Generating Grounded Theory with Community Partners

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ABSTRACT

This paper describes a methodology for conducting Community Nutrition research with rather than on people in a community to generate grounded theory. This collaborative grounded theory methodology incorporates local knowledge and wisdom and builds community leadership capacity through engaging community-based professionals and paraprofessionals in the research process. In addition to building capacity for participation and leadership in research, education and action, this approach can increase the validity and value of the research and facilitate its application in community led programs. The methodology has five components—background, study design, data gathering, data analysis and interpretation, and application of findings in community programming. Three stages of the data analysis component focus sequentially on each interview independently, comparing across interviews, and systematically testing theory developed in the first two.

KEY WORDS: grounded theory · qualitative research · engaged research · collaborative research · community nutrition.

Introduction

Changing the physical and social environment is critical to developing healthy lifestyles CDC 2004, Giles-Corti, Donovan 2003. Although community nutritionists understand that food consumption patterns are related to increased risk of obesity and chronic disease, research is needed to understand how these environmental influences operate and how consumption patterns can be improved. To increase our understanding of the interactions between social and physical environments and family and community food and eating decisions, we propose conducting research with rather than on people in communities. This paper reports on a methodology for engaging community members in the research process Gillespie 2003 through University-Community partnerships Gillespie 1998, Franz 2003, Gillespie et al. 2003. In this alternative model of theory development and application, projects are enriched by genuine community input into the decisions about the research as well as those about meaningful goals and appropriate strategies for change.

The collaborative methodology described in this article is rooted in grounded theory research Glaser, Strauss 1967. Grounded theory is a variant of qualitative social science research methodology which was established in the 1920’s and 1930’s by the “Chicago school” of sociology, Charmaz 2005 notes that grounded theory is both a method of inquiry and a product of research. She defines grounded theory methods as “a set of flexible analytic guidelines that enable researchers to focus their data collection and to build inductive middle-range theories through successive levels of data analysis and conceptual development” Charmaz 2005, p.507.

Since its inception in the 1960’s grounded theory has also been taken in different directions as its use has expanded greatly and researchers bring differing philosophical perspectives and research traditions to the process. The two main perspectives are the positivist or interpretivist and the humanist or constructivist. The debate about the “correct” approach and use of grounded theory continues Charmaz 2000, Bryant 2003. Ponterotto 2005 presents an extensive overview of philosophy of science across the research paradigms of positivism, post positivism, constructivism-interpretivism, and the critical-ideological perspective. The use of grounded theory in sociology has expanded to fields such as education, nursing, and, more recently, psychology as well as community...
nutrition. Fassinger 2005 describes the historical development of grounded theory and discusses some of the philosophical issues relevant to counseling psychology research.

The act of qualitative research, “a multicultural, gendered process” Denzin, Lincoln 2003 is particularly useful for a number of research questions in Community Nutrition. Beginning in the 1980’s, qualitative research from this social science tradition constitutes a significant proportion of community nutrition research in the U.S. Since community nutrition researchers began using qualitative methodology in the late 1970’s, the issues of grounded theory, so hotly debated by social scientists, have largely been ignored. However, these issues have implications for community nutrition grounded theory research and its interpretation and applications. From a public health perspective, Buchanan 2004 discusses the two main opposing philosophical approaches which he terms “scientific” and “humanistic.” In the scientific model, “theory is defined in terms of statements from which one can deduce hypotheses, which can then be tested in experimental research designs”. In the humanistic model, according to Buchanan, “theory is defined in terms of statements that seek to clarify basic social values.”

Regardless of one’s philosophical perspective, theory is central to both research and practice and serves to integrate them as research informs practice and practice enhances research Gillespie, Brun 1992. Other variants of qualitative social science methods have also influenced the development of the collaborative grounded theory methodology and our approach to food decision-making research. These include the phenomenological orientation toward meanings and interpretations that people make of events and situations in their everyday lives Bogdan, Biklen 1998, the symbolic interactionist perspective on the social roots of meaning and interpretations Manning, Maines 2003 Lofland, Lofland 1995 Blumer 1969, and action research Greenwood, Levin 2005 Simmons, Gregory 2003 Whyte 1991. The collaborative grounded theory methodology reported in this paper builds upon this work and takes the next step of engaging community members as part of a university-community research team.

