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Using Video Recordings as a Data Collection Strategy: Lessons from the Evaluation of Employment Coaching

Implementation studies of employment programs typically involve interviews with managers, frontline staff, and partners, and sometimes interviews or focus groups with participants. Although evaluation teams might observe some activities, observations of interactions between staff and participants are typically limited. Yet for many interventions, the interactions between staff and participants are central to the intervention.

This brief discusses the use of video recordings of interactions between program staff and participants as a data source for an implementation study of four employment coaching interventions for people with low incomes. We piloted this data collection as part of the Evaluation of Employment Coaching for TANF and Related Populations, which is being conducted for the Office of Planning, Research, and Evaluation within the Administration for Children and Families, U.S. Department of Health and Human Services (Box 1). The brief describes our process for video recording coaching sessions and our analysis, provides examples of what we learned from the data, and offers lessons for researchers considering using video recordings as a data source in future studies.

Overall, we found that collecting and analyzing video data for employment programs is feasible and can be a useful addition to implementation studies. Collecting video data with consent from participants can help evaluation teams understand the implementation of interventions that rely on staff-participant interactions. However, researchers should be sure to video enough staff-participant interactions to support conclusions. In addition to using a sampling plan, monitoring how the videos are collected and having multilingual coders can help ensure the recording sample is representative. Furthermore, tailoring the coding form to best capture the unique elements of each intervention being studied and using highly trained coders is important when observing multiple interventions with nuanced program elements.

Box 1. About the Evaluation of Employment Coaching for TANF and Related Populations

The objective of this evaluation is to learn more about the potential of coaching to help Temporary Assistance for Needy Families (TANF) recipients and other people with low incomes to succeed in the labor market and reach economic security. The evaluation uses an experimental research design to assess the effectiveness of four coaching interventions and their impacts on participants' self-regulation skills, employment, earnings, self-sufficiency, and other measures of personal and family well-being. It also examines the implementation of the four interventions. The coaching interventions in the evaluation are:

- **Family Development and Self-Sufficiency program (FaDSS)** in Iowa. Under contract to the state, 17 local human services agencies use grants from the Iowa Department of Human Rights to provide TANF recipients with coaching during home visits. Seven of those 17 agencies are participating in the evaluation.
- **Goal4 It!**™ in Jefferson County, Colorado. Goal4 It! is an employment coaching intervention designed by Mathematica and partners that is being piloted in a TANF program as an alternative to more traditional case management.
- **LIFT** in Chicago, Los Angeles, and New York City. LIFT is a nonprofit organization that provides career and financial coaching to parents and caregivers of young children. LIFT also operates in Washington, DC, but that location is not participating in the evaluation.
- **MyGoals for Employment Success** in Baltimore and Houston. MyGoals is a coaching demonstration project designed by MDRC and partners that provides employment coaching and financial incentives to unemployed adults receiving housing assistance. It is operated by the Housing Authority of Baltimore City and the Houston Housing Authority, respectively.

For additional information about the evaluation and snapshots of each program, [visit the project website](#).

Why observations are important to understand coaching

Gathering data on what happens during coaching sessions is important for the Evaluation of Employment Coaching because the interactions between program staff and participants are at the core of employment coaching. (See Box 2 for the evaluation's definition of employment coaching.) Coaching is not directive and instead involves a collaborative relationship between coach and participant. The coach partners with participants to help them set goals, determine action steps, and assess their progress toward those goals, rather than directing participants to pursue certain goals (Joyce and McConnell 2019). The participant drives the interactions, not the coach. The coach holds participants accountable for their progress while motivating them in their goal pursuit. The evaluation assesses whether coaching interactions followed these principles.

Box 2. Employment coaching defined

Coaching is an approach that (1) includes goal setting and developing action steps for meeting the goals, (2) is collaborative and not directive, (3) is individualized, (4) helps participants learn the skills to set goals on their own and work toward meeting those goals, (5) attempts to increase participants' motivation to meet goals, and (6) holds the participant accountable for progress. Employment coaching, for purposes of this study, is coaching in which goals are related directly or indirectly to employment.

Why we conducted observations using video

For the evaluation, we collected data from staff and participants on the implementation of the coaching interventions. We visited sites and interviewed coaches and other intervention staff. We also conducted 44 in-depth, in-person interviews with participants. Our site visits included in-person observations of a small number of coaching sessions and other program activities.

