Intellectual and Developmental Disabilities
Supporting Employment Consultants to Implement Supported and Customized Employment.
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Abstract: Implementing supported and customized employment in all their components is essential for supporting job seekers with disabilities to achieve their career goals. We asked 42 employment consultants in nine employment programs to respond daily to three quick questions about their employment support activities, for six months. Through monthly coaching, we helped the managers of these organizations engage their teams of employment consultants to interpret the data, reflect, set goals, and take action for quality improvement. Based on the positive results of this pilot, we recommend that employment consultants be provided with data-enabled feedback that supports decision making and helps them fully implement supported and customized employment as a necessary step toward improving job seekers' employment outcomes.
Supporting Employment Consultants to Implement Supported and Customized Employment.

Abstract
Implementing supported and customized employment in all their components is essential for supporting job seekers with disabilities to achieve their career goals. We asked 42 employment consultants in nine employment programs to respond daily to three quick questions about their employment support activities, for six months. Through monthly coaching, we helped the managers of these organizations engage their teams of employment consultants to interpret the data, reflect, set goals, and take action for quality improvement. Based on the positive results of this pilot, we recommend that employment consultants be provided with data-enabled feedback that supports decision making and helps them fully implement supported and customized employment as a necessary step toward improving job seekers’ employment outcomes.
Researchers shows that it takes about 17 years for evidence-based research to get implemented in clinical practice. This delay is a concern because it prevents people from receiving quality services and thus enjoying a better quality of life (Institute of Medicine, 2001). Job seekers with disabilities who receive supported and customized employment services are not exempt from this risk and thus they are at a higher peril of experiencing low employment (Butterworth & Hiersteiner, 2019; Butterworth et al., 2015). For example, in a recent research, Inge et al. (2022) found that although 90% of experts rated discovery as critical for job seeker success, only 60% of respondents agreed that discovery activities were being implemented well. Similarly, although most experts rated customized job development as critical for successful employment outcomes, only 62% of these experts agreed that customized job development activities were implemented well. In some cases, only 30% of experts agreed that customized job development was well implemented (Inge et al., 2022). Also, although networking is an effective job search strategy (Darling, 2010; Owens & Young, 2008), research shows that employment consultants invested only about 26% of their job search time in networking, whereas they invested most of their time (74%) implementing strategies not known to be effective including browsing ads and cold calling (Butterworth, et al., 2020; Migliore et al., 2021).

To improve the implementation of best practices in supported and customized employment supports, training is often recommended (Barwick et al., 2020; National Institute on Disability, Independent Living, and Rehabilitation Research [NIDILRR], 2019; President’s Committee for People with Intellectual Disabilities [PCPID], 2017). However, training is not always enough (Caruso, 2017). Research on adult learning shows that adults typically remember only a fraction of the content delivered through training (Garvin, 1993; Stolovitch & Keeps, 2011). Moreover, because training tends to be abstract, it is not always directly applicable to
everyday nuanced reality. Finally, because people are often under pressure to deliver results quickly, they may take shortcuts that do not align with best practices (Gottfredson & Mosher, 2021; Stolovitch & Keeps, 2011). In contrast, the adult learning literature shows that adults learn in the workflow, from their peers, when they need to address specific problems or when they need to achieve organizational goals (Education Development Center, 1998; Knowles et al., 2015; Stolovitch & Keeps, 2011). Therefore, providing employment consultants with support in the workflow, in addition to training, is key for improving the quality of supported and customized employment services (Butterworth et al., 2012). This requires documenting the implementation of research-based practices and leverage the data for quality improvement. As recommended by the National Quality Forum, in response to a request for assistance from the Department of Health and Human Services, bridging the quality gap in Home and Community Based Services (HCBS) requires leveraging data, making data public, and using data for performance improvement, consistent with established national standards (Caldwell & Kaye, 2016).

Some tools for leveraging data for quality improvement in supported and customized employment services already exist. For example, since the 1990s, the IPS Supported Employment Fidelity Scale has been available to employment programs that serve job seekers with mental health disabilities (Becker et al., 2015; Bond et al., 1997). More recently, the Discovery and the Job Development fidelity scales have been developed to support employment programs that serve job seekers with intellectual and developmental disabilities (Hall & Keeton, 2022; Hall et al., 2022). These tools play a key role in improving the implementation of quality supported and customized employment. However, these tools rely on interviews, observation, and document analysis by authorized professionals, and occur at planned points in time (Becker
et al., 2015; Hall et al., 2012), limiting widespread adoption and ongoing quality improvement in the workflow.

