SART Institute
Qualitative and Mixed Methods in Substance Use Disorder Research

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Qualitative Research

Qualitative Traditions

- Biography, life history

- History

- Journalism

- Case study

- Ethnography

- Grounded theory

- Sociolinguistics

Populations/Situations Where Qualitative Methods Are Useful

- **Population under study is "hidden"** (e.g., individuals with substance use disorders, who are homeless, involved in the criminal justice system)

- **Experience/event under study is not easily reduced to numerical categories** (e.g., barriers to treatment retention)

- **Topic under study is little explored** (e.g., experiences of homeless women transitioning from incarceration, turning points in drug use trajectories)

Qualitative Methods Can Contribute to the Research Design Process

- Improve our understanding of a target population's beliefs and attitudes

- Helps with understanding the social context in which behaviors occur

- Assists in determining where and how to recruit study population

Qualitative Methods Can be Used During the Research Project

- Assist in the development of assessment instruments by trying them out on the target group

- Enhance design through triangulation

- Assist in the interpretation of quantitatively obtained results

- Illuminate issues with implementation

Qualitative Research Is…

- Non-numeric

- Includes the examination and interpretation of:

  ➢ field notes, transcripts

  ➢ texts, documents

  ➢ images, videos, artifacts

- Often exploratory

- Involves fewer cases, but collects rich

  in-depth information

  A lot about a little.
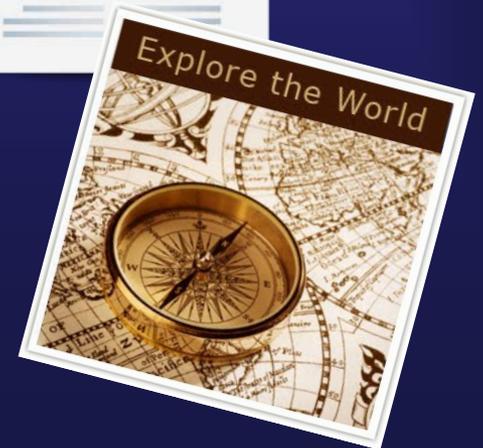
Walk a Mile in Their Shoes!

See the world through the eyes of your participants

Common Qualitative Data Collection Techniques

- Intensive or key informant interviews

- Focus group interviews

- Document and artifact collection

- Participant observation, naturalistic observation

These methods can be used separately or together.

Intensive or Key Informant Interviews

What intensive/key informant interviews are:

- **Semi-structured**
  - ➢ Open ended questions on topics of interest to the researcher
  - ➢ Broad questions and prompts
- **Unstructured**
  - ➢ One or two topics
  - ➢ Follow up questions are based on how interviewee previously responded
  - ➢ May require a series of interviews to fully explore a topic

Intensive or Key Informant Interviews

What a semi-structured interview does:

- Provides information in regard to specific topics about the interviewee's beliefs, attitudes, needs, or behaviors

What an unstructured interview does:

- Provides in-depth information about the interviewee's world view, how they categorize things, their life history, beliefs, and attitudes

Intensive or Key Informant Interview Characteristics

- Interview length is open-ended and determined by the time needed to answer the questions or explore the topic

- Data collected includes:
  - ➢ interview questions and probes
  - ➢ written notes
  - ➢ Recording (video or audio)
  - ➢ debriefing notes

Focus Group Interviews

What a focus group interview is:

- a directed discussion between people who share common interests or expertise on a specified topic

- a semi-structured interview

What a focus group interview does:

- Provides information about the beliefs, attitudes, needs, or behaviors people have in regard to a specific topic such as a program or program component

Focus Group Characteristics

- Moderator and note taker
- Recommended size: 6-10 people
- Interview length: $1^{1/2}$ - 3 hours
- Several groups should be run
  - enough to provide adequate breadth and depth of information
  - saturation is used to determine when enough groups have been conducted
- Data collected includes:
  - interview questions and probes
  - written notes
  - audio recording
  - debriefing session

Document and Artifact Collection

What it involves:

- **Collection of written/electronic documents relevant to research topic**
    - includes: client charts, other files, schedules, informational materials provided to public, meeting notes, agendas, reports, newspaper articles, web site materials, etc.

- **Collection of artifacts relevant to research topic**
    - includes: material artifacts (e.g., home made crack pipe), photographs, film, video, etc.

Document and Artifact Collection

What it does:

- **Provides historical data on topic of interest**

- **Provides information on a group's terminology or categories**

- **Provides information on how people interact with the physical world around them and how they alter that world**

- **Provides additional data sources for triangulation or for multiple perspectives**

GROUND RULES FOR GROUP THERAPY

COME ON TIME
*do not keep others waiting.
COME EVERY WEEK
*make a commitment to the group.
*call the clinic (***-****) if you can't make it.
BE SUPPORTIVE TO EACH OTHER
BE CONSTRUCTIVE
* avoid criticism, give constructive feedback.
* help each other find the good side of things.
* be caring, thoughtful.
* don't put pressure on each other (no "shoulds").
EQUAL TIME FOR ALL
* give everyone a chance to talk.
* one person at a time talks, no side conversations.

