Chapter 2. Research Methods for Community-based Studies

Background on Community-based Studies

The research methods used to conduct community case studies today are based on a long history of development. Among the first to examine communities were anthropologists like Bronislaw Malinowski, A.R. Radcliffe-Brown, and Claude Lévi-Strauss. A second group to pioneer community studies included Robert Park and the "Chicago school" sociologists. Other classic studies were conducted by Robert Lynd and Helen Merrell Lynd (Muncie, IN), W. Lloyd Warner (Newburyport, MA), Arthur J. Vidich and Joseph Bensman (Springdale, NY), and Sonya Salamon ("St. Boniface" and "Emerson"). These social scientists developed research techniques that are still used today, such as participant-as-observer fieldwork, interviews, community and organizational documentary data, secondary data. As community case studies continue to use the methods developed by these early pioneers, a growing body of research methods literature has emerged (e.g., Jason and Glenwick 2012; Jason and Glenwick. 2015; Johnson 20160.

Philosophy of Community-based Studies

A question of growing concern is the relationship between the researchers and the researched (members of the community). Historically, university or government researchers may have collected data on communities by conducting surveys and interviews and collecting documents and records for projects in which they were interested in a "top-down" fashion. Community leaders, officials, and residents may or may not have been informed or invited to participate in these community-based studies.

Beginning in the 1970s, educators (e.g., Paulo Freire[1]), researchers (e.g., Kurt Lewin[2]), community organizers (e.g., Orlando Fals-Borda[3]), and social movement activists (e.g., leaders in the Civil Rights Movement[4]) employed strategies that served as the basis for Participatory Action Research (PAR). Underlying each of these strategies was, first, a philosophy that research must be done <u>with</u> or <u>by</u> those being researched rather than <u>for</u> or <u>on</u> them. Second, research would be a collective and democratic emergent process that addressed the felt concerns of the community. And third, the strategies assumed that a critical reflexive step would lead to social and political action, then back to conversations on community needs and data collection, in a cyclical fashion. The resulting process became a partnership whereby community members and

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[1] Shor, Ira and Paulo Freire. 1987. *A Pedagogy for Liberation: Dialogues on Transforming Education*. Westport, CT: Bergin & Garvey.

[2] Lewin, Kurt. 1946. "Action Research and Minority Problems." *Journal of Social Issues* 2(4):34–46.

[3] Fals-Borda, Orlando and Mohammad A. Rahman. 1991. *Action and Knowledge: Breaking the Monopoly with Participatory Action-Research*. Lanham, MD: Rowman & Littlefield.

[4] Horton, Myles and Paulo Freire. 1990. *We Make the Road by Walking: Conversations on Education and Social Change*. Philadelphia, PA: Temple University Press.

researchers engaged in collaboration and partnerships with mutual benefits. Although variations exist among them, several PAR approaches currently are used such as action research, participatory rural appraisal, participatory learning and action, indigenous knowledge research, and critical pedagogy, each of which can be described as a “bottom-up” approach.

Community studies today typically fall at a point along a continuum ranging from “top-down” approaches to meet the needs of academic research or governmental programs to “bottom-up,” PAR approaches to address community or neighborhood concerns. The present community-based project falls in the middle of that continuum in that the project was conceived external to the communities to be studied. However, inclusive committees of community leaders, officials, and members were convened to give guidance to the project. Additionally, the communities received regular reports on the researchers’ findings that may be useful in their own development efforts.

Communities and Community Advisory Boards

Several criteria were used to select case-study communities in the beginning phase of this project. First, for logistical purposes, the communities must be accessible to the research team members in the Northern Plains. Second, since the focus of the case studies was on small towns, the community must have a population less than 10,000, yet have a population sufficient for a study (greater than 200 population). Third, the communities must have experienced a natural disaster such as a tornado, flood, or drought – the disasters most prevalent in the Northern Plains states. Fourth, the community leaders, officials, and residents must be amenable to having a research team investigate their town. These criteria resulted in a substantial number of potential case-study communities in the region. Three towns were selected: Breckenridge, MN (population 3,366; recovering from a 1997 flood); Pilger, NE (population 347; recovering from a tornado); and McCook, NE (population 7,697; recovering from a multi-year drought).

Community leaders, city officials, and residents were contacted in each of the three communities to form an inclusive Community Advisory Boards. These individuals were selected based on the roles they played in the city and in the disaster recovery. Although the goal was to form Community Advisory Boards of 8-to-12 individuals, membership was open so anyone in the community was welcome. The purpose of the Community Advisory Boards was to: (1) provide guidance to the research team members as they sought data; (2) to provide feedback on the veracity and completeness of the team’s findings; and (3) to serve as a liaison between the research team and the residents and organizations in the community. The research teams met with their respective Community Advisory Boards prior to entry into the community, at appointed times throughout the data collection phase, and upon completion of the project.