In recent years, increased access to mobile technology and computing power have opened new possibilities for collecting and leveraging data for quality improvement (Allard et al., 2018; Gu et al., 2014; Harari, 2016; Suffoletto, 2016). For example, as described in more detail in the method section, ES-Coach (Employment Support Coach) is a new tool that enables employment consultants to visualize their implementation of supported and customized employment, reflect, set goals, and take action for continuous quality improvement (Butterworth et al., 2020; Migliore, Butterworth, et al., 2018). A distinct characteristic of ES-Coach is that it leverages Ecological Momentary Assessment (EMA), shifting the emphasis from measuring past behavior at planned points in time to measuring current behavior through repeated measures in the workflow (Shiffman, et al., 2008; Walz et al., 2015). Ecological Momentary Assessment emerged from clinical psychology and has been rapidly adopted in other fields, including fitness and wellness where tracking behavior and displaying performance dashboards proved an effective strategy for motivating people to set goals that lead to improved well-being (Bajpai et al., 2015; Seifert et al., 2017). An additional benefit of ES-Coach is that it delivers daily microlearning content—short, bite-size content—about supported and customized employment practices. ES-Coach also allows participants to share their feedback, tips, and stories.

ES-Coach has been initially piloted with individual employment consultants (Butterworth et al., 2020; Migliore, Butterworth, et al., 2018). Recognizing the importance of teamwork, the role of managers (Birken & Currie, 2021), and the need for support to learn how to leverage data for quality improvement (Jeffs et al., 2015; Power, 2008), we repeated the pilot by involving teams of employment consultants and their managers as participants, and included coaching
support for managers about how to engage with their teams to interpret the data, reflect, set goals, and take action for quality improvement. The purpose of this article is to describe how the revised ES-Coach pilot helped employment consultants and their managers improve the implementation of supported and customized employment as a key step toward improving the employment outcomes of people with disabilities. We address these research questions:

- What goals and actions did the managers and their teams target?
- How did employment services change and what challenges interfered with change?
- What feedback about ES-Coach did managers and their teams share?

Method

The research design was exploratory using quantitative and qualitative analyses to describe the goals, actions, changes in service delivery, and the experiences of the participants. This section describes the participants, instruments, procedure, and data analysis.

Participants

Five Home and Community Based Services providers in Minnesota and four in Massachusetts that provide employment services to adults with intellectual disabilities, autism, and other developmental disabilities participated. The majority of the programs employed 6–10 employment consultants \((n = 6)\). Two organizations had teams of 3–5 employment consultants and one organization had a team of more than 20 employment consultants. Eleven managers from these organizations participated (two organizations identified two managers each). Halfway through the study, one manager left their organization and was replaced by a senior employment consultant who was promoted to be a manager. A total of 56 employment consultants from the nine organizations signed up for ES-Coach, 53 started submitting the ES-Coach daily survey, and 42 of them remained engaged until the end of the pilot. After excluding seven participants
who left their jobs or took medical leave, the retention rate was 91%. Table 1 shows the demographic and professional characteristics of the participants.

<Table 1 here>

**Instruments**

The data collection instruments included online baseline and feedback surveys, and the ES-Coach daily survey using Alchemer software optimized for mobile device use. The baseline and feedback surveys targeted both managers and employment consultants to check for eligibility, gather their demographic and professional characteristics, and obtain feedback about the ES-Coach pilot.

The ES-Coach daily survey was the core tool of this pilot. It consisted of three questions about the primary activity carried out during the 30 minutes before receiving a text on the phone: What primary support activity was carried out? Who was the interaction with? And where did the activity take place? A drop-down menu listed the response items included in Table 2. After selecting the primary activity, employment consultants were asked a follow-up question about their specific activity. For example, if they selected “Getting to know a job seeker” they were then asked to select which of the following activities they carried out: “Talking with someone...”, “Observing a job seeker”, “Participating in an activity with the job seeker”, “Reviewing records”, “Informational interviews...”, “Developing a vocational/career profile”, “Completing forms/reports”, or “Other”.

