

Incentives and Barriers to Participation in Community Nutrition Education Programs for
Recipients of Food Stamps and Temporary Assistance to Needy Families

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(ABSTRACT)

The purpose of this study was to explore the incentives and barriers perceived by low-income women of child-bearing age related to their participation in nutrition education programs. The specific programs of concern in this study are the Expanded Food and Nutrition Education Program (EFNEP) and the Food Stamp Nutrition Education (FSNE) program. This qualitative study sought to hear the voices of the women so that nutrition programs can be made more successful in reaching this population. Personal interviews were conducted with 23 women in their homes or appropriate local sites, and transcripts were analyzed to identify categories and themes.

People of low socioeconomic status and those with the least education have higher rates of obesity and overweight and suffer disproportionately from poor health. Women receiving Temporary Assistance to Needy Families (TANF) also receive Medicaid. Medicaid costs have escalated due to the obesity rate, which is currently estimated at 64% of the adult population. In addition, 30% of American children are experiencing obesity or are overweight. It is important for parents to understand the causes of obesity and the effects of the chronic diseases related to obesity. Prevention programs are more cost effective than medical treatment of the diseases associated with obesity, and proper nutrition can reduce the incidence of chronic diseases.

Findings of this study suggest that isolation is the main impediment to participating in nutrition education programs. Missing from the interviewed women's circumstances are social capital, human capital, and economic capital. Social capital relates to the connections and relationships that are important in life. Human capital involves the knowledge and skills acquired through life experiences. Economic capital refers to individual wealth or economic resources available to an individual or community.

Nutrition education programs should be refined to incorporate opportunities for socialization that will develop trust and reciprocity, as well as nutrition knowledge. Based on the results of this study, Virginia Cooperative Extension programs will be adapted to incorporate

weight control and cooking classes with nutritious recipes. The learning environment will be safe, learner-centered, and fun. New marketing tools that are more appealing to the prospective clients will be developed.

DEDICATION

“For I know the plans I have for you, declares the Lord, plans to prosper you and not to harm you, plans to give you hope and a future. Then you will call upon me and come and pray to me, and I will listen to you.” Jeremiah 29:11

I would have never been able to accomplish this educational endeavor without the inspiration of Our Lord. It seemed like every time I was at a roadblock some new idea came from His direction. He is an awesome God!

I dedicate this work to my mother and father who highly valued education. They sacrificed continuously to afford us the opportunity to have a parochial education. My parents expected me to continue on to college. I reluctantly went off to college because that is what children of the '60s did. My father always regretted he did not continue as a lifelong learner. I will not have this regret in my life.

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CHAPTER 1

INTRODUCTION

In 2004, the Surgeon General's Report indicated that overweight and obesity are major health and economic issues, costing Americans more than \$117 billion a year in 2000 (U.S. Department of Health and Human Services [HHS], 2001). Chronic diseases and obesity are increasing in America. Thirty percent of children and adolescents are overweight (Paxson, Donahue, Orleans, & Grisso, 2006), and 64% of U.S. adults are overweight (HHS, 2005). Overweight has doubled in the past 25 years among adults and tripled in children (HHS, 2001). Should this trend continue, it would prove to be a catastrophic problem for Americans in the future.

One's weight is related to genetic, metabolic, behavioral, and environmental factors. Overweight and obesity are caused by ingesting excessive calories and not expending the calories through activity. Age, race, gender, and socio-economic factors are also related to this serious health problem. Overweight and obesity are conditions that may cause heart disease, cancer, diabetes, kidney failure, and other serious chronic diseases. Many of these chronic diseases and obesity can be prevented through diet and physical activity (CDC, 2003).

The news media provides extensive information on poor nutrition, lack of exercise, and obesity, and how these conditions affect Americans. This information is presented through television, radio, weekly news magazines, newspapers, and monthly magazines.

Fiscella and Williams (2004) reported that families of low socioeconomic status suffer disproportionately from poor health. They experience a higher incidence of high blood pressure, cholesterol, stroke, obesity, and diabetes. Obesity contributes to chronic diseases in children including diabetes, asthma, sleep apnea, and gallbladder disease. Predominantly, this impoverished population does not have health insurance, often depending on Medicaid, the largest health care insurance program in America. Long, Coughlin, and King (2005) reported that one in every seven Americans participates in Medicaid.