Institutional Review Boards

The Institutional Review Board (IRB) approval is necessary prior to beginning a community-based study. The researchers will design the study using a variety of methods ranging from interviews and observations to collection of documentary and secondary data. These methods may involve direct contact with “human subjects” for whom informed consent, confidentiality, risks and benefits of data collection, use of the data, and final disposition of her data must be described. In most community-based studies, the unit of analysis is not the individuals but the community. Thus, the IRB will deem the project to be in the Exempt category.

Data Collection Methods Used in the Current Project

The current project made use of the many of the methods developed by the pioneers listed above. Among these were observation and participant observation, interviews, focus groups, secondary data, documentary data, and photographic data. A description of each of these methods are provided as well as methodological and ethical challenges of each. Additional detailed descriptions of each of these methods may be found in a variety of social research methods texts (e.g., Babbie 2014; Adler and Clark 2011).

1. Observation.

One field research technique used in community research is observation (Lofland, Snow, Anderson, and Lofland 2005). Researchers simply observe social phenomena in the community without participating in or engaging the community. By definition, the researchers observe and note people, their behavior, and other artifacts without being known as a researcher or having obtained permission to make observations. Advantages of NOT being known as a researcher is that naturalistic settings may be studied, the process is non-intrusive, and the researcher does not necessarily influence the social/behavioral process, thus limiting the "Hawthorn effect," The process typically takes place in public settings such as on city streets or parks, athletic or civic events, or holiday festivities. However, observations may take place in private or quasi-public settings such as churches, stores, or government offices.

Researchers typically are able to record their observations directly on paper or digitally. Their data may be quantitative in nature, such as the number of vehicles in a parking lot or number of attendees at a sporting event. Other data may be qualitative, such as a description of the condition of houses in a neighborhood or comments overheard at a political rally. The researchers may use a process of making mental notes of what they observe and/or making jotted notes. The jotted notes are used to write a set of full field notes used for analysis. Analysis is conducted by noting patterns in the data and drawing conclusions about various facets of the community.

Researchers using observational techniques may face a variety of methodological concerns. Are observational opportunities readily accessible? Is it appropriate to record observations unobtrusively?

Ethical issues also emerge. When is it appropriate to make observations in private locations? Is it appropriate to record observations of people's behavior or words without first informing them of the observation and obtaining their permission to do so? What are the risks associated with the observations; that is, will the analysis benefit or hurt those being observed? What should be done if the researcher observes illegal or abusive behavior? Both the methodological and ethical concerns must be anticipated and addressed BEFORE the study is engaged.

In the present study, observations were conducted during the initial phase of the community study as a “windshield reconnaissance.” During this phase, the researchers walked or drove around the community to familiarize themselves with the physical layout of the town, location of key facilities, the condition of buildings and residences, and potential meeting locations. The researchers made notes of their observations and included them in their CCF analyses.

2. <u>Participant Observation</u>.

A second field research technique is participant observation (PO) (DeWalt and DeWalt 2010; Jorgensen 1989). Researchers using this technique may participate in community activities and ARE known as researchers by having informed those being observed of his/her work. Examples of locations where PO have been used include businesses, churches, or organizational settings. An advantage of PO is that the researcher can observe in naturalistic settings, however a disadvantage is that people may adjust what they say and do since they are being observed. Typically, the researchers use note-taking methods similar to those used in the Observation method; mental notes and/or jotted notes are converted to a set of full field notes. Analysis is conducted on the full field notes.

Methodological issues may stem from how the researcher informs those being observed that he/she is a researcher. The researcher should provide information about his/her identity and affiliation, an account or description of their work, how the findings will be analyzed and disseminated, and the risks and benefits that accrue to those being observed. Other methodological issues may involve scheduling times and places to make observations and the methods by which note-taking will be done.

Ethical issues involve whether or not to obtain informed consent and how to consider vulnerable populations (e.g., children and the elderly). The researchers must consider the risks of recording observations that place those being observed at risk.

The current community-based case studies employed PO methods as the researchers attended a variety of meetings and observed naturalistic settings. In each case, they informed organizational officials or members of the project, the data to be collected, and how it was to be used. The researchers stated that they would provide copies of the report to the various organizations they observed. Some of the meetings included those of county commissions, city councils, school boards, Chambers of Commerce, emergency management agencies, and a variety of governmental agencies. Participant observers took notes at the various meetings. These data were analyzed using the CCF.