<Table 2 here>

More details about the ES-Coach can be found in Butterworth et al., 2020 and Migliore, Butterworth, et al., 2018.
In preparation for this pilot, we carried out additional validation of the questions and response items of the ES-Coach daily survey through focus groups with employment consultants \((n = 3)\), managers of employment programs \((n = 3)\), subject matter experts \((n = 3)\), and a self-advocate. Finally, we carried out cognitive interviews with employment consultants \((n=6)\) (Miller et al., 2014; Willis & Artino, 2013). Our team met three times to revise the questions and response items of the ES-Coach daily survey based on the feedback we received. Next, we beta-tested the revised version of the ES-Coach daily survey with 11 employment consultants and 19 experts in supported and customized employment for one month.

**Procedure**

**Recruitment**

After receiving approval from the Institutional Review Board (IRB), we asked state-level associations of employment programs in Minnesota and Massachusetts to forward an informational flyer about the pilot to their members. Sixteen managers who expressed interest in participating received more information, an approved IRB consent form, and an invitation to complete the baseline survey. The eligibility criteria included having at least three full-time employment consultants, serving primarily job seekers with intellectual and developmental disabilities, and operating in either Minnesota or Massachusetts. All the organizations were eligible and were invited to join an individual phone call with our team members to further discuss the project activities and address their questions to ensure fit. Nine organizations participated in the call and committed to participating in the pilot.

**Intervention**

The intervention included a) Orientation, b) data collection c) data visualization, d) microlearning, e) coaching, and f) evaluation.
**Orientation.** In September 2021, we invited the managers and their teams of employment consultants to join an online (Zoom) orientation. The agenda included an introduction, the importance of quality improvement, an ES-Coach demonstration, and what to expect from enrolling in the pilot. A total of 42 participants attended. On the day after orientation, we emailed an invitation and instructions to sign up for an ES-Coach account and start receiving the ES-Coach daily survey.

**Data collection.** The day after they signed up for an ES-Coach account, the employment consultants started to receive the ES-Coach daily survey. The survey was texted to the phones of the employment consultants daily between 9:00 am and 4:00 pm in their local time zone, each day at a different random time. Participants received up to two reminders to complete the daily survey before it expired at midnight each day. If not at work or on a break, the employment consultants could pause the survey until they returned to work. The average individual daily response rate was 87% (min = 46%, max = 100%). On average, 61% of daily surveys were completed within one hour of receiving the text, and 81% within two hours of receiving the text. Managers who provided substantial direct employment support services in addition to managing their programs also received the daily survey.

**Data visualization.** The responses to the three core questions were visualized in a data dashboard refreshed daily [www.es-coach.org/dashboard](http://www.es-coach.org/dashboard). Employment consultants and managers could interrogate the dashboard about their teams’ estimated amount of time invested in the support activities targeted for improvement. Moreover, they could compare their teams’ aggregated data with the aggregated data from all participants in the project. Finally, employment consultants could see their own individual data and compare it with their teams’ data, and all participants’ aggregated data.
Microlearning. The purpose of microlearning was to nudge the employment consultants to implement research-based supported and customized employment strategies. To this end, the closing screen of the ES-Coach daily survey featured 1-minute videos, tips, data, and links to articles on best practices in supported and customized employment (Migliore, Butterworth, et al., 2018; ThinkWork, 2020). We also shared these microlearning resources through a weekly digest email sent to all employment consultants and managers and through a searchable library on the ES-Coach website. Google Analytics reported 155 clickthrough to the microlearning resources and 23 resource downloads through the closing screen of the ES-Coach daily survey. We do not have comparison data to evaluate the magnitude of these numbers, however positive feedback from focus groups with managers suggested that this content was useful and often re-shared with the teams for emphasis. Finally, we sent monthly data emails to all employment consultants and their managers featuring key metrics and reminding the participants to visit the ES-Coach data dashboard for more details about their data.

