

CHAPTER THREE

METHODOLOGY

Introduction

The purpose of this study was to gain insight regarding the opinions, attitudes, stages of change, and the real and perceived needs of food stamp recipients for use in developing or redesigning nutrition education programs and activities conducted by EFNEP, SCNEP, and the Smart Choices Network. Focus group interviews and dietary recalls were the data collection methods utilized. The focus group interview method was chosen because it was an efficient, inexpensive, and flexible means to gather information on perceptions, feelings, opinions, and thoughts.⁹ As a preliminary assessment method, the focus group approach has been advantageous in the development of nutrition education interventions.^{45,46,47,48,49}

Manual dietary recall analysis was the method used for identifying trends in the consumption of specific foods of food stamp recipients and how those foods were prepared. Use of computer analysis programs do not enable one to determine dietary variety within each food group. Quantitative data gained from manual analysis were used to identify food-related patterns that were then compared to the perceived needs assessed through the focus groups.

Research Protocol

This investigation was approved by the University Institutional Review Board for Research Involving Human Subjects at Virginia Tech prior to its initiation. An informed consent form was signed by each of the focus group participants (Appendix A). Three trial focus groups were conducted beforehand to test the appropriateness and effectiveness of the questions. Two separate procedures were used for conducting the focus groups and collecting the dietary recall forms.

Focus Group Procedure

Six focus group interviews with a total of 26 food stamp clients were conducted between June 7 and July 11, 1996. The interviews were conducted at the following Virginia locations: 2 central cities with populations greater than 50,000 (Arlington and Newport News); 1 suburb of a city with a population greater than 50,000 (Chesapeake); 2 towns/cities with populations of 10,000 to 50,000 (Mecklenburg and Colonial Beach); and 1 county with less than 10,000 people (Lee County.) These sites are illustrated in Appendix B and cover a broad geographical range of Virginia.

Participants for the focus group interviews were chosen from newly enrolled EFNEP homemakers, having joined no more than two months prior to the focus group meeting. EFNEP was a good source for the recruitment of subjects meeting the predetermined participant criteria of this study because many members belonged to households receiving or eligible to receive food stamps. Individuals invited to participate were between the ages of 21 and 55 years and were primarily responsible for the food budgeting, purchasing of groceries, meal planning, and/or meal

preparation of their families. When possible, participants for each focus group interview were not previously acquainted with each other.

EFNEP Program Assistants (PAs) were used to recruit subjects for participation in the focus groups. PAs from five of the six Virginia Cooperative Extension districts served as recruiters (Appendix B). Figure 1 outlines the parameters that PAs used as guidelines for choosing the individuals to be invited to the focus group meetings. No parameters were set regarding gender or race.

The procedure followed for the focus group interviews was developed from the descriptions given by Krueger.⁹ Three focus group meetings with low-income participants were conducted in the Roanoke, VA vicinity prior to the start of the investigation to test the meeting format, questions, and facilitation methods for the meetings. Necessary changes identified during the pilot study were made before conducting the first official meeting. Minor adjustments in the facilitation of the meetings were made at the discretion of the moderator and assistant moderator during the study.

Krueger⁹ recommended seven to twelve participants per focus group; therefore, PAs recruited twelve people for each focus group, following recruitment procedures outlined in Figure 2. A detailed explanation of what a focus group meeting entails and a brief description of the purpose of the study were provided to potential participants by the PAs at the time of invitation. They emphasized the following: the focus group interview was a one time commitment taking two hours at the most, transportation was provided if needed, and confidentiality was guaranteed. Meeting places were chosen based on suggestions by the PAs as to what they considered to be the most neutral and convenient meeting place, preferably not associated with EFNEP. Follow up letters of invitation were mailed one week before each meeting, with details such as date, time, location, and transportation arrangements (Appendix C).

