Participatory Data Analysis Workshop protocol

We will host a series of data analysis workshops with two cohorts of people affected by food insecurity in the Boulder community. The workshop cohorts will each be a single group that is consistent across the series of meetings. The protocol for the workshop series will be covered over the course of 2 - 4 workshop meetings that will each build off of the previous. Each individual workshop session will last between 1.5 and 2.5 hours. There will be at least two workshop meetings for each cohort, however the total number of workshops (whether it is 2, 3, or 4) will be driven by the participants. This will be based on whether they feel that the group has finished analyzing the data and resolved all the issues that surfaced through the analysis activities. Midway through the second workshop meeting, and for subsequent meetings, we will ask the group whether they think they would want to meet again to continue discussing and exploring the data. If so, we will schedule the next meeting at the end of the workshop. If they do not think we need to meet again, then we will adjust our time allotment for the activities to ensure that the group can reach all of the steps in the protocol. In the case that some members are unable to attend a subsequent meeting, due to availability, but would still like to participate, we will offer to meet them individually and conduct similar research activities.

Activities prior to the first meeting

To prepare for the first data analysis workshop, we will review the transcripts from the Multimedia Elicitation Interview (MEI) study and select a random sample of them from individuals that are not participating in the data analysis workshop. Our goal with excluding MEI data from individuals who are participating in the workshop is to minimize the potential for discomfort in someone having their data analyzed in their presence. This will reduce the risk that someone in the group may make a negative statement about that data in their presence.

From the randomly selected sample of transcripts, we will print them out in large font and cut out excerpts of text from those transcripts that we identify as relating to a single topic. These excerpts will be full or partial sentences or longer stories that were spoken by MEI participants during their recorded interviews. For each excerpt, members of the research team will identify if the excerpt needs to be de-identified, and if so, make edits to the excerpt and re-print it to be included. If it is deemed not possible to de-identify an excerpt, we will remove it and replace it with another. We envision needing 35 excerpts per participant in the workshop, given the time available for the workshop. The excerpts will be randomly placed into different containers, one for each workshop participant who has signed up to attend.

Informed consent for participation

We will ensure that participants have a detailed understanding of the research project before attending the workshop - either by meeting with them in person or discussing it over the phone. For those that we meet with in person, either at a food bank, their home, or another private location that they identify as convenient we will gain informed consent if time permits during that meeting. For those that we do not meet in person or who are unable to provide informed consent prior to the workshop, we will ask them to come to the workshop at least 15 minutes early to review the consent form and provide informed consent if they decide to participate. Those who do not wish to participate at that time will be able to leave before the beginning of the workshop. We will also emphasize that anyone can leave at any point in the workshop for any reason.

Introductions and brief training

The first activity will be introductions of everyone present, including research team members, participants, and a translator if one is present. Everyone will be asked to only use their first names during the workshop activities and will also be provided a nametag onto which they can write their first name. We will also use a neutral icebreaker question for the group to get people talking and comfortable sharing with the group.

After introductions, members of the research team will provide a brief introduction to the research project and the MEI study, which is the basis of the data set that they will be analyzing. Following that, we will provide a brief presentation on the topic of qualitative data analysis and thematic analysis using coding. This will focus on establishing the goals of the activities – creating a general understanding of the common themes that occur across individuals and identifying the unique experiences that are not common across individuals. This step is intended to clarify the connections between the analysis activities and the broader goals of research. We will also include at least one example to demonstrate how to code excerpts of data and relate multiple excerpts to each other. Specifically, we will demonstrate how we would take a handful of excerpts and identify two of those that are similar in someway and describing that similarity as a thematic code. We will use the guiding questions in Table 1 to help people develop labels for excerpts and determine whether and how excerpts are similar.

How would you summarize what these individuals are saying in a few words?
What do you think is going on in these statements?
What do you think is similar between these statements?

Table 1. Prompts for developing category names

Following the brief training, we will put participants into dyads by pairing them with the person sitting next to them. In the case where we have an odd number of participants, we will create a group of three. We will ask people to work with their partner to try out the activity for one pair of excerpts. They will be asked to select 5 excerpts from each of their baskets (for a total of 10 excerpts) and then, as a dyad, identify two excerpts that are similar based on the content or underlying meaning. They will then be asked to name, or provide a title, to describe the similarity between the two excerpts. Researchers will roam around the group during this time to help clarify their questions and ensure that everyone understands the activity.

Once all the dyads have identified their pair of excerpts and assigned them a title, each dyad will report out to the group on the two excerpts they identified and the title they generated. They will place their excerpts on a whiteboard or piece of butcher paper using tape and then the title using a sticky note. Questions, uncertainties, or disagreements will be discussed as a group and feedback will be provided. During the share out, we will look for any commonalities across the themes that the dyads identified and then use that to explain how pairs of excerpts can be combined or grown with additional excerpts that relate to the same idea. If no commonalities exist, the research team will identify an excerpt to add to one of the themes to show how the groupings can be grown and iterated on over time as more excerpts are reviewed. After the share out is complete, we will answer any questions that the activity provoked from participants.