Coaching. The purpose of coaching was to support the managers to engage their teams to reflect on the ES-Coach data, set goals, and take action for improving the implementation of supported and customized employment (ACRE, 2018; APSE, 2020; Migliore, Nye-Lengerman, et al., 2018). Two coaches from our team with experience providing training and technical assistance on employment support scheduled monthly, 1-hour, individual Zoom calls with each manager of the nine programs. Our coaches used the 30-Day Team Action Plan to document the goals and actions that the managers and their teams identified for the 30 days before the next coaching call. The coaches updated the 30-Day Team Action Plan and emailed it to the managers to use in their meetings with their teams.
Evaluation

The purpose of evaluation was to document the fidelity of the pilot’s implementation and to gather participants’ feedback about the project activities. To this end, we used call logs, focus groups, and feedback surveys. After each coaching call, the two coaches completed a call log in Alchemer to document the employment consultant teams’ goals and actions, progress on those goals, challenges, and overall managers’ engagement.

Project staff carried out a focus group in Zoom with employment consultants in December 2021 ($n = 4$) and a focus group with managers in February 2022 ($n = 9$) and in April 2022 ($n = 4$). Finally, after completing the pilot, the managers ($n = 9$) and employment consultants ($n = 33$) completed a feedback survey on Alchemer (Response rate=79%). Everyone who participated in the focus groups or completed a feedback survey received a $25 gift card.

Data Analysis

To address the first research question, goals and actions, we analyzed the content of the 30-Day Action Plans and identified the seven goals listed in Table 3. To identify the actions, we carried out qualitative data analysis of the 30-Day Action Plans as described further below. To address how employment services changed, the second research question, we computed the monthly average time invested on the targeted goals by each organization. Next, we computed the average, minimum, and maximum change over the 6-month duration for each organization. For context, we also computed the average time invested by each organization in each goal over the 6-month period (Table 3). Finally, we carried out qualitative data analysis of the 30-Day Team Action Plan and the transcripts from the focus groups to describe a) the actions identified by the managers and teams (research question 1), b) the challenges that interfered with change (research question 2), and c) feedback about ES-Coach (research question 3). To this end, a
member of our research team consolidated all information from the 30-Day Team Action Plan into an Excel file and coded the text by identifying themes and subthemes. Next a second researcher reviewed the text, themes, and subthemes, and made recommendations before memos were developed as the basis for writing the final summary results. Similarly, we analyzed the transcripts from the focus groups to identify common themes and develop memos as the basis for the results section.

Results

This section addresses the following research questions (a) What goals and actions did the managers and their teams target? (b) How did employment support practices change and what challenges interfered with change? (c) What feedback about ES-Coach did managers and their teams share?

What Goals and Actions did the Managers and their Teams Target?

Goals

Based on the data from the ES-Coach daily survey, most organizations targeted goals related to improving their job search strategies including networking \((n = 7)\), engaging with businesses/job negotiation \((n = 7)\), and informational interviews/business tours \((n = 6)\). The second most common cluster of goals included both improving getting to know job seekers \((observing job seekers and participating in activities with job seekers)\) and facilitating natural support after hire \((n = 5)\). Finally, less than half of the organizations identified reducing paperwork & meetings \((n = 4)\) and facilitating career advancement \((n = 3)\) as goals (Table 3).
Actions

The managers and their teams identified actions in three domains: 1) increasing best practices, 2) professional development, and 3) improving organizational management.

**Increasing best practices.** To improve *getting to know the job seeker*, one organization established an expectation of conducting the discovery process with all new referrals. Another switched all functional assessments to in-person meetings because doing so helps employment consultants with connecting with new job seekers, building trust, making observations, and learning about their skills and preferences. One organization set a goal to use person-centered planning approaches to increase the focus on career advancement.

To improve *finding jobs*, some organizations started or increased attending chamber of commerce events and scheduling business meetings with new employers. Other organizations planned to use their existing connections to businesses, expanding options for informational interviews, business tours, and job shadows. One organization sought to make new connections to businesses through participation in a regional employment collaborative where employment consultants exchange job leads, discuss employer relationships, and share resources.

**Professional Development.** The ES-Coach data helped the managers to make informed decisions about which specific training to pursue. For example, one manager noticed that their team invested a significant amount of time in job development without obtaining adequate results. Therefore, they identified a need for further professional development about how to engage more effectively in job development. Other areas of need for professional development included discovery, networking, managing employer relationships, and job negotiation.