The principle investigator served as moderator of the meetings as she had no prior connection with EFNEP or the participants, thus reducing bias. The Network Coordinator for Virginia Smart Food Choices Network served as assistant moderator to operate the tape recorder, take detailed notes, and handle unexpected interruptions. Both the moderator and assistant moderator attended a focus group workshop prior to the study in order to gain the skills necessary for conducting focus group meetings.

The PAs provided transportation to sites for participants that required it. Their presence before the meetings was intended to promote familiarity and put the participants at ease. The evening before the first focus group meeting, the principle investigator gave each participant a reminder telephone call; however the PAs and assistant moderator recommended that all subsequent verbal communications with participants prior to the meetings occur through EFNEP PAs because of their familiarity with the participants.

The first focus group meeting was conducted in Arlington, VA, which has a large Hispanic population. Therefore, a local food bank employee of Hispanic descent was recruited to serve as the interpreter for the meeting. Every statement made by an individual, either in English and Spanish, was translated to the other language directly after that individual finished

Figure 1

Criteria for recruiting focus group participants

1	members of a family, aged 21-55 years, receiving food stamps (or potentially eligible)
2	primarily responsible for the food budgeting, purchasing of groceries, meal planning, and/or meal preparation of their families
3	newly associated with EFNEP, having joined no more than two months prior to focus group meeting
4	participants should not be previously acquainted with each other, if possible

Based on: Archer T. (1987). *Edge Guidesheet: Focus group interviews*. Ohio Cooperative Extension Service, The Ohio State University

Figure 2

Participant invitation/notification protocol

1	EFNEP PAs created lists of possible focus group participants meeting the given parameters
2	12-15 days before the established meeting date, EFNEP PAs made telephone contacts or personal visits to recruit participants
3	transportation arrangements were made and meeting sites were determined
4	8-10 days prior to the established meeting date, EFNEP PAs provided the principle investigator with names and addresses of persons who consented to participate
5	follow up letters of invitation were mailed one week before each meeting, with details such as date, time, location, and transportation arrangements
6	each person was contacted by telephone the day before the meeting as a reminder of the session and to confirm the day, time, place, and arranged transportation

Based on: Archer T. (1987). *Edge Guidesheet: Focus group interviews*. Ohio Cooperative Extension Service, The Ohio State University

speaking. The transcript from this meeting was later analyzed by a Spanish high school teacher to ensure validity of the initial translation. All other focus group meetings were conducted with English speaking participants.

Prior to arrival of the participants, the moderator, assistant moderator, and EFNEP PA(s) met to discuss the procedures. As participants arrived, the facilitators attempted to create a warm and friendly environment with welcoming small talk and purposeful avoidance of the key issues that were discussed during the meeting. Participants were asked to wear name tags and sign consent forms (Appendix A) as they were eating healthy snacks that were provided at each of the meetings. Chairs were set up around a large table and two tape recorders were placed on each end to ensure that all comments were recorded clearly. At the sites where the EFNEP PAs were unable to leave the room, they were asked not to sit at the table with the participants or contribute to the discussion.

The moderator opened the meeting with an introduction modified from the standard introduction given by Krueger (1988). The moderator attempted to create a thoughtful and permissive environment, stated the confidential nature of the meeting, and set the tone for the discussion. In addition, the focus group ground rules were reviewed and participants were informed that the meetings were tape-recorded and later transcribed. The focus group interview questions that followed are listed in Appendix D. At the conclusion of the meetings, gift certificates or coupons from local grocery stores were distributed to each participant.

After the meeting, the moderator and assistant moderator debriefed and identified common observations and perceptions experienced during the interview. The need for any minor changes in wording of the questions or facilitation of the meeting were also discussed. The PAs had each participant complete a brief questionnaire at their next home visit, approximately one week later, to assess the participants' readiness for dietary change (Figure 3). Questions were developed by the principle investigator based on a study done by Greene and colleagues (1994) in which an algorithm to define a person's stage of change was developed. Letters of appreciation were mailed out to participants during the week following each meeting.