Grouping similar excerpts with labels

When no questions remain from participants, we will ask them to use the guiding questions we provided (see Table 1) to work with their partner to process the rest of their excerpts in the same manner we had demonstrated. The goal will be to identify pairs of similar excerpts, provide titles for those excerpts, and then combine groups of excerpts sharing similar themes into larger groupings. Each dyad will be given a piece of white butcher paper to tape their groupings of excerpts along with the titles for them. This will allow them to move the data around and dynamically change their groupings and labels as new data emerges or as their understanding of the themes evolves. Members of the research team will float around to the different dyads and help them work through challenges and provide support. Participants will continue until they have grouped all of their excerpts or until they are left only with excerpts that do not belong with any group. Participants will keep those excerpts that do not belong with any groups in their own singleton groups.

Merge and organize themes across dyads

Once each dyad has completed grouping and labeling their excerpts, we will reconvene the whole group and let each dyad share out their findings. All of the pieces of butcher paper from the dyads will be placed next to each other along the wall and the dyads will take turns presenting their findings to the group. As dyads share their findings, the others will be instructed to listen carefully to the themes and use the prompts in Table 2 to identify themes from their own analysis that might be related or might overlap in some way. When a dyad identifies a similar theme, we will ask them to briefly describe their theme and the entire group will decide, using consensus decision making, whether the themes should be combined or whether another relationship should be described between the two themes (i.e., cause/effect, temporal, thematic antonym). We will ask participants to provide evidence or examples from the data that support their claims regarding the relationships.

What are two themes that you see that you think are related? How are they related?
What do you think caused or led to the situations

represented in this theme?
Do you think that any of the situations in one theme were caused or affected by the situations from another theme?
Are there any statements or pieces of data that you think refute this point?

Table 2. Prompts for merging and organizing themes

After all the dyads have shared, we will ask everyone to look for one more pair of common or related themes across all of the papers. Individuals will get up and move to the pieces of butcher paper along the wall to review the themes closer and try to identify two themes that are related. They will then present the new grouping or relationship that they have identified to the rest of the group for discussion and consensus decision-making. In cases where an agreement cannot be reached about the relationship between two themes, we will keep the themes separate and document the potential relationships that the group described.

Individual responses to the findings

Once the grouping and relating of themes has been completed, we will ask participants to reflect on their own experiences in relation to the findings. We will ask four questions to guide their reflection which include:

1. What was one statement or thing that a person said that surprised you the most? What surprised you about it?
2. What is a theme that you would want to explore further or know more about?
3. Are there any experiences that you have had or heard from others that run counter these themes?
4. Have you had or heard of any experiences that are similar to these themes?

After everyone has had a chance to write down responses to each of these questions, we will provide a space for people to share out their thoughts. People can decide whether or not they want to share and there will be no expectation that they do so at this point - allowing people to keep their own personal experiences private if they choose. Members of the research team will also be able to share their experiences and reactions to the data at this time as well. We will ask people to provide evidence from the data or specific examples from their experiences to support their responses to these different questions.

Discussing dissemination

The final step with the group will be to develop a dissemination plan for the findings. We will use a think-pair-share approach where we will again assign participants into dyads, though different dyads than the original analysis activities. They will be asked to develop responses to a series of prompts (see Table 3), presented one at a time, by first discussing with their partner and then sharing out their ideas to the larger group. Members of the research team will also share their ideas during this time. One participant will be in charge of writing down the ideas on a whiteboard or piece of butcher paper to preserve them.

Who do you think should know about the information we discovered today?
(In what form/how) do you think we could share the findings we developed to help people better understand the challenges in getting food in Boulder?
Where would you want to see these findings displayed?

Table 3. Prompts for dissemination discussion

Once we have written out all of our ideas, we will go through each idea and ask the group, including members of the research team, to use their thumbs to indicate their level of interest and comfort with each idea. A thumbs up means they are very interested in the approach, a sideways thumb means they are not very interested or uncertain, and a thumbs down means they are uncomfortable with the idea. We will inform the group that if there are any ideas that they are concerned about, but don't feel comfortable sharing during this activity, then they can speak with us afterwards. We will let the group know that this voting will be the prioritization of our efforts to share the findings. One participant will be in charge of tallying the thumbs up and noting any thumbs down next to each idea. We will briefly review the results of that activity, especially those receiving a thumbs down to understand the concerns people have. If there is still a concern after discussing an idea and we cannot come to an agreement, those that still have at least one thumbs down will be excluded to ensure people feel comfortable with the overall plan.

The very last activity will be quick check-in with every participant to ask them to identify one thing they learned from the activities and if there are any ways use they will use that information in their life. During this time, we will also ask participants who would like to be involved with disseminating the results to write down their first name, best contact information (either phone or email), and the types of activities they would like to be involved in based on the dissemination ideas we developed. We will collect the papers from those that want to be involved in some way and let them know that we'll follow-up based on their interests.

The research team will make themselves available after the workshop comes to a close to answer any of the participant's questions, to talk through next steps for people that want to maintain involvement going forward, and to address any concerns.

Providing a thank you for participating

Because we are asking a significant commitment from folks, we plan to provide gift cards to local grocery stores or healthy eating venues to express our gratitude for their help. Each individual will receive $45 in gift cards, which will be distributed as $20 at the end of the first meeting and $25 at the end of the second meeting.

Citations

Jackson, S. F. (2008). A participatory group process to analyze qualitative data. *Progress in Community Health Partnerships : Research, Education, and Action*, *2*(2), 161–70.

Fortin, R., Jackson, S. F., Maher, J., & Moravac, C. (2014). I WAS HERE: young mothers who have experienced homelessness use Photovoice and participatory qualitative analysis to demonstrate strengths and assets. *Global Health Promotion*, *0*(0), 1–13.