Formal training was not the only approach to promote professional development. One organization used staff meetings to facilitate discussions about best practices (e.g., networking
vs. cold calls) whereas other organizations explored ways for experienced employment consultants to mentor junior staff.

**Improving Organizational Management.** Several organizations identified a need for organizational changes. For example, one manager reduced caseloads by hiring new staff and rearranging caseload assignments. Another organization increased their staff specialization by hiring someone to focus only on job coaching. Many organizations focused on increasing their staff efficiency by reducing paperwork and administrative activities, switching to an electronic documentation platform, and offering training in time management.

**How did Employment Support Practices Change and What Challenges Interfered with Change?**

Overall, no major changes emerged in the frequency of implementation of the practices targeted for improvement. However, the participants reported positive results in other aspects of their operations.

**Changes in Support Practices**

Although some improvements emerged for some metrics, overall the change in time investment in the targeted support practices was negligible (Table 3). For example, of the seven organizations who targeted networking as a goal, five reported an increased investment in this practice with a maximum average increase of seven minutes/day by one organization whereas two organizations reported no change or a one-minute/day decline investment in networking. The average change across the seven organizations over the six months was an increase of two minutes per day invested in networking. Overall, during the six months of the pilot, they invested an average of eight minutes/day in networking.
The data showed no change for informational interviews or business tours, observing job seekers, participating in activities with job seekers, and paperwork/meetings. In contrast, time investment declined for engaging with businesses/job negotiation (-1 minute/day), facilitating natural support (-1 minute/day), and facilitating career advancement (-2 minute/day) metrics.

<Table 3 here>

**Other Positive Results.** One of the ways the ES-Coach data added value was by assigning hard numbers to goals and service delivery. For example, a program manager said: “It’s hard to quantify in this field what we’re doing, and to have this data to back it up is just fantastic!” Moreover, by providing a set of categories of services and definitions, the ES-Coach helped managers and their team members frame their language using shared terms, which helped to align their goals and actions. A manager said, “(ES-Coach) has kind of helped frame some of the data we've wanted to capture and whereas our previous system was not able to do that…it has helped us kind of frame what we would like to say.” Also, using numbers to discuss service delivery during staff meetings helped managers and their teams appreciate that actions are important factors in determining outcomes. One manager reported: “I think one of the great things about ES-Coach is that it gives us the opportunity to really, in a very practical way, show people that inputs matter; and if they manage the inputs, a lot of times the outputs will take care of themselves.”

Besides supporting their teams to improve the quality of employment supports, the managers reported that the ES-Coach data helped them back up their departmental goals when interacting with their organizational leadership, and back up their conversations with state funding agencies. One manager said: “It helps me be more mindful when setting departmental goals…to see where we started and where we’ve gone.” Another manager shared that the data was useful
for showing their organization’s leadership board and funding agency the work and accomplishments while highlighting the nuances and complexities of the work itself. “It can really show the work that goes into helping people to find jobs in the community and supporting moving past barriers that exist with businesses.” Finally, at a broader level, the managers reported that participating in the ES-Coach pilot made their employment consultants feel like they were part of something larger, contributing to the overall understanding, refinement, and elevation of the field of employment supports.

The coaching calls helped managers focus on the goals, identify catalysts, and identify potential obstacles for goal achievement. One manager reflected, “It’s very helpful to discuss things and through that process, identifying things that we didn't think we were doing well.” The weekly summary of microlearning and the monthly data emails helped managers and their teams stay connected with the data when they did not have time to visit the dashboard: “I think (the data emails) are really valuable and kept (my staff) connected to (the data) even if maybe they weren't going to the dashboard.”

Challenges

Nearly every manager said that the biggest challenge to achieving their goals was the staffing crisis exacerbated by the COVID-19 pandemic. Employment programs that were part of larger organizations experienced ripple effects when their employment consultants were asked to support residential and day services and instructed to avoid in-person employment supports. In addition to the pandemic, managers identified transportation as a major barrier to achieving project goals, especially when staff had to provide transportation at the expense of investing their time assisting job seekers to find and retain employment. Also, some managers reported that funding did not always align with the delivery of supported and customized employment. For
example, a manager reported engaging in cold calling because funding was tied to documenting a minimum number of phone calls per year to employers. Other managers struggled to identify resources for the professional development of their team members.