However, conducting observations of coaching sessions can be challenging. We were only on-site for a few days, and we expected that some participants would not attend their appointments as planned. Hence, we could only conduct one or two observations. Observing coaching sessions in person might also feel intrusive to the coaches and participants because participants are used to speaking with their coach in private.

To help with these challenges, we asked coaches and participants to video record coaching sessions after our visit and to share those recordings with us for analysis. Having program staff record and then the study team view the coaching sessions enabled us to observe those private sessions silently and gather information about the interactions we could not get from coach reports alone. Having staff record the sessions also enabled us to observe many more coaching sessions than we could during our site visits.

How we collected the video data

In spring 2019, we asked each coaching intervention to record 30 coaching sessions with consent of the participants, with the aim of obtaining 15 quality videos for each intervention for our analysis. The study team assumed that some of the videos would not be of high enough quality to use, so we asked for more than we needed. As the team began to receive and review the videos, we found that the videos were for the most part high quality. That is, the audio was clear and both the coach and participant were in the frame, so we could analyze the content of the discussions and the interactions. As a result, we revised the target to 20 videoed sessions per intervention. Ultimately, we received between 14 and 20 videos from each intervention. We selected the first 15 quality videos received to analyze for each intervention (except in the case of MyGoals Baltimore, which only submitted 14 videos) (Table 1).

Table 1. Number of videos analyzed by intervention and location

Intervention	Location	Number of videos
FaDSS	Cedar Rapids, Iowa	8
	Polk County, Iowa	7
LIFT*	Chicago, Illinois	10
	New York City, New York	5
Goal4 It!™	Jefferson County, Colorado	15
MyGoals	Baltimore, Maryland	14
	Houston, Texas	15
Total		74

*We did not ask the LIFT site in Los Angeles to record coaching sessions because of the large Spanish-speaking population. The evaluation did not have the additional resources that would have been required to code the videos in Spanish.

FaDSS = Family Development and Self-Sufficiency program.

Before our site visits, we sent coaches tablets and tripods to record the videos. We purchased the tablets for about \$217 each and the tripods for about \$62 each. Then, while study team members were on-site to interview staff, they trained the coaches on how to use the equipment. We asked that about five coaches participate from each intervention so we could observe a range of coaches, have multiple recordings from each coach, and limit the burden on any one coach. We instructed the coaches to record the appointments they had after the training, if the participant consented. For example, if the coach needed to complete six recordings, she should attempt to record her next six scheduled appointments. She should continue to attempt to record each of her subsequent appointments until she reached six recordings.

The study team instructed the coaches to send the videos to the team using a secure file-sharing software, Box, and then delete the video from the tablet once the study team confirmed the video had been received. After all the videos had been recorded, the intervention staff sent the tablets and tripods back to the study team.

Consent process and procedures

Coaches only recorded study participants, all of whom had previously consented to participate in the evaluation. The study consent form, administered at intake for participants in all the interventions except MyGoals, included language that read, “if you are in the program, you may also be asked to participate in other study activities, such as a two-hour, in-person interview and video recording of one or more of your coaching sessions to be reviewed by members of the study team.” Because the MyGoals evaluation started before we decided to collect videos, the MyGoals participants signed a consent form that did not refer to the video recording.¹ An institutional review board approved the video data collection at all the interventions, including MyGoals. The Office of Management and Budget also approved the video data collection, through its authority under the Paperwork Reduction Act.

At the beginning of a coaching session, the coach asked the participant to verbally consent to being recorded and only recorded the session if the participant consented. Coaches read each participant a consent script that explained the study and requested their participation in the recording. The participants were informed that the recording would be used for research purposes only, unless the researchers were required by law to release it, and that the recording would not be posted online

or otherwise made public. They were told that their identity or personal information would not be disclosed in any publication. They were also told they could decline to be recorded and continue with their coaching session.

If the participant consented, the coach then turned on the camera on the tablet and held up a piece of paper containing the coach’s name and the participant’s study identification number. The coach then asked the participant, “Please confirm that you have consented for our coaching session together to be video recorded.” If the participant said yes, the coach continued to record the session; the coach stopped the recording if they said no and continued the coaching session.