Because it incorporates local perspectives and knowledge, the collaborative grounded theory methodology not only enhances the validity and value of the research, but it builds community capacity for systematically gathering information, interpreting it, and applying it to change social and physical environments to foster healthier lifestyles. Although some might question the rigor of such research because it is not quantitative, it fits Branigan’s 2003 conception of rigorous research because “the methods used are those that can represent the fullest, most detailed, rich and expressive picture of a particular situation.” In his experience with projects to improve child development by changing communities, Riley 1997 found that, “helping to perform the local research seems to have changed not just the knowledge of local citizens but also their motivation to act on that knowledge.”

The collaborative grounded theory methodology was developed through research in family food decision-making with a variety of community partners. Examples are drawn from this research to illustrate the elements described in the next section.

Collaborative Grounded Theory Methodology

The elements of the collaborative grounded theory methodology are background or context, study design, data gathering, data analysis and interpretation, and application of findings in the community context.

1. Background influences

In collaborative grounded theory, the experiences of both university and community-based members of a research team and their particular subcultures influence the research process. These influences include worldviews life experiences in general and, in particular, understandings of the phenomena under study. They also include explicit or implicit philosophies of science, and the scientific and everyday-life theories used by team members to understand how the world works. From a constructionist framework, a substantial part of what people observe and attend to is affected by their participation in the general culture of their country and particular regional or ethnic subcultures. These experiences and observations are organized into everyday-life theories about the phenomena of interest. Because team members’ individual and collective everyday life theories shape their thinking about research questions, data collection and data interpretation, it is important to recognize and engage these, sometimes quite different, perspectives in the research process.

Thus, everyone is influenced by his or her everyday life theories as well as any previous knowledge of scientific theories. Therefore, we believe that it is not possible to be a
“neutral observer” as taken for granted in a positivist or objectivist approach to research Charmaz 2000. Silverman 2001 describes an atheoretical position as a “convenient myth” and notes that, “without some conceptual orientation, one would not recognize the ‘field’ one was studying.” We subscribe to a humanist or constructionist view which “recognizes that the viewer creates the data and ensuing analysis through interaction with the viewed” Charmaz 2000, p.523. Buchanan has made a compelling argument for using a humanistic model for research in nutrition education Buchanan 2004 and in public health Buchanan 2000 in which he notes “theory is defined in terms of statements that seek to clarify basic social values.”

One example of the influence of differing perspectives applies to understanding and appreciation of the agrarian subculture of family farming in the U.S.. Team members who have experience with farm families will approach and understand interviewees differently than will those unfamiliar with agrarian life. Those with agrarian experience may attend to different aspects of an interview and be able to probe more knowledgeably. At the same time, they may fail to note other aspects that they take for granted and which might be noted by others. In similar ways, common ethnic, socio-economic status, regional or other subcultures may be important in community nutrition. Thus, diversifying the mix of experiences and understandings by including community members who share interviewees’ subcultures helps to strengthen community nutrition research. At the same time, it is important to understand and articulate team members’ everyday-life theories as well as to make explicit the scientific theories which influence their thinking.

Thus, while developing new theory is a central goal of the collaborative grounded theory approach, we emphasize the importance of explicating the perspective underlying each study, acknowledging the background implicit in past experiences and knowledge of the field, articulating the theoretical bases on which a study is conceived, and assessing the appropriateness and fit of these theories. For example, our studies of Family Food Decision-making are influenced not only by schools of thought and scholarship as described in the introduction, but also our knowledge of social, behavioral, and biophysical theories. We are influenced by theories from decision-making Simon et al. 1992, human/family development Bronfenbrenner 2005, human ecology Deacon, Firebaugh 1988, and communication Gillespie, Yarbrough 1984 Yarbrough 1981.