3. <u>Interviews</u>.

Interviews in community-based studies involve asking a series of questions to an individual with knowledge or experiences about the community. A set of questions and probes are prepared in advance specific to the interviewee. The interviews are audio recorded, from which written transcriptions are made for data analysis purposes. Data analysis involves comparing the nominal responses interviewees made to similar questions in order to list and describe the themes (Gubrium, Holstein, Marvasti, and McKinney 2012).

One of the methodological issues interviewers face is selection – who should be interviewed? Random sampling is typically less of a concern in community-based research than in other forms of social science research. Interviewees are selected because of their knowledge of and experiences in the community. They are intentionally selected because of the offices they hold, the agencies or organizations they represent, or the experiences they had. Nevertheless, interviewees should not be limited to an elite group of community influentials. Rather, interviewees should include residents who will be affected by community development efforts, which include young and old, men and women, majority and minority residents, affluent and less affluent, etc.

A second methodological concern pertains to scheduling the interview. When potential interviewees are invited to the interview, they should be informed of the nature of the questions to be asked and how the information will be used. The interview should be conducted at a time and date convenient both to the interviewer and interviewee. The place of the interview must be convenient, safe, and provide for confidentiality.

A third methodological concern involves recording the data. The interview may be recorded by taking notes on paper or by audio recording. Data recording will depend on the interviewee's comfort level. Whether verbatims from the notes or transcripts from the audio recordings are typed, they should be completed on the same day so data are not lost.

Confidentiality and informed consent are among the key ethical issues involved in interviewing. These issues are particularly salient if the unit of analysis is community residents rather than the broader community itself. In this case, the IRB may require than the interviewee sign an informed consent form.

Interviews in the current study were scheduled and conducted with community residents, elected officials, community leaders, business owners, newspaper editors, clergy, etc. Lists of potential interviewees were drafted prior to entering the communities in the form of a purposive (nonrandom) sample. Interviewees were asked for names of other individuals (nonrandom "snowball" sample) in the community who may have knowledge about the community, the disaster, and the recovery. Attempts were made to include an interviewee pool of men and women, young and old, minorities, and a variety of occupational backgrounds. Most of the interviews ranged from 30-45 minutes, although in a few cases the conversation extended beyond one hour where the interviewees were particularly engaged.

Lists of interview questions and probes were drafted prior to the interviews. Although questions were tailored according to the individuals to be interviewed, most revolved around three themes: How would you describe the community prior to the disaster?; What were the processes used by the community for the long-term recovery?; and How would you describe the community today?

The interviews were audio recorded and transcribed. Upon completion of data analysis, the recordings and transcriptions were destroyed for privacy purposes. Transcriptions were coded according to emergent themes organized around the community capitals framework (CCF).

4. Focus Groups.

Focus groups have many similarities with the interview method. In both cases a series of questions and probes are asked; the responses are recorded and transcribed; the written transcriptions become the data to be analyzed. However, there are several aspects of focus groups that are unique. Focus groups typically involve six-to-ten participants, lasted 75-to-90 minutes, and involved three-to-five questions, plus probes (Stewart and Shamdasani 2015).

In the current study, individuals were invited to participate focus groups based on their roles in the community. The focus groups typically revolved around selected CCF themes and members were recruited accordingly. Focus group questions similar to those used in the interviews were used: How would you describe the community prior to the disaster?; What were the processes used by the community for the long-term recovery?; and How would you describe the community today?

The focus groups were audio recorded and transcribed. Upon completion of data analysis, the recordings and transcriptions were destroyed for privacy purposes. Transcriptions were coded according to emergent themes organized around the community capitals framework (CCF). Qualitative software programs, such as NVivo, were used to analyze interview and focus group transcripts.

5. Secondary Data Analysis.

Secondary data include information that had previously been collected by others for purposes unrelated to the present study (Vartanian 2010). One form of secondary data of particular importance to community-based studies is census data. As mandated by the U.S. Constitution, the decennial population census is collected every 10 years by the Census Bureau for the purpose of congressional apportionment. However, the Census Bureau collects many other types of data ranging from population and housing characteristics to education, industry, and income. Current data (2010, the most recent decennial census) as well as historical data (2000 and previous) are available on the Census Bureau's website at www.census.gov. Data are aggregated at the city level ("place") and sub-city levels (census tracts, block groups, and blocks). Additionally, data may be retrieved at the congressional district, school district, state legislative district, and ZIP code tabulation areas levels.

