavioral Sciences and the Law*, 23, 3-20.
- [41] Straus, S., Tetroe, J., & Graham, I. (2009). *Knowledge Translation in Health Care: Moving from Evidence to Practice*, NY, NY: Wiley-Blackwell.
- [42] Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.
- [43] Sudsawad, P. (2007). *Knowledge Translation: Introduction to models, strategies, measures*. Austin, TX: Southwest Educational Development Laboratory, National Center for the Dissemination of Disability Research.
- [44] Tugwell, P., Robinson, V., Grimshaw, J., & Santesso, N. (2006). Systematic reviews and knowledge translation. *Bulletin of the World Health Organization*, 84, 643-651.
- [45] Unger, D., & Kregel, J. (2003). Employers' knowledge and utilization of accommodations. *Work*, 21(1), 5-15.
- [46] US Business Leadership Network, Employment & Disability Institute at Cornell University & US Office of Disability and Employment Policy. (2010). *Summary Report: Retail Industry Exchange*.
- [47] US Business Leadership Network, Employment & Disability Institute at Cornell University & US Office of Disability and Employment Policy. (2010). *Summary Report: Government Contractors' Exchange*.
- [48] US Business Leadership Network, Employment & Disability Institute at Cornell University & US Office of Disability and Employment Policy. (2010). *Summary Report: Healthcare Industry Exchange*.
- [49] Van de Ven, A. H., & Poole, M. S. (1995). Explaining development and change in organizations. *Academy of Management Review*, 20(3), 510-540.
- [50] Weick, K., & Quinn, R. (1999). Organizational change and development. In J. T. Spence, J. M. Darley, & D. J. Foxx (Eds.), *Annual Review of Psychology*, 50, 361-386. Palo Alto, CA: Annual Reviews.