Rationale for the Study

Presently, in Virginia, more than 210,000 people participate in the food stamp program, with the potential for many more to receive this assistance (Virginia Department of Social Services [VDSS], 2005). These participants may not be employed, or if employed, their jobs may

not pay a wage that supports the necessities of life or provides medical benefits (Castner & Schirm, 2004). Data supplied by VDSS (2005) indicates that out of 65,536 households receiving food stamps where the women are of child-bearing age, 53,037 have Medicaid as their health insurance program, and 35,412 receive Temporary Assistance to Needy Families (TANF). TANF, commonly referred to as welfare, is a block grant program funded by the federal government and administered by states to move people off public support into work activities following strict time limits. TANF replaced the previous welfare system, which was called Aid to Families with Dependent Children (AFDC).

Recent studies report a strong association between medical costs and the treatment of obesity and overweight and how this rise in medical costs impacts Medicaid. Finkelstein, Flebelkorn, and Wang (2003) reported that in 2000, Medicare and Medicaid spent approximately \$92.6 billion toward treating obesity and overweight. Long, Coughlin, and King (2005) reported that total federal and state expenditures for Medicaid in 2002 exceeded \$256 billion.

Prevention programs are more cost effective than treatment of diseases, for both individuals and society. Preventing health problems such as low-birth-weight babies and malnutrition saves the government money in health care costs (Lewit, Baker, Corman, & Shiono, 1995). One of the most successful nutrition education programs for limited income audiences in the United States is the Expanded Food and Nutrition Education Program (EFNEP). In Virginia, there are two nutrition education programs: the EFNEP and the Food Stamp Nutrition Education Program (FSNE). Lambur, Rajgopal, Cox, and Ellerbrock (1996) conducted a cost-benefit analysis in 1996 that found for every \$1.00 spent on EFNEP, \$10.64 was saved in health care costs.

EFNEP and FSNE

The EFNEP was implemented in the 1960s for low-income families who are of childbearing age and their children. EFNEP is a USDA Cooperative State Research, Education, and Extension Service (CSREES) program. To be healthy, young women need to eat nutritious foods before and during their pregnancy. Once their babies are born, it is essential they feed their babies and young children diets rich in nutrients from health-sustaining foods. Target audiences for the EFNEP programs are low-income families whose incomes are up to 185% of the federal poverty guidelines. The goal of EFNEP is “to assist limited resource audiences in acquiring the knowledge, skills, attitudes, and changed-behavior necessary for nutritionally sound diets, and to

contribute to their personal development and the improvement of the total family diet and nutritional well-being” (CSREES, 2005, n.p.). These individuals may also be receiving supplemental foods through a food-assistance program of the United States Department of Agriculture (USDA), called the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program.

The FSNE program is funded by the Food and Nutrition Services (FNS), another food and nutrition agency of the USDA. FSNE contracts are available through collaboration with the Department of Social Services (DSS), which administers the food stamp program in each state. In 2005, Virginia Cooperative Extension (VCE) was awarded a \$3.5 million FSNE contract. The contract mandated the program reach food stamp recipients and those eligible for food stamps. To qualify, individuals must have incomes of no more than 130% of the federal poverty guidelines or be enrolled in WIC. For example, a single mother who is the head of the household and has two children would be eligible if her income was less than \$20,917 annually. The contract specifically targets young women obtaining food stamps, of child-bearing age, pregnant, and/or with young children. The program attempts to teach the target audience how to stretch their food stamps and food dollars so they do not run out of food before the end of the month. Clients are also provided with information about how to plan meals using a menu and how to prepare nutrient-dense meals for their families. Emphasis is placed on fruits and vegetables, whole grains, and physical activity.

Health Concerns

Wilde and Ranney (2000) reported that food stamp participants decrease their nutrient intake as the month progresses. During the first three days of the month, people receive food stamps and shop for groceries. By the end of the month, often no food is left in the home due to lack of planning, storage, and transportation. This ultimately leads to low nutrient levels for all family members and related health problems. Wilde and Ranney (2000) suggested food stamp recipients feel embarrassed about using food stamps and are unwilling to make multiple shopping trips each month.

Many young people are not learning how to cook at home and do not know how to plan, shop, and prepare nutritious meals. As a result, they eat processed foods or fast foods (Serrano & Cox, 2005). Eating these types of foods on a regular basis can cause serious health problems due

to high fat content. Additionally, using processed foods and eating out is more expensive than preparing foods at home.