**What Feedback about ES-Coach did Managers and their Teams Share?**

Through focus groups and feedback surveys the employment consultants and managers shared positive comments about how the ES-Coach pilot helped them to reflect on their employment support activities and how to improve. Some employment consultants wished that the response items of the daily ES-Coach survey could capture more details about their daily work activities. Also, while overall the employment consultants appreciated the content of the microlearning featured in the closing screen of the daily survey, they asked to share such content in weekly emails as an additional way to access this content if they were too busy when they received the daily survey. Some other recommendations included providing a more comprehensive orientation at the onset of the project as well as providing more opportunities for managers and their teams to get together, brainstorm and share ideas, and discuss how they use the data for quality improvement of their programs and services. Some managers and employment consultants indicated that using a tool like ES-Coach would be extremely useful, but it would help if it was integrated into their existing electronic documentation software rather than being a separate tool.

**Discussion**

Past research has documented the discrepancies between evidence-based practices in supported and customized employment and the actual services received by job seekers with disabilities (Inge et al., 2022; Migliore et al., 2021), and has demonstrated that ongoing implementation support in the form of mentoring (Butterworth et al., 2012) and data-based
feedback (Butterworth et al., 2020) can improve the quality of services and thus the outcomes including the number of job seekers entering employment, the time to job entry, and the quality of job outcomes. This exploratory study used an established tool, ES-Coach, and emphasized supporting managers to embed data-enabled feedback and micro-learning in their staff workflow. While results from this study did not demonstrate observable change in employment consultant behavior or outcomes, there was considerable support from both managers and employment providers for the value of using data-enabled feedback to support planning and continuous quality improvement. The limited observable outcomes may have been impacted by the short timeline of the study (six months) and the staffing and service delivery disruption caused by the COVID pandemic.

Data from the 30-Day Team Action Plans provided insight into the goals identified by the managers and their teams. The most frequent goals addressed improving both the quantity and quality of business engagement, followed by getting to know job seekers, both critical activities in improving the job search process. The greater emphasis on finding jobs than on getting to know job seekers might be due to the fact that finding jobs is a more concrete activity with a clear outcome (having found a job or not). In contrast, getting to know job seekers is more elusive, does not have an objective outcome, and the positive effects are noticeable only in the long-term including job matches that require less job coaching, better job satisfaction, and greater job retention. Both sets of activities were implemented at relatively low levels despite their importance. For example, participants reported an average of only four minutes/day (less than 1% of available time) for observing job seekers and participating in activities with job seekers combined. Similarly, they reported only an average of 15 minutes/day (3% of an employment team’s available time) for networking, engaging with businesses, informational
interviews or tours combined. In contrast, administrative activities such as paperwork and meetings represented the largest investment of time, averaging almost three hours per day or a startling 37% of their available time. Yet, the participants struggled to reduce time investment in this area.

Most providers reported implementing specific actions to achieve their goals, including networking, job negotiation, job tours, and informational interviewing, suggesting there is value to describing the distribution of staff time investments to support planning and quality improvement. Additional time in the project might have allowed participants to drill down more specifically to high value strategies.

After looking at their ES-Coach data, some providers concluded that they needed to provide more training to their team members. Seeking training is consistent with the typical recommendations from experts (Barwick et al., 2020; NIDILRR, 2019; PCPID, 2017). At the same time, adult learning theory would suggest that embedding learning and coaching opportunities in the day-to-day work of employment consultants would be preferable for changing behavior (Education Development Center, 1998; Knowles et al., 2015; Stolovitch & Keeps, 2011). In line with this approach, some managers reported leveraging their team meetings and peer mentoring to support their staff improving the implementation of best practices.

What was not expected is that several providers used the ES-Coach data to take actions for improving their organizational management structure including hiring staff, redistributing caseloads, and negotiating with senior leadership and funding agencies. These are long term investments that would not have been captured in the data collected during this project, but reflect the need for a more holistic approach to organizational transformation if we are to make substantial changes in employment outcomes (Timmons et al., 2019). Access to the ES-Coach
data is not necessarily enough for all managers and their teams to know what to do about it. Some managers benefit from coaching support because, they said, it keeps them accountable.