For collaborative research work, it is important to come to a common understanding of goals which serve needs of the community as well as interests of the researchers Gillespie et al. 2003 and are reasonable for the team given its diversity in backgrounds and current interests. The goals and gaps in knowledge and understandings of the related social and behavioral phenomena shape the research questions.

2. Study design

Designing a study is essentially translating its background elements into a coherent and methodologically-defensible strategy for collecting and analyzing data. For example, in one of our collaborative family food decision-making studies, the background led to a research goal of understanding the social structures and processes affecting family decisions about food and eating. To achieve this goal, we devised a strategy for describing, comparing, and contrasting family food decision-making processes, styles, resources, and constraints. Then a series of research questions for studying family food decision-making among Hispanic, African American, and white families was developed through consultation with local community food and nutrition program leaders about their research needs. The resulting research questions were What are the main considerations in family food decision-making? What are the general styles of family food decision-making? How does family interaction affect food decisions such as how to prepare food, who prepares it, and who is actually eating? What are the social and material constraints and resources affecting food decisions?

Based on these research questions, an interview guide was developed to elicit information from interviewees about these questions. An interview guide is a research tool consisting of general open-ended questions and probes which give interviewers a set of cues to help them get the information wanted from the interviewees to help them get the information wanted from the interviewees Lofland, Lofland 1995. It enables the research team to clarify and come to a common understanding about what they want to learn from interviewees. The guide consists of general questions and suggested probes to elicit an interviewee’s story.

In addition to addressing the research questions through an interview guide, consideration should also be given to who the interviewees should be and what each might know that they would be able to tell us about. For example, to learn about young children’s food preferences, can the children themselves...
be interviewed or must their mothers be interviewed, as has been done in many studies of young children.

3. Data gathering

The data gathering phase implements the study design and involves the interaction between researchers and subjects with the goal of achieving shared meaning. In most Community Nutrition studies, this involves interviewing which has been characterized as “directed conversations and requires cultivating and establishing a relationship characterized by mutual trust” Glaser 1992. Denzin, Lincoln 2003 characterize interviews as ranging from structured survey research to the most qualitative type which they characterize as “negotiated text.” Seidman 1998 recommends sending interview transcripts to the interviewees for corrections or additions. Forest 2005 found this approach helpful for negotiating meanings in her study of goal setting in families living in toxic environments.

Local interviewers, although not necessarily experienced in qualitative social scientific methodology, may with training be best able to develop the mutual trust necessary to negotiate common understandings. Even with experienced interviewers it is important to develop shared understandings among the research team. As a part of interviewer training, we ask interviewers to react to and comment on the interview guide and then modify it accordingly. As the data collection progresses, the interview guide should be revised to focus on emerging themes and eliminate unproductive directions. Thus it is an evolving guide shaped by analyses of early interviews that leads toward focus and more indepth understanding of the themes that emerge early in the process.

Qualitative researchers have long understood that the “data collectors” are very much a part of the data collection process. Within this perspective, the interview guide is only a part of the data collection process because each interviewer has his/her own personality and unique ways of effectively finding out information DeSantis 1980 from the family’s perspective. Interviewers from the local subcultures come equipped with knowledge about, and concrete experiences with, both the local context and other people from their subcultures. Interviews are recorded and the interviewers also take backup notes during the interview. Following each interview, the interviewer writes a brief fieldnote about the interview. Interviews are transcribed and the interviewers verify the transcripts by comparing them with the audio recordings and correct any errors. A data analyst processes the corrected transcripts in preparation for collaborative analysis by the research team. The emerging analysis then feeds into subsequent data collection.