U.S. residents are more sedentary now than in the past. Exercise is usually not a part of a daily routine for the targeted audience of the EFNEP and the FSNE programs (Burdette, Wadden, & Whitaker, 2006). Overweight children exercise less due to embarrassment about their physique (O’Dea, 2003). They watch more television, play more video games, and use the computer more frequently than children who are not overweight (Finkelstein, Ruhm, & Kosa, 2005). Many schools have eliminated recess and physical education. Safe play areas are not available in many housing developments. Children in these situations consume excess calories and do not expend an equal amount of energy. Exacerbating the problem is the fact that many of their food items contain empty calories and are high in fat (Serrano & Cox, 2005).

Implementing EFNEP and FSNE

Many Americans do not have easy access to educational materials and programs about good nutrition practices. Stern, Kazaks, and Downey (2005) reported that health insurance does not normally cover diet therapy. The USDA is committed to educating all Americans about good nutrition practices. Cooperative Extension, through the land-grant universities in each state, provides educational programs that address chronic disease and obesity. Programming efforts are offered to reach out to all socioeconomic populations at the community level to empower people to live healthier lives through nutrition education programs. EFNEP and FSNE programs extend nutrition education to the limited-income population in every county of Virginia.

A primary challenge in implementing the EFNEP and the FSNE program is recruiting the targeted population to participate in nutrition education programs. There are over 100 full-time paraprofessionals employed in EFNEP and FSNE programs in Virginia who teach nutrition to food stamp recipients and people who are eligible for food stamps. Based on previous FSNE enrollment data, it is easier to enroll seniors in the program than it is to enroll young women (VERS, 2005). Some seniors are connected with senior nutrition sites or programs in county recreation facilities that welcome the nutrition programs. One population in need of the EFNEP and the FSNE program consists of women enrolled in the TANF program. These women are often unable to find a job and stay employed (East, 1999; Moffitt, Cherlin, Buron, King, & Roff, 2002). Furthermore, they experience many barriers to participating in the EFNEP and FSNE programs. Examples of these barriers are transportation, food insecurity, and not understanding

the value of good nutrition. Women of child-bearing age who receive TANF are more difficult to enroll in the nutrition education programs because they have personal situations that prevent them from attending classes, including inadequate money for housing, food, medical expenses, and sick children. Their daily emphasis is placed on survival.

Purpose of the Study

This study investigated the incentives and barriers to participation in nutrition education programs as perceived by women of prime child-bearing age who receive food stamps and TANF. The categories of characteristics examined were home environment, educational experiences, nutrition knowledge, and food provision for their families. The voices of these women were sought in the hope of improving the success of the programs in reaching the target population. This study examined how to communicate with these young women and what strategies would motivate them to enroll in the programs.

Twenty-three women receiving food stamps and TANF who were of prime child-bearing age, specifically between 20 and 30 years old, were recruited for personal, face-to-face interviews. The list of food stamp recipients provided by the VDSS was used to identify the clients. This list contained names, addresses, and phone numbers of members of the targeted population.

Research Questions

The following research questions were addressed:

1. What were the characteristics of the selected food stamp and TANF recipients between 20 and 30 years old? (The categories of characteristics examined were home environment, educational background, nutrition knowledge, and methods of providing food for their families.)
2. What factors did these women perceive as incentives to participation in the FSNE program and the EFNEP?
3. What factors did these women perceive as barriers to participation in the FSNE program and the EFNEP?

Importance of the Study

People in low socioeconomic groups and those who are the least educated have higher rates of obesity and overweight (Linz, Lee, & Bell, 2005). Women receiving TANF also have health insurance through Medicaid. Medicaid costs have continued to increase (Finkelstein, Flebelkorn & Wang, 2003). Medical costs are exploding, with overweight and obesity being precursors to chronic diseases (Bhargava & Hays, 2004). Children from low-income families are also experiencing overweight and obesity at high rates. Therefore, parents need to understand the causes of obesity and the negative effects of these chronic diseases on their children's long-term health.

Preventing health problems is far more cost effective than treating major health issues. Impoverished young women need to be as healthy as possible prior to becoming pregnant. They should understand how to plan and prepare meals that are nutrient dense and be able to feed their children balanced meals. They should also understand the importance of physical activity for themselves and their children. EFNEP and FSNE empower them to successfully avoid chronic diseases associated with obesity and overweight that impact their own and their family's health.