Besides the decennial census of population and housing, the Census Bureau provides population estimates for years between the decennial census years and projects for years in the future. Other censuses include annual economic surveys, surveys of governments, and county business patterns. Additional agencies from whom secondary data are available include the U.S. Department of Agriculture, the Bureau of Economic Analysis, and the Department of Housing and Urban Development, to name a few.

One of the largest methodological issues researchers will face when attempting to retrieve census data is navigating the Census Bureau's website. They must have an understanding of census geography and the types of data that are needed.

If an ethical concern is privacy, the researcher should be aware that census data are aggregated such that no individual's information is available. When lower levels of census geographies (e.g., block level) are requested that may have small populations, these data are suppressed or merged with other geographies to avoid revealing individual information.

The present study made use of census data to determine current and historic populations and how populations may have changed as a result of natural disasters. Census data were used to find the numbers of houses (occupied and vacant) and economic change.

6. Documentary Data Analysis.

Documentary data consist of written materials pertinent to the community. These materials may be paper-based or electronic and include zoning ordinance and land use maps, promotional materials, local histories, diaries and memoirs, meeting minutes, business documents, organizational budgets, websites, and Facebook sites. A particularly important community-based document include is the newspaper (Photograph 1). Although some documents used in community studies are publically available (e.g., websites and newspapers), others may private (e.g., minutes and budgets) for which requests must be made to obtain them and permission must be granted to make use of them (Hodson, 1999; McCulloch 2004).

Some documents, such as minutes and budgets, have become the recorded history for the community and is organizations. Other documents, such as memoirs, are residents' recollections and perceptions of events. A methodological issue is to "triangulate" these data with each other to validate factuality. One ethical concern involves use of residents' written memoirs of community events. These documents may reveal details, not just of the resident, but of other individuals as well. Although these may be public documents, care must be taken in use of names and personal information in subsequent publications.

Photograph 1. Collecting documentary data in a newspaper archive.
(Source: Gary A. Goreham, 2016)

The present study made use of many forms of documentary data. Current and past editions of newspapers were available to the researchers. Newspaper offices maintain an archive of newspaper editions useful in creating timelines of disaster events and community responses.

7. Photographic Data Analysis/Visual Sociology.

Photographs of the community before, during, and after disaster events are useful in graphically illustrating what can be found by "triangulating" the other data sources. Photographs may be made by the researchers. They may be acquired from community residents, museums, organizations, governments, or newspaper offices and used with permission (Harper 2012; Rose 2016). Analysis of photographic material is done by answering basic questions: Where and when was this photograph taken? What event does it depict? Who is depicted? What did the photographer hope to display by taking this photograph? What additional contextual characteristics are evident with the photograph?

Photographic material often is available of events and topics of particular significance to the photographer, such as THE flood or destroyed buildings from THE tornado. Photographs are often available of the community, buildings, and events prior to the disaster. These represent specific points in time. However, one methodological concern is to obtain photographic material that is post-disaster or from the recovery phase. These photographs, if available, must be taken over the course of time, perhaps years, and are difficult to obtain.

Ethical issues related to photographic data involves confidentiality. Unless publically available, photographers may not have obtained permission to display individual people. Current photographers must avoid providing photographs of children or other vulnerable populations.

Mixed Research Methods Approach

The mixed research methods approach is frequently used in community-based research and involves collecting and analyzing many types of data as described above (Creswell and Plano-Clark. 2010). The researchers "combine elements of qualitative and quantitative research approaches (e.g., use of qualitative viewpoints, data collection, analysis, inference techniques) for the board purposes of breadth and depth of understanding and corroboration" (Johnson, Onwuegbuzie, and Turner 2007: 123). The methodological integrity of each approach is maintained throughout the project and the results are "triangulated" to determine the results of the project (Figure 2).

Triangulation implies that multiple data points are used to substantiate, corroborate, or verify the study's findings. A question occurs when data outliers are found. The researchers must ask if the methods used were wrong, if the data were wrong, or if the researchers came to wrong conclusions.