Limitations

This project was carried out during a complex time period and over a relatively short period of time, six months. During the implementation of the pilot, and especially in December 2021 and January 2022, a surge in Omicron infections had a substantial impact both on the ability of the providers to resume pre-pandemic in-person services and on the ability to retain their staff levels. Staff often reported sick, had to cover other services in their organizations, or simply quit. Although these challenges existed also before Covid (Houseworth, et al., 2020), they were particularly severe during the pandemic. Another limitation of this pilot is that changing organizational behavior is a complex process that requires both cultural and strategic change (Lyons et al., 2022), and thus requires more than the six-month period available for this pilot. Moreover, external factors not under the control of the employment consultants play a role as well. For example, funding structures may prevent or slow down change. One provider mentioned that their funding agency required them to make a high volume of phone calls per year to businesses. The unintended consequence is a reduced emphasis and time investment on networking. Also, in some cases job coaching is preferred to facilitating natural support because the latter is not always billable.

Not all employment programs engaged all their employment consultants. For example, a large organization reported having several employment consultants. However, because they were distributed across different teams with different managers, this organization decided to enroll only two employment consultants. Also, because participation was voluntary, this study does not
necessarily provide insights about how managers and their teams would engage if they were required to use ES-Coach as part of a state-wide program for quality improvement.

**Strengths**

Despite these limitations, this study extends a limited body of research on both the implementation in real life of supported and customized employment, and on the importance of investing in real-time implementation support rather than only in training. The pilot provides evidence that managers and employment consultants value coaching and feedback, and that data-enabled feedback can be an important part of organizational management and quality improvement. Participants valued the study and maintained an 87% response rate to the daily survey, with 81% of the responses coming within 2 hours of the initial text.

**Recommendations**

The limited fidelity to established practice in supported and customized employment makes it clear that changes to our investments in training and implementation support are needed. While formal training is important, it is not enough. These investments need to be reflected in provider qualifications and in state capacity building investments. This need also has implications for funding. Rate structures need to acknowledge time investment in data-enabled coaching as a complement to training. This will require collaboration between state funding agencies and management information system vendors to assist in documenting the implementation of supported and customized employment in all their components, while reducing the administrative burden on programs. Future research will need to refine our understanding of high value activities and develop strategies for better embedding data-based feedback and coaching into organizational behavior.
While the recommendations above may take time to implement, employment programs can start now to engage in quality improvement by pursuing goals similar to those identified by the participants in this pilot including a) getting to know job seekers through observation and participating in activities with them; b) finding jobs through networking, informational interviews, business tours, engaging with businesses, and job negotiation; c) facilitating natural support; and d) streamlining administrative tasks. Employment programs could visualize progress by leveraging ES-Coach.org, publicly available at the time of this writing.

Conclusions

Implementing supported and customized employment in all their components is essential for supporting job seekers with disabilities to fully achieve their career goals. This pilot highlighted the importance of data-enabled feedback in the workflow as a tool for supporting employment consultants implementing supported and customized employment. The next step is to scale up the adoption of ES-Coach, or similar data-enabled feedback interventions, for adoption in the service delivery systems for continuous quality improvement.
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Table 1. Characteristics of Employment Consultants and Managers at Baseline

