THE USE OF ANTHROPOLOGICAL INTERVIEWING METHODS IN SURVEY RESEARCH PRETESTING

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1. Overview

This paper describes a Census Bureau project using anthropological/ethnographic interviewing methods as a pretesting tool in the development of a redesigned National Health Interview Survey (NHIS) questionnaire. The primary goal of the project was to better understand sub-cultural differences in health--and, in particular, mental health--perceptions and behaviors which might aid questionnaire designers in constructing a more valid survey instrument.

Elsewhere (Von Thurn, Moore, and Martin, 1993) we describe the substantive findings of this project. The focus of this paper is the methodological issues that accompany an anthropological approach to survey questionnaire pretesting. Section 2 describes the NHIS, and offers a brief review of cultural differences in health reporting, drawing on both the survey research and the anthropological literatures. Section 3 provides a brief description of anthropological interviewing methods, with particular attention to how they differ from the traditional methods of survey research. This section also outlines the design of the current research project. Section 4 highlights the results of the project as a survey pretesting endeavor, focusing on both the more attractive features of the methods used, and their drawbacks. Finally, the paper closes with a summary and conclusions, and suggestions for future research.

2. Background

2.1 The National Health Interview Survey (NHIS)

NHIS is a major research program of the National Center for Health Statistics (NCHS). Established by the National Health Survey Act of 1956, NHIS has been a continuing source of health statistics for the United States since 1957. Census Bureau interviewers annually interview approximately 50,000 households for the NHIS. Information gathered in this survey is used to establish and prioritize national health policies, and to monitor the nation's health status.

In conjunction with the cyclical sample revision that follows each census, NCHS is currently redesigning the NHIS sample to enhance minority statistics by oversampling Blacks, Hispanics and the elderly. NCHS is also planning to redesign the structure and content of the NHIS questionnaire, including a new focus on mental health issues. Developmental work on a new mental health module is being carried out by the University of Michigan's Institute for Social Research and School of Public Health.

2.2 Cultural Differences in Health Reporting

One question raised in connection with the questionnaire redesign concerns the comparability of health measurements across different sub-cultural groups. Differences in the way different groups interpret and respond to questions about health and mental health might result in apparent differences in health which are more artifactual than real.

One need not venture into the anthropological realm to find intriguing illustrations of differences between groups in their reports of basic health events and conditions. Wagener and Winn (1991), for example, find that survey-reported non-fatal injury rates are higher for Whites than for Blacks, even though Blacks are much more likely than Whites to suffer fatal injuries. Gender differences in survey estimates are also fairly common. Women report more symptoms of depression (Newmann, 1984) and anxiety (Dohrenwend, et al., 1980) than men, more episodes of hysteria (Dworkin and Adams, 1984), and generally report their health status less positively than men (Groves, et al., 1992). Although it is typically assumed that these survey-reported differences reflect true differences in the underlying characteristic of interest, the extent to which they are actually artifacts of the measurement system is unknown.

The anthropological literature also offers a wealth of examples of cultural variations in health conditions and health care, including symptomology and prognosis. For example, researchers have noted that among Latin American, Asian and African groups, health conditions are categorized on a "hot-cold" continuum; appropriate treatment depends upon whether a condition is "hot" or "cold" in nature (Manderson, 1987). What this "hot/cold" organization means for survey reporting is unknown, although it is a reasonable guess that references to this system in survey questions could serve as effective memory retrieval cues.

Mental health, as a sub-domain of health in general, has also received substantial attention in the literature,

especially with regard to how societal definitions of normality and deviance vary from culture to culture (Kirmayer, 1989). There is rich literature on specific culture-bound syndromes, such as God-intoxication in Bengal (Morinis, 1985), Dhat and Possession syndromes in India (Akhtar, 1988) and anorexia nervosa among western culture women (Gremillion, 1992). This literature strongly supports the notion that mental health is in considerable measure a culturally constructed domain. Again, however, aside from the obvious problem of the potential underreporting of specific culture-bound syndromes (due to their exclusion from sets of retrieval cues), what isn't clear is how or whether these differing cultural perspectives will produce artifactual differences in responses to a mental health questionnaire.

Other research appears more clearly germane to the survey reporting issue. For example, an important focus of the health-care literature (e.g., Spector, 1985) is educating health care providers on the role culture plays during an illness, so that the best health care can be given to the patient. Research has found wide cross-cultural variation in how people express pain and discomfort. In some cultures members are encouraged to freely and openly display pain or discomfort, while in other cultures such displays are strongly discouraged (Zborowski, 1969; Mechanic, 1963; Suchman, 1964, 1965; Zola, 1966). Such findings strongly suggest that survey-based health assessments which derive from reports of pain or discomfort may be misleading regarding the prevalence of certain health conditions.