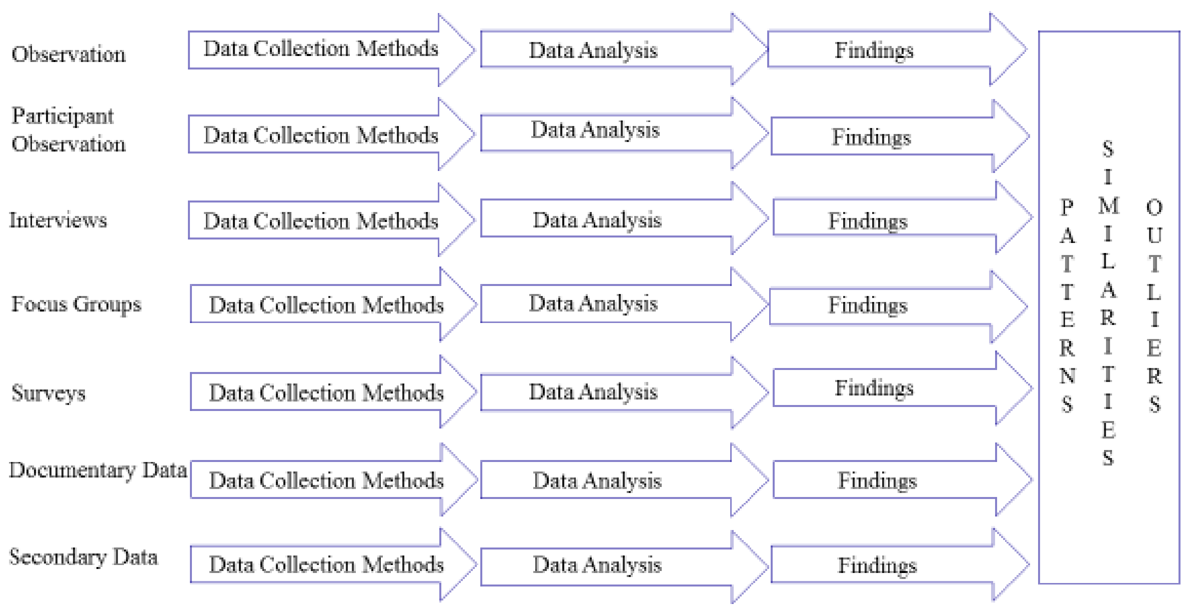

Figure 2. Mixed Methods Approach.
(Source: Gary A. Goreham, 2017)

Each of the three community-based case studies of disaster recovery used a mixed methods approach. Variations in which methods are described in the Methods section of each case study.

References

Adler, Emily Stier and Roger Clark. 2011. *An Invitation to Social Research: How It's Done*, 4th ed. Belmont, CA: Wadsworth.

Babbie, Earl. 2014. *The Basics of Social Research*, 6th ed. Belmont, CA: Wadsworth.

Creswell, John W. and Vicki L. Plano-Clark. 2010. *Designing and Conducting Mixed Methods Research*, 2nd ed. Thousand Oaks, CA: SAGE Publications, Inc.

DeWalt, Kathleen M. and Billie R. DeWalt. 2010. *Participant Observation: A Guide for Fieldworkers*, 2nd edition. AltaMira Press.

Gubrium, Jaber F., James A. Holstein, Amir B. Marvasti, and Karyn D. McKinney. 2012. *The SAGE Handbook of Interview Research*. Thousand Oaks, CA: SAGE Publishing.

Harper, Douglas. 2012. *Visual Sociology*. New York: Routledge

Hodson, Randy. 1999. *Analyzing Documentary Accounts*. Thousand Oaks, CA: SAGE.

Jorgensen, Danny L. 1989. *Participant Observation: A Methodology for Human Studies*. Thousand Oaks, CA: SAGE Publishing.

Jason, Leonard A. and David S. Glenwick, (eds.). 2012. *Methodological Approaches to Community-based Research*. Washington, DC: American Psychological Association.

Jason, Leonard A. and David S. Glenwick, (eds.). 2015. *Handbook of Methodological Approaches to Community-based Research*. New York: Oxford University Press.

Johnson, Laura Ruth. 2016. *Community-based Qualitative Research: Approaches for Education and the Social Sciences*. Thousand Oaks, CA: SAGE.

Johnson, R.B., A.J. Onwuegbuzie, and L.A. Turner. 2007. "Toward a Definition of Mixed Methods Research." *Journal of Mixed Methods Research* 1(2): 112-133.

Lofland, John, David A. Snow, Leon Anderson, and Lyn H. Lofland. 2005. *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis*, 4th ed. Cengage Learning.

McCulloch, Gary. 2004. *Documentary Research in Education, History, and the Social Sciences*. London: RoutledgeFalmer.

Rose, Gillian. 2016. *Visual Methodologies: An Introduction to Researching with Visual Methodologies*. Thousand Oaks, CA: SAGE.

Stewart, David W. and Prem N. Shamdasani. 2015. *Focus Groups: Theory and Practice*. Thousand Oaks, CA: SAGE Publishing.

Vartanian, Thomas P. 2010. *Secondary Data Analysis*. Oxford University Press.