Coding and analyzing the data

To code the videos, we developed a standardized coding form for all interventions that coders completed while watching the videos. We developed the form based on the definition of coaching used for the evaluation (Box 2) and the four coaching approaches we were evaluating. For example, we coded whether the coach worked collaboratively with the participant, avoided directing the participant, and motivated the participant. We also coded whether goal setting and developing action steps occurred during coaching sessions. Mathematica staff with coaching expertise reviewed the form, and the study team revised it based on their comments. For example, we clarified our example of what it looks like to be nondirective and revised the options for how a coach and participant might be physically positioned during their interaction. We then tested the form on a few videos and made a few additional minor revisions, mainly to clarify language.

The coding form collected information on the following:

- Physical space and attendees, such as where the coaching took place (for example, in an office or a home), how the coach and participant were physically positioned, and if children were present
- Activities, tools, or worksheets used, such as assessments and goal-setting sheets
- The challenges and needs that the participant discussed during the session
- How the coach and participant interacted, such as whether the coach avoided directing the participant, celebrated successes, and motivated the participant

We trained staff on using the coding form and the different codes. We discussed examples of what they could observe and how to record it on the form. For example, to code whether

¹ MyGoals had already begun enrolling participants into an evaluation before they joined the Evaluation of Employment Coaching in 2018, and continued using the same consent form.

a coach and participant worked collaboratively together, coders were instructed to look for examples of the coach and participant working together to brainstorm goals or consider next steps. We also trained them on the coaching interventions and the unique elements of each to look for while viewing the videos. For example, we instructed the coders to look for the use of tools that were part of some coaching approaches. The coders noted any of the unique elements they observed in an open notes section of the form because we did not tailor the coding form to capture these elements. After the training, each coder and the trainer coded a video and compared codes. The trainer provided feedback to the coders on any coding differences and shared the trainer's coding sheet for review. Each coder coded all the videos for one intervention to help with consistent coding across each intervention's videos.

After completing the coding, a researcher input the coded data into an Excel workbook for analysis across each intervention's recordings. The researcher calculated the frequencies and percentages of the codes for each element of the coding form to identify trends in the data. For example, we calculated the percentage of coaching sessions that were held in each type of location (such as in the program office or the participant's home) and what percentage of sessions included specific activities (such as reviewing goal progress and identifying new short-term goals).

In addition to identifying data trends, we also used the video recordings as a source of examples when analyzing other evaluation data sources to help bolster our findings. For example, when discussing whether the coaches were directive, we reviewed the videos to find concrete examples of when a coach did or did not direct a participant. In one video, we observed the coach and participant collaborating and the coach not directing the participant. The coach asked the participant how she would like to spend their time together, instead of the coach setting the agenda for the meeting. The participant mentioned that she wanted to work on budgeting. The coach described the different types of budget tools and resources the intervention had to offer and asked the participant to choose which tools would be most useful for her, instead of telling the participant what tool she had to use. When determining if the coaching sessions were held in private spaces in one intervention, we reviewed the videos to see whether sessions were held in private offices or in shared cubicle space.

How we used video to learn about and describe coaching

Video data allowed us to assess fidelity to the coaching approaches. Per the definition of employment coaching (Box 2), coaches should not be directive. Instead, participants should

set their own goals and determine action steps with support from their coaches. In the videos, we observed that coaches were mostly nondirective, but that they sometimes directed participants. For example, in one session, the coach was non-directive by asking the participant, "What do you want to do? You mentioned housing, so do you want to be in an apartment by a certain time?" The participant replied, "I want to be stable," and the coach asked, "So what would that look like?" In another session, when one participant discussed conflicts she was having at home, the coach directed her by suggesting she needed to submit more housing applications so she could get her own apartment instead of asking the participant what she thought her next step should be.

Some of the coaching approaches followed a specific structure or included certain content that we were able to observe adherence to in the videos. For example, one coaching approach uses a set of tools that the participants fill out by themselves. Through the videos, we were able to observe participants completing forms by hand, as designed. In another approach, coaches are instructed to talk with participants about soft skills such as time management and emotional regulation. Watching the videos, we were able to observe when and how these types of discussions occurred.

We also observed participants and coaches working collaboratively and having positive, trusting relationships. For example, one video showed a coach and participant laughing together and the participant freely sharing her goals, including improving her health and losing weight, and her obstacles. In another video, we observed a participant discussing her recent arrest for driving under the influence and the coach helping the participant understand the requirements of her court order.

The videos showed elements of coaching that we would not have observed if we had collected just audio recordings.