Delimitations

This study was delimited in the following ways:

1. This research study was specific to Virginia food stamp and TANF recipients who are of prime child-bearing age, specifically those between 20 and 30 years old. This restricted the study by location, age, and socioeconomic status.
2. The list of food stamp recipients from the DSS does not designate whether the head of the household was male or female, and some names are not gender specific. Therefore, a call was placed to the home phone number and a request was made to speak to the woman of the house.
3. The 2005 VDSS list of persons fitting the study criteria was not updated during the course of the study, preventing new members of the target population from participating. An updated version of the list was requested but not provided prior to conducting the study.
4. People living in homeless shelters were not considered as participants in the study due to their mobility.

5. Transportation and child care were addressed in scheduling and conducting the interviews. Transportation was provided for the participant, if requested.
6. The paraprofessionals assisting with the recruitment for the study were selected due to their interest in the research project and a positive attitude toward recruiting the targeted population for the interviews.

Limitations

Factors that may limit the study were:

1. Interviews surface discussion around specific issues, so personal interviews may be uncomfortable for some members of the target audience.
2. Clientele selected for the interviews may find it difficult to participate due to multiple barriers, such as sick children or emergency situations.
3. Truthfulness may be limited by a lack of trust. People may not be comfortable sharing their weaknesses and problems with someone they don't know (East, 1999).
4. Food stamp recipients may perceive the EFNEP and FSNE programs as part of a large federal bureaucracy and an intrusion in their personal lives. "Many immigrants fear (incorrectly) that receiving food stamps will cause them to be considered a 'public charge,' with severe immigration consequences" (Food Research and Action Center [FRAC], 2003, n.p.). These perceptions may prevent clients from participating or from providing complete and accurate information.
5. The results of this study cannot be generalized to other populations in Virginia or similar populations in other states.

Key Terms

This section provides definitions of terms and the targeted programs used in this study.

- *Expanded Food Nutrition Education Program (EFNEP)*: a USDA Cooperative State Research, Education, and Extension Service (CSREES) program implemented in the United States. It is designed to assist limited resource audiences (those with incomes of less than 185% of the federal poverty guidelines) "in acquiring knowledge, skills, attitudes, and changed-behavior necessary for nutritionally sound diets, and to contribute to their personal development and the improvement of the total family diet and nutritional well-being" (CSREES, 2006). (see Appendix A for the 2006 Poverty Income Guidelines.)

- *Food insecurity*: lack of access to an adequate food supply so that basic needs can be met.
- *Food resource management*: “to enhance practices related to thrifty shopping for preparation of nutritious foods” (Weimer, McKinney, & Benning, 2001, p. S1).
- *Food security*: the general well-being of a household in terms of having access to an adequate supply of food at all times to support a healthy, active life.
- *Food Stamp Nutrition Education (FSNE)*: a USDA Food and Nutrition Service (FNS) program implemented in the United States funded by the food stamp administration to improve the nutrition-related skills of food stamp recipients (see later definition). Skills taught relate to selecting, purchasing, and preparing a low-cost nutritional diet for themselves and their families. The members of the target population receive food stamps or are eligible for food stamps.
- *Food Stamp Program (FSP)*: a USDA Food and Nutrition Service (FNS) food assistance program that attempts “to permit low-income households, with incomes less than 130% of the federal poverty guidelines, to obtain a more nutritious diet by increasing their purchasing power” (FRAC, 2003, n.p.). The program attempts to end hunger and improve nutrition and health outcomes. The FSP is operated by state and local departments of social services (USDA, n.d.a).
- *Food stamp recipient*: an individual living in the United States whose income is less than or equal to 130% of the federal poverty guidelines, who has limited assets, and who meets various non-financial criteria. All immigrants living in the United States legally for five years or more are eligible; immigrant children are eligible regardless of how long they have lived in the U.S. (USDA, 2004a).
- *Obesity*: “an excess amount of body fat. Operationally, it is usually defined as a body mass index (BMI) of 30 kg/m² or greater, which uses height and weight. BMI is used because it correlates with amount of body fat. Adults with a BMI between 25 and 29.9 are considered overweight; adults with a BMI between 30 and higher are considered obese” (CDC, 2004, n.p.).
- *Poverty guidelines*: the federal government's statistical poverty thresholds used by the Census Bureau to prepare statistical estimates of the number of individuals and families in poverty. The poverty guidelines issued by the HHS Department are used for administrative purposes (HHS, 2004a). (Appendix A).