In the survey research literature, a number of researchers have recently focused on Hispanics and measurement errors. Marin and Marin (1991) review the existing literature and find evidence suggesting that survey data collected from Hispanics across a number of different substantive topics (including health issues) may be biased by a tendency to provide extreme responses, to acquiesce, to give socially desirable responses, to underreport, and to avoid self-disclosure to an interviewer. The authors properly caution against overgeneralizing from a small number of studies, many of which had small sample sizes. However, they do emphasize the need for researchers to be aware of, and control for, these potential problems in surveys of Hispanic populations.

3. Pretesting for a Redesigned NHIS

3.1 Introduction

Research provides abundant support for the notion that culture plays a major role in the way different groups perceive and define their health; however, the literature is not nearly as clear about how these cultural differences might affect mental health survey data quality. Thus, NCHS decided to fund qualitative, exploratory research to examine cultural effects on reporting of mental health issues. The guiding principle was that by understanding how various groups of people think about mental health, and how mental health terms and concepts are perceived and expressed, researchers can design mental health questions that will yield more accurate mental health data.

3.2 General Description of Anthropological Methods

Anthropological research methods differ from traditional qualitative survey research methods in a number of ways. Perhaps the most fundamental difference is the role of the participant. Survey research has "respondents," anthropology has "informants." The survey respondent is a passive participant in the process, who merely responds to the interviewer's previously designed questions. In ethnographic interviews, as noted in a recent article by Bauman and Greenberg Adair (1992), the anthropologist takes on the role of pupil to the informant's expert, with the explicit objective being the understanding of an informant's experience from his or her point of view. As much as possible, any prior understanding of the research topic is deliberately set aside by the anthropologist. Thus, in matter of speaking, the informant determines the research questions.

The specific interview formats used in this project were an in-depth ethnographic style interview to explore health and mental health concepts, and a focused interview format to elicit comments on the cultural appropriateness of a set of proposed survey measures[2]. These interview formats differ from one another in several ways. Ethnographic interviews are very unstructured and nondirective, with the intent being the collection of descriptive data. The interviewer takes on a subordinate role, using the informant's own expressions, whenever possible, when probing for more detail. In contrast, the focused interview is structured and focuses on informants' reactions to a specific experience or situation. It uses a stimulus to trigger discussion (here, specific mental health question wordings).

3.3 Design of the Study

In early 1992, the Census Bureau, with funding from NCHS, solicited proposals from ethnographers and medical anthropologists to explore mental health issues. Contracts were awarded to study the following groups (defined by the anthropologists themselves): Mexican and Mexican-American migrant farm workers in Florida; Appalachian, Anglo residents of rural West

Virginia; White, middle class Americans residing in the Washington-Baltimore metropolitan area; African-Americans in North Carolina; and a diverse collection of Chicago residents, including German, Polish, Haitian, Hispanic, African-American, Chinese and Japanese.[3]

The anthropologists tried to ensure a heterogeneous study population within each of the chosen socio-cultural groups, but all of the anthropologists' samples were quite small and not necessarily representative of any larger population. The substantive findings cannot be generalized with any confidence, although they are useful in suggesting hypotheses about differences in reporting and interpretation of reports of mental health symptoms which could be explored further.

4. Results

4.1 Attractive Features of the Ethnographic Approach

As noted above, a key component of ethnographic interviews is that the interviewer sets aside any previous hypotheses and seeks to learn all pertinent information on the research topic from the informant. In doing so, the interviewer is open to new information that may prove to be very important. We offer three such examples from the current set of studies.

The first example illustrates the possibility of false negative reports, or the underreporting of an event or item. From her work with White, middle class Americans residing in the Washington-Baltimore area, Cassidy (1992) confirmed that laypeople tend to have a wider boundary for normality than do specialists. This phenomenon is labeled "normalization" in the literature. When informants were asked to sort a stack of symptom cards derived from lists of symptoms designed to elicit reports of abnormality, they often claimed the symptoms to be normal. A related element is the perception of "stress" and "anxiety" by these same informants. While specialists tend to classify these conditions as mental illnesses, the informants thought them to be a normal part of urban life. This suggests that questionnaire designers who opt to use a strictly biomedical approach when wording questions may very well end up with data that underestimate various health conditions. Respondents may not interpret their own stress levels as a symptom of a mental health condition; thus, when asked, they may omit the information or classify it more mildly than the specialists would classify it. Even though Cassidy was aware of normalization from her literature review, she took steps not to introduce the term or concept to her informants.