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<td><strong>Gender n (%)</strong></td>
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<td>Female</td>
<td>35 (86%)</td>
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<td>Male</td>
<td>5 (12%)</td>
<td>1 (11%)</td>
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<td>Other</td>
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<td>30 or younger</td>
<td>15 (37%)</td>
<td>1 (11%)</td>
</tr>
<tr>
<td>31–40</td>
<td>11 (27%)</td>
<td>2 (23%)</td>
</tr>
<tr>
<td>41–50</td>
<td>7 (17%)</td>
<td>3 (33%)</td>
</tr>
<tr>
<td>51+</td>
<td>8 (20%)</td>
<td>3 (33%)</td>
</tr>
<tr>
<td><strong>Education n (%)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school or less</td>
<td>3 (7%)</td>
<td>4 (44%)</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>29 (71%)</td>
<td>3 (33%)</td>
</tr>
<tr>
<td>Graduate</td>
<td>9 (22%)</td>
<td>2 (23%)</td>
</tr>
<tr>
<td><strong>Race n (%)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>38 (93%)</td>
<td>9 (100%)</td>
</tr>
<tr>
<td>Black or African American</td>
<td>1 (2%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (5%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td><strong>Ethnicity n (%)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>3 (7%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Not Hispanic, Not Latino</td>
<td>38 (93%)</td>
<td>9 (100%)</td>
</tr>
<tr>
<td><strong>Professional accreditation n (%)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CESP / APSE</td>
<td>5 (12%)</td>
<td>3 (33%)</td>
</tr>
<tr>
<td>Any accreditation</td>
<td>11 (27%)</td>
<td>5 (56%)</td>
</tr>
<tr>
<td><strong>Years managing a team of employment consultants n (%)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1–2</td>
<td>n/a</td>
<td>4 (44%)</td>
</tr>
<tr>
<td>3–5</td>
<td>n/a</td>
<td>2 (23%)</td>
</tr>
<tr>
<td>6–10</td>
<td>n/a</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>11+</td>
<td>n/a</td>
<td>3 (33%)</td>
</tr>
<tr>
<td><strong>Number of employment consultants in the team n (%)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3–5</td>
<td>n/a</td>
<td>2 (23%)</td>
</tr>
<tr>
<td>6–10</td>
<td>n/a</td>
<td>6 (66%)</td>
</tr>
<tr>
<td>11+</td>
<td>n/a</td>
<td>1 (11%)</td>
</tr>
<tr>
<td><strong>Number of job seekers with any disability on caseload per organization n (%)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 or less</td>
<td>n/a</td>
<td>5 (55%)</td>
</tr>
<tr>
<td>21–60</td>
<td>n/a</td>
<td>1 (11%)</td>
</tr>
</tbody>
</table>
### Table 2. Response items of the daily survey [www.es-coach.org/dashboard](http://www.es-coach.org/dashboard)

<table>
<thead>
<tr>
<th>What primary support activity?</th>
<th>Who was the interaction with?</th>
<th>Where did the activity take place?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Getting to know a job seeker</td>
<td>• A person I support</td>
<td>• In my office or home office</td>
</tr>
<tr>
<td>• Finding, securing jobs</td>
<td>• Family, friends, acquaintances</td>
<td>• At the residence of a person I support</td>
</tr>
<tr>
<td>• Other supports BEFORE hire</td>
<td>• Disability professionals</td>
<td>• At a business (Not provider-owned)</td>
</tr>
<tr>
<td>• Any supports AFTER hire</td>
<td>• Someone from a business</td>
<td>• In other community integrated settings</td>
</tr>
<tr>
<td>• Paperwork, meetings, program business</td>
<td>• Other</td>
<td>• In a vehicle</td>
</tr>
<tr>
<td>• Non-employment related e.g. day programs</td>
<td>• None</td>
<td>• Other</td>
</tr>
</tbody>
</table>

### Table 3. Change in Time Invested in the Targeted Employment Supports (Minute/day)

<table>
<thead>
<tr>
<th>Goals</th>
<th>N of organizations</th>
<th>Min change</th>
<th>Max change</th>
<th>Average change</th>
<th>Average time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Networking</td>
<td>7</td>
<td>-1</td>
<td>7</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Informational interview or business tour</td>
<td>6</td>
<td>-1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Observing a job seeker</td>
<td>5</td>
<td>-2</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Participating in activities with job seekers</td>
<td>5</td>
<td>-1</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Paperwork, meetings…</td>
<td>4</td>
<td>-12</td>
<td>12</td>
<td>0</td>
<td>177</td>
</tr>
<tr>
<td>Engaging with businesses/job negotiation</td>
<td>7</td>
<td>-3</td>
<td>2</td>
<td>-1</td>
<td>7</td>
</tr>
<tr>
<td>Facilitating natural support</td>
<td>5</td>
<td>-9</td>
<td>3</td>
<td>-1</td>
<td>12</td>
</tr>
<tr>
<td>Facilitating career advancement</td>
<td>3</td>
<td>-7</td>
<td>0</td>
<td>-2</td>
<td>3</td>
</tr>
</tbody>
</table>