- *Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)*: a USDA Food and Nutrition Service (FNS) program for young women of child-bearing age who are pregnant or have young children under the age of five to receive free supplemental foods. These women qualify with an income up to but no more than 185% of the Federal poverty guidelines or are receiving Food Stamps, Medicaid, TANF or have certain family members who are eligible to receive Medicaid or TANF (USDA, n.d.b).
- *Temporary Assistance to Needy Families (TANF)*: commonly referred to as welfare, it is a block grant program funded by the federal government and administered by states to move people off welfare into work activities following strict time limits. TANF replaced the previous welfare system.
- *Virginia Cooperative Extension (VCE)*: part of the Land-Grant University system of Virginia Polytechnic Institute and State University and Virginia State University. It “enables people to improve their lives through an educational process that uses scientific knowledge focused on issues and needs. It is a public-funded, non-formal, off-campus educational system that links the research of the land-grant universities to citizens of Virginia (Seevers, Graham, Gamon, & Conklin, 1997).
- *Welfare*: Aid to Families with Dependent Children (AFDC) program, which provided cash assistance to poor families with children from 1935 to 1996 (Coven, 2003).
- *Women of child-bearing age*: females from 14 to 42 years of age with children or are able to bear children.
- *Work-first*: Under the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996, the Temporary Assistance for Needy Families (TANF) program was established. The intent is to have recipients attain independence through work, which is referred to as work-first (HHS, 2002). A five-year lifetime limit for receiving assistance is imposed under this law (HHS, 2002).

Summary

Winkleby, Jatulis, Frank, and Formann (1992) reported that low-socioeconomic status is one of the most powerful risk factors for poor health outcomes. The USDA has implemented multiple nutrition education programs for this low-income group to ensure a healthier American

population. Prevention programming is more effective and less costly than those costs associated with health care and the inability to provide for one's family.

Currently in Virginia, there is a growing incidence of obesity. Kurz (2005) reported that people are growing obese at a faster rate in Virginia than any other state in the nation. This implies multiple health risks leading to chronic disease. Health related issues are costing taxpayers large amounts of money and these expenditures will continue to rise until prevention programs are implemented and the increase in obesity and overweight is halted.

The timing of this study coincides with recently reported findings concerning increased obesity in Virginia and the United States. Obesity frequently leads to chronic diseases, especially diabetes. It is important to determine why young women of child-bearing age who receive food stamps and TANF are not attending free, local nutrition programs. Their health and their children's health will not improve until nutrition programs are successful in educating the audience to make nutritious choices for their families, shop within a budget, ensure an adequate food supply, and prepare nutritious meals. The EFNEP and the FSNE program can only educate the intended audience about these essential life-sustaining principles if they attend the program. The personal interviews conducted within several communities throughout Virginia provided information needed to successfully recruit and retain the targeted audience.

This chapter included a short discussion of the study and why nutrition education prevention programs are important as related to the obesity and overweight epidemic in the United States. In Virginia, there are two nutrition education programs available to impoverished adults and children, the EFNEP and the FSNE program. A short description of these two programs was briefly introduced as were the health concerns of U.S. citizens. The research questions and the rationale of the study were given.

In Chapter 2, a review of pertinent literature related to the topics of the study is provided. Chapter 3 presents the research methodology used to define and implement the study. The results obtained from this qualitative study are discussed in Chapter 4. Finally, Chapter 5 includes conclusions of the study and suggestions for practice and further research.

CHAPTER 2

REVIEW OF LITERATURE

This chapter provides a review of the literature related to health issues associated with young women receiving Temporary Assistance to Needy Families (TANF) and food stamps. The major topics of review are an overview; rationale for the study; obesity, chronic diseases and economic impact; the target population; and the food stamp program and food insecurity, and the VCE nutrition education programs.

Overview

Hunger exists in the greatest democracy in the world. The United States is known as the “land of plenty,” but this does not include all socio-economic populations. The United States has the most bountiful food supply in the world, yet every day children and adults go to bed hungry (Burnham, 2001; Hall, 2004). There are government programs to prevent this from happening, but unfortunately many of those who are impoverished are not participating in the programs.

In 1964, President Lyndon B. Johnson declared war: “This administration today, here and now, declares unconditional war on poverty in America” (Blank, 2000, p. 3). Health care reforms through Medicaid, the Food Stamp Program, and Welfare were established through legislative changes. These programs were intended to be a safety net for the most impoverished people in America (U.S. Department of Agriculture [USDA], 2004b). However, some believe these government programs have enslaved people by rewarding dependency (Kiefer, 2000; Parker, 2003). The extent to which these legislative changes succeeded is still debated.