We could observe body language and facial expressions that helped us understand how coaches and participants related to one another. For example, one video showed a participant's demeanor change when she learned her coach was leaving the program; she frowned, and her body language became more closed off, with her arms folded. We also were able to see the environment where the coaching took place, which was a key element of some coaching interventions. For example, in one intervention that conducts coaching during home visits, we could see the participant's home and the coach conducting a child development assessment with a mother of infant twins.

The videos helped portray the nuances of coaching. Sometimes it is hard to explain what coaching is and how it differs from other one-on-one staff and participant interactions. Often, nuanced changes in the language staff use make a

difference. The videos enabled us to closely review the coaching interactions, including the coaches' language and how the participants responded. We then wrote detailed vignettes to describe the coaching; these vignettes help illustrate the sometimes subtle differences between coaching and other interactions (see Box 3 for an example vignette).

What we learned about conducting observations using video

Coaches and participants were generally willing to be recorded, but not all were comfortable with the approach.

Most coaches were willing to have their coaching sessions videoed. To help encourage coaches to participate, we actively sought to limit the burden of the activity and quell any concerns about how the videos would be used. We trained multiple coaches at the intervention locations so no single coach would be expected to record all the videos. We assured the coaches during training that the recordings were for observational purposes only to inform the implementation study findings. We told the coaches that we would not share the videos with anyone else, including intervention leaders, and that no evaluation report would name the coach or the participant in the video.

However, we received feedback from some coaches that they were not comfortable being video recorded, and that some participants were not comfortable either. Some coaches felt awkward conducting their session while being recorded. Some participants also might have felt self-conscious about being on video. If the coaches did not feel comfortable, they might not have been as effective in describing the video process to the participants and encouraging them to participate. This may be why we received multiple videos from some coaches, and only one video from others. While this suggests that some coaches and participants may have acted differently while being video recorded than they normally would, we do not believe the risk of this happening was higher than if we had observed the sessions in person.

Having a small, non-random sample limited our use of the data.

The sample of videos we analyzed for each intervention was small. We analyzed about 15 videos from each intervention, collected by three to nine coaches at each intervention. Having a small sample made it hard to systematically compare coaching techniques between coaches and participants. For example, it was hard to determine from a small sample the situations in which coaches were directive. Because we almost always had only one observation per coach-participant dyad, we could not see how their relationship varied over time. We also lacked multiple videos of all the coaches. Although some coaches submitted multiple videos, others only submitted one.

Box 3. One participant's coaching session

Kate (not her real name) and her coach met for their coaching session in the MyGoals office. The pair sat across from each other at a desk. Kate's coach had a notepad for taking notes during their conversation. It was clear that Kate and her coach had a good relationship—they high-fived a few times during the session, Kate was engaged in the conversation, and her coach used validating and supportive language.

Kate's coach began the session by asking Kate about the progress she had made toward her goals. Kate shared her recent accomplishment of completing a training and receiving a certification in child welfare advocacy. Her coach was very encouraging and congratulatory about this accomplishment—she said how excited she was for Kate. Her coach discussed how emotionally challenging working in this field can be and tied the conversation to the emotional regulation skills Kate and her coach had discussed and worked on in earlier sessions. Kate explained that she's now able to better control her emotions and shared that when she feels angry at work, she steps out of the room to decompress.

Next, the pair discussed Kate's progress on her other goals, including obtaining a GED and driver's license. When Kate shared her challenges to obtaining these goals, her coach was validating, supportive, and offered knowledge and resources when appropriate. For example, to eliminate the financial barrier keeping Kate from obtaining her GED, her coach told her about a scholarship that will pay for it. Kate agreed that applying for the scholarship would be helpful, and her coach wrote down applying for the scholarship as a new goal.

As the two discussed Kate's goals, her coach always stated that they were in it together and reminded Kate to reach out to her in between sessions if she needed any help or if she had any questions. Kate's coach closed the session by making a copy for Kate of the plan she had written during their conversation, which outlined the new goals they set together.

Source: MyGoals Baltimore video observation

As a result, we could not consistently analyze whether coaches' techniques varied by participant or coaching session.

In addition, although we attempted to create a random sample of participants, we are not confident this occurred. Coaches were instructed to ask for consent to record their next set of coaching sessions immediately after the training. This was intended to prevent coaches from selecting which participants they wanted to record or they thought would be more willing to be recorded. We did not monitor whether coaches did this, and we did not collect data on how many participants declined to participate. For these reasons, we cannot be sure how the coaches selected the participants they recorded, and the sample might not have been representative.