Participant Observation
Naturalistic Observation

What participant/naturalistic observation is:

- A data collection method in which the observer becomes "part" of the environment or cultural context and acts as the data collection instrument

- Example: Quality improvement model – pretending you are a client and walking through the process of obtaining a service

Qualitative Data Analysis Process

- Re-examine the objectives of the study
- Thoroughly familiarize yourself with the data
- Conduct a content analysis of each transcript
- Develop a coding scheme
- Conduct a logical analysis across transcripts
- Summarize trends (keep the objectives in mind)
- Assemble statements from participants that illustrate trends
- Incorporate summaries and illustrative statements into final report

Examples of Qualitative Research From Our Work

Patient perspectives on buprenorphine/naloxone:
A qualitative study of retention during the Starting Treatment with Agonist Replacement Therapies (START) Study

C. Teruya, R.P. Schwartz, S. G. Mitchell, et al.,

Journal of Psychoactive Drugs, 46:5, 412-426

Study Aim

- To understand the differential retention rates of BUP/NX compared to MET participants in START from the perspectives of patients and treatment providers
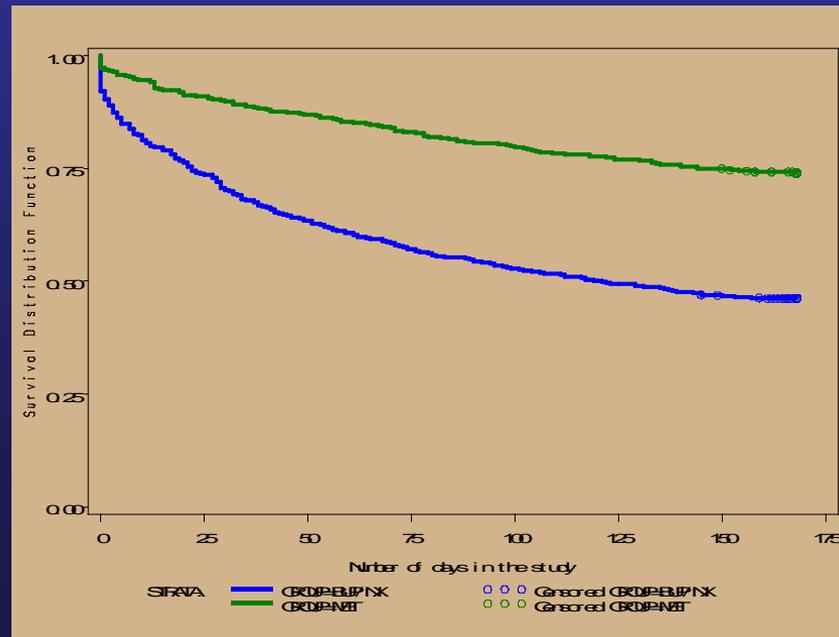
Methods

- Data collected Sept. 2009 – Sept. 2010
- 243 Semi-structured interviews
  - ➢ 79 Program Directors and staff
  - ➢ 79 Non-Completers (67 BUP/NX; 12 MET)
  - ➢ 70 Completers (38 BUP/NX; 32 MET)
  - ➢ 15 Non START
- 12 Focus Groups
  - ➢ 38 Active participants (23 BUP/NX; 15 MET)
- Coded and content analyzed using Atlas.ti

Main Interview Topics

- Reasons for enrolling in START
- Prior experience with BUP/NX and MET
- Medication preference
- Experience with medication during START
- Reasons for leaving treatment early (< 24 weeks)
- Reasons for completing treatment
- Advice to opiate users thinking about seeking BUP/NX or MET treatment
- Implementation challenges and successes*
- Suggestions for improving retention*

* Staff Interviews

Findings – Patients' Reasons for Leaving START – Themes Unique to BUP/NX

- Negative experiences with medication
- Switched to MET maintenance
- Wanted MET
- Desire to use/feel the effects of opiates
- Inconvenience
- Didn't feel needed the medication anymore

Theme: Wanted Methadone

"I came for methadone. They said I couldn't get it, I had to get Suboxone, and I walked out the door." *male participant*

"I was hopin' for the methadone. If I'd gotten that, I'd have stayed the whole eight months." *male participant*

Theme: Desire to Use/Feel the Effects of Opiates

"There's no doubt in my mind…being that it worked so well as a blocker, it didn't work out for me, so I stopped." *male participant*

"When I would take methadone, it would kinda give me energy, I guess I would say, where the Suboxone didn't do that for me. Just that little bit of, not really euphoric. I don't know how to explain the feeling – just made me feel good." *female participant*

Transitioning into the Community: Perceptions of Barriers and Facilitators Experienced By Formerly Incarcerated, Homeless Women during Reentry – A Qualitative Study

B.E. Salem, J. Kwon, M.L. Ekstand, E. Hall,
S. Turner, M. Faucette, & R. Slaughter

Study Aims

- Part of a larger mixed-methods study (N=126) that involved a randomized controlled trial comparing dialectical behavioral therapy-case management with a health promotion program in achieving drug and alcohol abstinence among recently incarcerated homeless women (PI: Nyamathi).