The second example arises from interviews with Mexican-American migrant farm workers (Baer, 1992). A proposed mental health screening question tested in our research was how often the informant has thoughts about "death and dying." In Mexican culture, thinking about death and dying is culturally appropriate and has religious significance, and it therefore may not be appropriate to interpret it as a symptom of depression and suicidal ideation. Similarly, the Mexican culture places great value on "the tragic sense of life." The fact that in Mexico the emotion of sadness is highly elaborated, and that it is appropriate and desirable to feel sad, certainly affects the interpretation of a report of "sad feelings" as a measure of psychological depression for this group. If the proposed questions were to be used among Mexican-Americans the likely result would be an overreporting of the incidence of depression.

The third example is related to cultural differences in the rules of discourse defining the acceptability of complaining. Discourse rules may affect how willing respondents are to talk about the symptoms in question, since acknowledging having the symptom is in some sense "complaining" to the interviewer. Some cultures (e.g., Japanese) take a very dim view of expressing emotion, especially negative emotion, and these cultures can extend this view even to the expression of physical distress. Joseph and Shweder (1992) offer examples of this phenomena. An elderly Japanese female, when asked to rate self-perceived health status on a 10 point scale, reported a "9" even after mentioning that she had had an attack of shingles and other ailments. When asked, she noted that she didn't think that she had very many aches and pains that she could complain about. Her husband, also Japanese, continued to explain that even if his health was worse than it was, he would probably still rate it about the same since he isn't really a complainer. Cultural differences in discourse rules may possibly bias survey estimates.

As we have seen, the anthropologist acts like a pupil and seeks to learn everything about the socio-cultural group from the informant while the informant acts like the expert and "informs" rather than merely "responds" to queries. In this fashion, a wealth of useful information is obtained that can be used by questionnaire designers. This fundamental change in the interviewer's role may offer other benefits as well. In survey research, the interviewer typically takes on the role of the authority figure with the respondent as the subordinate. At times respondents show deference to the interviewer by agreeing to statements regardless of their own opinion on the subject. Although not tested in this research project, we hypothesize that by reversing the roles of interviewer and respondent, acquiescent behavior of the respondent may be reduced.

Another potential benefit of anthropological

interviewing methods is that social desirability pressures may be lessened by the changes in the respondent-interviewer dynamic. In "textbook" ethnographic interviews, the interviewer portrays ignorance about the subject matter, asks very few direct questions and only probes information presented by the informant. The informant has no evidence to suggest what the interviewer thinks or feels. Furthermore, the ethnographic interview situation is more similar to a teacher-pupil interaction than to a typical research interview interaction. Hence, the informant may also be less concerned about portraying him/herself in a particular light since the interviewer as "pupil" is not in a judgment role like a survey researcher interviewer typically is. For these reasons, informants in ethnographic interviews may be less affected than traditional survey interview respondents to social acceptability pressures.

4.2 Drawbacks of the Ethnographic Approach

Along with the advantages we find in this pretesting method, we also find important disadvantages. Let us now turn to the major drawbacks and to suggestions to overcome or minimize them.

Use of the ethnographic approach makes it doubly important to reach clear consensus on the research objectives and methods to be used prior to the actual field research. What an anthropologist finds interesting in the field may not necessarily be of interest to the survey researcher. In fact, what interests one anthropologist may not interest another anthropologist. Since the content of the ethnographic interview is basically determined by the informant and the focused interview format is not standardized, it is not surprising that the several final reports produced by this research had very different focuses. Although some topics were discussed by more than one anthropologist, the bulk of the information presented in the reports is unique to a particular socio-cultural group. This makes it difficult to compare information across the reports and interpret the findings.

For example, as a way to identify culture-bound disorders, we looked for information that might suggest the existence of disorders across the various socio-cultural groups. If something appeared in one group and not the others, then the possibility exists that this condition may be bound to that specific socio-cultural group. However, the vast differences in the content across the reports makes this analysis very difficult, because what appears to be a unique element of a particular socio-cultural group may simply have evaded mention in other groups. To illustrate this difficulty, one anthropologist (Cassidy, 1992) asserted that males within her socio-cultural population of interest were very sensitive to appearing weak. Since other anthropologists also noted this tendency, it is apparent that there may exist a cross-cultural gender difference related to the appearance of weakness, rather than a difference specific to this socio-cultural group. In this instance, the more general nature of the supposedly sub-cultural phenomenon became evident only because other anthropologists discussed the same issue within their reports. The status of other supposedly culture-specific phenomena, not discussed uniformly in the several reports, is less clear.