4. Data analysis and interpretation

Data analysis is a process of sifting through large quantities of information to make sense of important aspects of a social setting as viewed from the interviewees’ perspectives and understandings. It involves a variety of intellectual activities including formulating concepts, connecting concepts with other concepts in theories, discerning reasons for things observed and identifying what cases tend to share or not share. The general strategy for analyzing the data, was influenced by Glaser, Strauss 1967 Strauss 1987 Glaser 1992 are described by Gillespie 1982. The analysis takes place in three stages: early analysis, with primary focus on individual interviews; middle analysis, with primary focus on comparing and contrasting across interviews; and late analysis, with primary focus on systematically testing theory developed in the earlier stages of the analysis.

1) Early analysis.

Four recording activities constitute early analysis of fieldnotes. Fieldnotes include interview transcripts, written comments from an interviewer about the setting and conditions of the interview, and records and notes of the background and study design. The first early analysis activity is making observer comments which are descriptions of something observed by the interviewer but not captured in an interview fieldnote, notes pertinent to interpreting a segment of that interview transcript, or inferences drawn about a comment or other part of the fieldnote. For example, adding the following observer comment in brackets

A And we usually eat as a family. I’m sorry. OC A apologized for R’s attempt to interrupt.

The second early analysis activity is writing analytic comments about concepts or how concepts relate to each other as sparked by the content of a single fieldnote. These are often speculative acts of sociological imagination Mills 1959 which, if deemed pertinent, need to be examined and developed in the middle analysis activity of memo writing. At the same time, they offer an important opportunity for community-based team members knowledgeable about the context and interviewees as well as researchers to begin both incorporating
their novel insights and thinking more broadly. The example below illustrates these characteristics of an analytic comment.

I [GJ] find A’s and I’s attribution of high protein content to fruits rather interesting in the sense that they seem, in the preceding paragraphs, to be pulling together reasons for consuming fruit. They also mention vitamins and fiber. They do not seem to have thought much about fruit consumption as a means of preventing long term health problems, such as heart disease and cancer, even though in later paragraphs they express considerable awareness of popular presentations of this potential effect. Perhaps when one really likes fruit though may be not quite as well as ice cream or candy bars, that in itself serves as sufficient motivation and the idea of health benefits is a little ‘plus’ that resides in the background and helps to justify the choice of fruits over the alternatives, as opposed to intentionally eating fruits to obtain particular health benefits, such as reducing cancer risk.

The third early analysis activity is writing ideas for further research notes. These notes suggest what information should be gathered, other people who should be interviewed, better ways of doing something, or other ideas of things that are “missing.” For example, an idea might read like the following.

GJ How much information do we have on Latino young people, who have grown up eating “American” foods? Do they come to like Hispanic foods? If so, how and when?

The final early analytic activity is writing summaries of fieldnotes that include the general characteristics of the interviewees and what is perceived as significant about that interview.

GJ A., J., their 6-year-old daughter and their 2-year-old son comprise a fairly “traditional” Latino family in terms of family food roles. They have a pretty varied diet incorporating both traditional Hispanic foods and contemporary “American” foods often from eating out at “family” restaurants because A. is employed outside of their home. J. has a relatively narrow set of food preferences, but does not seem to be hostile to others eating different things as long as he doesn’t have to. In that sense, he provides his children and his wife with space to exercise their own food choices. A. has a somewhat broader set of preferences, but does not care for some common Anglo vegetables such as green beans.

This early analysis of individual interviews provides the basis for middle analysis which may begin after the early analysis activities have been completed on more than one interview.

2) Middle analysis

The middle analysis is comprised of writing analytic and methodological memos and constructing coding categories. Analytic memos often build on analytic comments and incorporate information from more than one fieldnote. In analytic memos, concepts are defined, refined, and linked to particular segments of fieldnotes. Analytic memos are also used for describing when and how concepts relate to each other in building theory. One interviewer/analyst, for example, wrote an insightful, four-page analytic memo toward the end of one project that began as follows.