Study Aims

Qualitative study to:

- describe the pathways to incarceration and addiction, and factors influencing community reentry

- to understand women's perspectives on health and social services within and outside the residential treatment programs

Methods

- Qualitative, cross sectional design
- Three focus groups
- Focus group questions were developed with assistance from a community advisory board
- Participants were recently incarcerated, homeless women (N=18; ages 23 to 53)

Analysis Methods

- Content and thematic analysis of transcripts by three researchers
- Trustworthiness of the data analysis was safeguarded by addressing four issues during the data analytic process:
  a) credibility (similar to internal validity)
  b) transferability (in preference to external validity/generalizability)
  c) dependability (in preference to reliability)
  d) confirmability (in preference to objectivity).*

* Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22*(2), 63-75.

Results

Theme 1: Access to Resources - Barriers and Facilitators during Community Transition

- Example: lack of tangible support in navigating complex reentry processes
  - "…All the information that you gather would be really nice if you had a very current and up-to-date resource book for people that got out of prison… Or, maybe it was given prior to...getting out of prison."

Results

- Women shared that they needed access to technology during reentry, including access to a cell phone, a literacy lab, Internet and a general information line.

- Many of the women described access to "Obama phones" which were lifeline assistance phone plans available to those with low income.

- They noted that having a cell phone was critical as many were filing applications and if they did not respond within a certain amount of time, they would be cancelled.

Results

Theme 2: Familial Reconciliation and Parenting during Community Transition

- Women described the effects of incarceration on their families and their reunification needs post-incarceration.
    - "...People don't know how to be parents. They didn't have good parents themselves. So it's like the people that are mentoring to us, they have to be practicing what they're preaching. They have to be good role models for us to really look at them and try to follow suit and, you know, walk in their light too."
    - "...I feel it's so important for a mother getting out of prison and a child ...to have a class or therapy to go to build that bond back so ... [as to] why they shouldn't go down the road your mother been down...."

Results

Theme 3: Trauma and Self-Care Support during Community Transition

- A number of individual-level agency facilitators for self-care were discussed and included the following: a) personal focus and motivation, b) motivation from others, and c) self-love.

- One woman illustrated the importance of personal focus and motivation. She said:

    - "...Staying focused is really important you know. Staying focused and knowing, you know, what your journey is...help is out there...it exists. You just have to be willing and, you know, motivated. You have to motivate yourself. You can't wait for people to motivate you..."

Mixed-Methods Research

Mixed-Methods Designs

- Combines elements of qualitative and quantitative research approaches (e.g., data collection, analysis) to answer the research questions

- For purposes of obtaining both the depth and breadth of understanding and corroboration

Benefits of Using Mixed Methods

- Offset the limitations and use the strengths of each method
- Answer a question that can't be answered by any one method alone
- Triangulate data sources – increase validity by corroboration between qualitative and quantitative data
- More complete and comprehensive picture of phenomenon under study
- Explain findings by using a different approach
- Develop and test hypotheses
- Develop and test instruments
- Reflects participants' point of view

Considerations When Developing a Mixed-Methods Strategy

- Timing
  - Concurrent or sequencing of quantitative and qualitative data collection
- Priority
  - Equal weight or priority given to the quantitative and qualitative data collection and analysis
- Coordinating findings
  - Stage in the research when the quantitative and qualitative data and findings will be integrated

Major Mixed-Methods Designs

- Convergent
- Explanatory Sequential
- Exploratory Sequential
- Embedded

Convergent Design

- Collects the data concurrently

- Equal weight

- Analyzes two data sets separately (compare/relate)

- Mixes the data sets by merging results during interpretation (and sometimes during data analysis)

Cresswell, W., & Plano-Clark, V. (2011). Designing and Conducting Mixed Methods Research, 2nd ed. Sage Publications: Thousand Oaks, CA.

Explanatory Sequential Design

- Quantitative data collection & analysis
- Followed by qualitative data collection & analysis, then interpretation
- Quantitative data collection and analysis are priority
- Qualitative data used to help *explain* quantitative results that need further clarification

Exploratory Sequential Design

- Qualitative data collection and analysis
- Followed by quantitative data collection and analysis, then interpretation
- Qualitative data collection and analysis are priority
- Uses qualitative findings to *explore* or build the subsequent quantitative phase (e.g., research questions and variables, developing a survey instrument)

Embedded Design

- Used when a single data set is not sufficient, different questions need to be answered, and each type of question requires different types of data.
- Collect and analyze quantitative and qualitative data within a quantitative research design, qualitative research design, or research procedure
- Collection and analysis of the second data set could occur before, during, and/or after implementation and analysis procedures associated with the larger design
- The qualitative strand is commonly embedded within an experimental design and provides a deeper understanding of research participants' experiences.

Challenges and Tips

- IRB challenges

- Volume of data!

- Time consuming

- Don't wait until the end to begin the data analysis process

Questions?

Thank You!

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