The small sample and potential lack of representation meant the videos were most useful as a source of vignettes and examples of how coaching occurs instead of as a source of quantitative data. We used the data to support our findings from our interviews with staff and participants. We have and will continue to include examples, vignettes, and direct quotes from the videos in our implementation study reports.

The video equipment produced quality videos, but the file-sharing software was difficult to use.

The tablets that coaches used to record the coaching sessions worked well. They were easy to use and produced videos that were visually and audibly clear. However, some coaches faced technical difficulties using the file-sharing software, Box, to send the videos to the study team. These coaches found Box hard to navigate, and the study team needed to provide technical assistance over the phone to help them upload the videos. It also took a long time to upload large video files to Box.

Summary of lessons learned

Our study showed that it is feasible to conduct observations of one-on-one staff-participant interactions using video in employment programs. Enough coaches and participants agreed to be videoed to collect the necessary data for our analysis, although not all coaches and participants were comfortable with the approach. Participant willingness to be recorded might vary by the type of intervention and the interactions being recorded. For example, a program in which participants discuss more sensitive topics with staff members, like health or domestic violence issues, might face more challenges to obtaining participant consent to be videoed.

Collecting video data can be a useful addition to implementation studies of programs in which the nature of the interaction between staff and participants is key to assessing the intervention. Using video data enables

researchers to collect more observational data than is possible during a short site visit. Videos can also be collected over time and in multiple locations that can be useful for analyzing how implementation might vary. Video enables researchers to gather observational data when it is not possible to visit in person, such as during public health emergencies that limit travel. Video also provides more information than audio recordings, including body language, physical settings, and others present during the activity. Having video recordings also enables researchers to revisit the data if new questions emerge during analysis.

Using video might be particularly useful when analyzing the implementation of one-on-one interactions between staff and participants, like coaching, career navigation, or case management, when the conversations occur in private. It might also be useful for gathering observational data on staff and participant interactions and participant engagement during classroom or group instruction and orientations.

To help get the most out of video data collection for implementation studies, we suggest the following:

- **Collect a larger sample of videos to make the data more useful.** For future studies, we suggest collecting more videos per intervention, including more videos of the same staff, and some with the same participant, to be able to unpack differences in techniques and to have a larger sample for analysis. In our study, although some coaches submitted multiple videos, others only submitted one, so we were unable to consistently analyze whether the coaches' techniques varied by participant or coaching session.
- **Monitor the process for obtaining videos to help limit potential selection bias.** To help limit potential bias, consider overseeing the process of selecting participants to be recorded. For example, researchers could ask coaches to document their scheduled coaching sessions with participants each day after the video training and identify which participants declined to be recorded. This would help prevent coaches from picking participants they wanted to record or they thought would be more willing to be recorded. Alternatively, the programs could randomly select who would be asked to be videoed. For larger video observation efforts, consider having all staff record videos to prevent selection bias among the staff who are recorded.
- **Make sure the file-sharing software is user friendly and can handle large files.** Make the process of sending files back to researchers as easy as possible to avoid delays in obtaining the videos. A simple file-sharing process can also limit the amount of technical assistance that staff need. Video files can be quite large, so the file-sharing software needs to be capable of transmitting them.

- **Use a coding form that you can tailor.** For coding and analyzing data from multiple interventions, we recommend using a coding form that is tailored to each intervention. This will help ensure that coders are able to collect specific information that is unique to each intervention. For example, instead of coding whether a coach and participant used any form during a coaching session, the coding form could allow a coder to indicate whether a specific form was used at a specific time or for a specific reason based on the intervention's design. Including this information in a coding form would enable researchers to collect this information systematically across the videos.
- **Train coders on the material they will observe.** It is important to ensure that coders are well trained on the techniques and models they will be observing. This is especially important for activities such as coaching that involve nuanced concepts, like when and how a coach avoids directing a participant and helps a participant envision how they might act differently when facing a challenge. This could be done by providing examples to coders of what these activities look like, including using role-plays or example videos. We used this approach and found that the coders were well prepared to code the videos.
- **Have multilingual coders.** Finally, having coders who can code videos in other languages ensures that participants are not excluded, and that the findings are more representative when studying interventions that serve multilingual participants. Our data collection was limited to English-speaking participants but would have been improved by including Spanish-speaking participants, especially for one intervention that served a large Spanish-speaking population.

Reference

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