I have been thinking about the patterns that are emerging as I interview families and individuals. Some of the recurring themes can be illustrated by the following a page and a half of paraphrased descriptions of the situations of different interviewees. People I’ve interviewed are very preoccupied with food. I have been struck by the level of anxiety and conflict which what is reported. There is a great deal of confusion about what is O.K. to eat and whether or not children need a different diet than adults. Continuing with paragraphs about shopping, satisfaction, conflicts, children, popular diets, and time and ending with ideas for interview questions for future research.

Methodological memos are like analytic memos except that their topic pertains to the research process. The coding categories are those concepts from analytic memos that are chosen for further examination in the late analysis stage. Although middle analysis requires a higher level of research expertise, we have found that when community members are part of a research team they can begin by reviewing and reacting to analytic memos written by experienced qualitative researchers and then some can move on to writing their own memos with enlightening interpretations as illustrated in the example above.
Although the outcomes of collaborative grounded theory and serve to integrate them as research informs practice and, at the same time, practice can enhance research Gillespie, Brun 1992. A basic premise of this paper is that engaging knowledgeable community people in the research process will not only improve the validity of the research itself, but also facilitate its application in community interventions. Simmons and Gregory have developed a method for creating actions built on the grounded theory generated 2003. They describe “operational theory” as an outcome of the research, which “provides a grounded theoretical foothold for action planning and implementation” p.4. Operational theory is generated from the explanatory grounded theory.

Although particular consideration of the application of findings comes at the end, in most cases, potential applications are generated throughout the data analysis process and, when community educators and opinion leaders are involved in the research, these applications may be activated while the research continues. Although moving into action is a natural outcome from collaborative grounded theory research, it is not an automatic one. However, community leaders involved in a research project are well positioned to move in this direction. Also, an effective team process, developed through research, can benefit the action stage as well as encourage academics to continue to support community-initiated change programs.

For extending the grounded theory into action, community education and leadership experiences of team members will influence not only the types of applications made, but their sense of potential efficacy of certain applications in bringing about desired change. Grounded theory methods can effectively be applied to program evaluation, but there are limitations. It would likely be most powerful for assessing the process and answering the questions of why and what, and providing input for program improvement. Depending upon the orientation of funders or other stakeholders, it may be strategic to also include quantitative measures of impacts and intermediate and outcome goals as well. Issues of internal vs. external validity Gillespie 1981 should be considered as well. The most successful evaluations are likely to include both ethnographic and survey data.

Although the outcomes of collaborative grounded theory research add to in-depth knowledge and understanding of
social phenomena and effectively inform education and action, these very strengths of collaborative grounded research can also make its proponents vulnerable to criticism when applied in an academic culture steeped in the positivist quantitative tradition. In-depth understanding from the perspective of those studied is often undervalued compared to the large quantitative data sets and experimental designs that dominate the culture of respect and rewards. When cost and benefits are assessed in terms of numbers of scientific publications generated and size of data sets, grounded theory research cannot compete well. For academic researchers, it also takes more time and more sophisticated inquiry and analysis skills to both work in communities with community members and integrate research with education and action. Collaborative research also requires giving up some measure of control of the process and outcomes. This paradigm can be an extremely powerful asset, but, at the same time it can also be threatening to researchers and community leaders comfortable in the dominant paradigm.

## Conclusion

Based on our experience, we believe that engaging community members in the process of generating grounded theory about a topic of interest to them improves the validity and richness of the theories and at the same time empowers the community to apply these findings and take action. However, careful consideration should be given to the time and resources required for the collaborative grounded theory approach relative to the goals of the researchers. If the primary goal is generating research publications and/or efficient data collection, this approach may be too costly.

There are also potential pitfalls as with any collaborative endeavor. When particular team members have their own agendas that compete with shared team goals, working collaboratively may be difficult. Even with shared goals, ambiguity or disagreement about team member roles and responsibilities and/or unrealistic expectations of others may cause disappointment or even disruption of the collaboration. To minimize these possibilities by identifying them before engaging in collaborative research, it is important to spend time articulating and recognizing each team member’s goals and motivations for collaboration, clarifying each team members individual or organizational roles based on realistic expectations, and develop protocols for collaboration. 

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