As another example, some of the anthropologists explored how their informants organize the domains of health and mental health conceptually. These anthropologists found a number of divergent health models. For example, some informants conceptualized health as the ability to carry on the activities of everyday life. The informants noted they would only consider themselves ill if they were not able to perform some basic tasks, such as going to work or to school. Other informants viewed health as the purity or hardiness of one's genetic stock. With this view, health refers to the ability one has inherited, through some kind of evolution, to exist in one's environment. Still other informants conceptualized health with a strong sense of idealism, and see it as either an unattainable dream or a state of perfection.

With regard to mental health, some informants conceptualized good mental health as control over one's emotions, with mental illness as the loss of that control. Other informants emphasized self-esteem, self-confidence and self-direction. An unexpected finding was the connection some informants drew between good mental health and higher intelligence, suggesting a certain lumping of desirable mental qualities.

At least as a cautionary signal, this information is very useful. It forces survey designers to realize that, since informants embrace many divergent health models, it is possible that respondents will interpret health questions differently from one another, and in ways that differ from what was intended by the questionnaire designers. What is missing is an understanding of the prevalence of these health models. Since only a few of the anthropologists explored this area, it is unclear whether or not other socio-cultural groups share these particular health models. Thus, the information is less useful as a guide to specific survey design action.

As survey researchers, our first inclination is to suggest adding structure into the anthropologists' interviews, at least enough to assure comparability of content across the groups. However, structuring the interviews could jeopardize the benefits of the ethnographic method. Our resulting recommendation is

to stress the importance of continuous communication between the survey researchers and the anthropologists, and to organize the research project so that feedback from one research phase is critical to the successful completion of the next research phase. In this manner, the anthropologists are aware of what type of information is desired, when, and from whom. When unexpected and interesting findings arise the anthropologist will have the freedom to explore the issue/issues and feedback preliminary results to the survey researcher. The anthropologist and survey researcher can then jointly decide whether or not such topics should be pursued in future interviews. In this fashion, the anthropologists are able to conduct interviews in an appropriate ethnographic fashion yet obtain the desired information for the research project.

As suggested above, while the information from the ethnographic interviews is often very eye-opening and compelling, it is also very difficult to apply in survey design. Much of the information is descriptive, and it is hard to imagine how questionnaire designers would use this information to write specific questions. Of course, this was not an applied survey research endeavor, but rather, an exploration to understand how different socio-cultural groups think about and express mental health concepts. The research was conducted to generate hypotheses about mental health perceptions rather than to suggest question wordings.

5. Summary and Conclusions

The use of anthropological research methods enriches our understanding of the complexity of designing mental health measures for use in a national survey. The results of this research certainly serve as an effective warning that "standard" mental health measurements are not necessarily comparable across different socio-cultural groups. As illustrated by the potential for false positive errors among Mexican-Americans on the depression questions and the normalization results with the White, middle class Americans residing in the Washington-Baltimore area, socio-cultural groups comprehend and interpret questions differently. Additional research is needed since the results do not provide specific solutions to these issues. We will conclude by offering our recommendations for additional research.

One recommendation is to replicate this research in different geographical locations but with the same socio-cultural groups. The socio-cultural groups chosen by the anthropologists were from large and diverse subpopulations. Additional research is needed before one can accurately represent an entire cultural group. For example, residents of the Washington-Baltimore metropolitan area may not fully represent white, middle class Americans. In addition to geographic location (urban/rural, South/North/West/East), such elements as age, educational attainment and socio-economic status could be used to stratify the subpopulations.

A second recommendation is to the expand the scope of this research to include other medical conditions measured in NHIS. It would seem particularly useful to expand knowledge of folk illnesses, and of language, terminology, and concepts in order to improve survey questions used to elicit reports of physical conditions and symptoms. Certainly there is reason to suspect that cultural influences may affect reporting of both mental and physical conditions.

As a third recommendation, we suggest experimentally testing, on more systematic samples, some of the hypotheses about minority reporting differences developed in this exploratory phase of research. Finally, we hope eventually to make this kind of research an integral part of the questionnaire design process, so that the ethnographic research is used to inform, and then to refine and test, question wordings as a way to improve cross-cultural validity of survey questions.

NOTES

1. The views expressed in this paper are the authors', and do not necessarily represent the official views or positions of the U.S. Census Bureau.

2. A 45-item mental health screening questionnaire designed to assess anxiety, depression, panic and phobia was given to each of the anthropologists to be used as a stimulus for the focused interview portion of their field research.

3. The final reports produced under the five contracts (see the "References" for Baer, Boone, Cassidy, Illingworth, and Joseph and Shweder) are available upon request from Dawn R. Von Thurn.

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