Focus Group Interview Analysis

Of the analysis options described by Krueger,⁹ the transcript based analysis was chosen for use in this study. The primary investigator and an assistant analyst, familiar with group meeting analyses, transcribed the tapes. Each transcript was labeled with the focus group number (in order of occurrence), date, location, and number of participants. The moderator's questions were not transcribed in detail, but rather identified by question number and concept. Participants' responses were numbered consecutively and transcribed verbatim. Any comments that could not be understood on the tape recording, or deemed irrelevant to the topic, were stricken and noted by ellipses.

The format for analyzing the transcripts was developed by the principle investigator and assistant. The transcripts were used to identify common themes that related to each question. The responses were then identified as key points that could be categorized under one of the themes. These key points were listed on an analysis worksheet that was separated by theme and

Figure 3

Follow-up Questionnaire to Group Discussion

<p>Please circle one word/phrase to complete each sentence:</p> <p>1. I plan on changing the way I eat now in the next month in the next six months after six months no time in the future</p> <p>2. I think about health issues when choosing and buying food. never rarely sometimes often always</p> <p>3. Changing the way my family and I eat is _____ important to me. not at all a little somewhat very</p> <p>4. The food that my family and I eat has _____ effect on our health. no a little some a large</p> <p>5. I did NOT think about changing what food I buy and make never until about six months ago until about a month ago I have recently made a change</p>

question number (Appendix E). The number of responses throughout all six focus group transcripts that represented each key point was counted in order to qualify the prevalence of the ideas that were expressed. Each page of the six transcripts was given a different page number (numbered consecutively from 1 - 49.) The analysis worksheets identified the page numbers that corresponded to each key point for later reference.

The analysis was conducted separately by both the principle investigator and the assistant analyst. The two analyses were compared and any discrepancies in interpretations were discussed until a consensus was reached. This approach was used to ensure objective interpretations of the data.

The surveys rating stage of behavior change were assessed based on the analysis done by Greene et al.³³ in a study to develop a methodology for defining stages of change. Frequencies of responses to each question were tallied and patterns indicating the prevalence of one or more dietary stages of change among the focus group participants were then assessed.

Collection of Food Data

Twenty-four hour food recall forms from homemakers in EFNEP or SCNEP were analyzed for food behavior patterns. The State EFNEP Coordinator sent every EFNEP and SCNEP PA in Virginia a memo (Appendix F) requesting submission of copies of two family records (including the 24-hour food recalls) according to the following criteria:

- family received food stamps or was potentially eligible
- family record was as recent as possible, no more than six months old
- food recall form appeared complete

The criteria for selecting family records were more inclusive than the criteria for selecting focus group participants in order to assure a large number of responses. Information on foods eaten, how they were prepared, and where they were purchased was required. Names and addresses of individuals were removed to assure confidentiality. The PAs who completed the homemaker's 24-hour food recalls were previously trained in obtaining the most accurate recollection of a person's food intake, according to EFNEP procedures. The State EFNEP Coordinator, a registered dietitian, provided this training in 1992.

Food Data Analysis

Data from the 24-hour dietary recall forms were analyzed for food categories based on the methods used by Patterson and Gladys.⁵² As stated by these authors, the food categories were developed based on the Interim Dietary Guidelines and the American Cancer Society recommendations. Dairy, cereals and grains, and limited extras categories were added to those used by Patterson and Gladys.⁵² Appendix G outlines the food categories that were used in this study. Food items in each food category were recorded according to the number of times each food was consumed. Results were reported as frequencies of persons consuming predetermined categories of foods. Serving sizes were not considered.

The EFNEP/SCNEP records were also analyzed for trends in food preparation and places of food purchasing. These considerations are outlined in Appendix G as well. Similar to the food items, frequencies of preparation methods and place of purchase were tallied. Results were reported as trends seen in each of these factors. The dietary recall analysis did not include a statistical component due to the qualitative nature of this study and the low number of participants involved.