People experiencing hunger often experience overweight and obesity problems, as well (Gibson, 2003). This implies that the food items hungry people consume are not necessarily nutritious and health sustaining. The Center for Disease Control (CDC) (2003) reported that foods high in fats and sugars, referred to as empty calories, often dominate the dietary intake of this population. Daily physical activity essential to being healthy, is not incorporated into their lives. Caloric intake is not proportionate to caloric expenditure. To complicate this problem even further, people with limited incomes have a disproportionate number of health issues that compromise their ability to attend school, retain jobs, and manage successful lives (Baldyga & Petersmarck, 2005; Dausch, 2001; Fiscella & Williams, 2004). Further complicating the issues of poor health and nutrition, Shim, Variyam, and Blaylock (2000) reported that many Americans

are falsely optimistic about their diets. Americans believe they are eating properly and mistakenly believe their diets are healthful.

Overweight and obesity can be precursors to chronic diseases (CDC, 2003). In the United States, we have an epidemic. Sixty-four percent of Americans are overweight or obese, potentially leading to serious health problems (CDC, 2004). Problems related to obesity are affecting the economy of the U.S. by driving up health care costs (Drewnowski & Specter, 2004). Presently, about 30% of American children are overweight and obese (Paxson, Donahue, Orleans, & Grisso, 2006).

The federal TANF program replaced Aid to Families with Dependent Children (AFDC) in 1996. This was a turning point for social welfare policy. TANF set time limits for receiving cash assistance and set conditions for compliance with employment and work-related activities (Bischoff & Reisch, 2000; Bloom, 1997). While education, employment training, child care, physical and mental health, and other social services are critical to our impoverished population's future success, services are more difficult to access due to the restrictions on use of TANF funds. Recent studies indicate that families who have left welfare since 2000 are less likely to be working than people leaving welfare prior to 2000 (Fremstad, 2004). Fremstad further reported "between 2000 and 2002 the number of children in poverty increased by 600,000" (p. 1).

Rationale for the Study

Women should be at optimal health prior to becoming pregnant to ensure a healthy pregnancy and a healthy baby. The women in this study's population are frequently not at optimal health due to lack of health care, food security issues, lack of resources such as transportation and finances, lack of nutrients through nutrient-rich diets, and lack of knowledge about how to plan and prepare nutritious meals (George, Hanss-Nuss, Milani, & Freeland-Graves, 2005).

Health as It Relates to Nutrition

Health is directly related to nutrition. Health-sustaining diets do not just happen, but must be planned. Understanding basic concepts of good nutrition practices is essential to healthy eating practices. The Expanded Food and Nutrition Education Program (EFNEP) and the Food Stamp Nutrition Education (FSNE) program are nutrition education programs available within

each county and city in Virginia. The goals of both of these programs are to educate limited-resource people to practice good nutrition, to stretch their food stamps and food dollars to prevent running out of food during the month, to prepare nutrient-dense foods, and to practice recommended food safety practices.

According to a March 2005 report by Hank Kurz Jr. of the Associated Press, Virginians are growing obese at a faster rate than any other state. The fact that obesity and overweight issues are significantly impacting people's health and well-being, especially for the impoverished, makes this study timely and important. Reaching this particular target audience has always been challenging for nutrition educators. Health care costs are escalating, and TANF requires people to become self-supporting. Therefore, TANF recipients need to learn how to plan and prepare nutrient-dense meals to avoid poor health for themselves and their children and to avoid missing work (CDC, 2003). The only direct way to understand how to engage this population in EFNEP and FSNE is to talk with them, discover what barriers prevent them from entering the program, and find incentives to encourage them to attend the program. For this study, interviews were conducted with 23 women with selected characteristics to determine their ideas about nutrition education. Based on the findings of the personal interviews, improvements in the delivery of the nutrition programs will be made to fit the needs of the target population more effectively.

Obesity, Chronic Diseases, and Economic Impact

Today in the United States, approximately 64% of the adults are either obese or overweight (U.S. Department of Health & Human Services [HHS], 2005), and 30% of children between the ages of 6 and 19 are at risk for being overweight and obese (Paxson, Donahue, Orleans, & Grisso, 2006). The U.S. Department of Health and Human Services (2004a) released a report calling this issue a national priority. The burden of diseases related to these conditions falls disproportionately on people of low-socioeconomic status, less educated women, and people of color (Baldyga & Petersmarck, 2005; Drewnowski & Specter, 2004; Fiscella & Williams, 2004; Gibson, 2003; Linz, Lee, & Bell, 2005; Pi-Sunyer, 2002).

Obesity is a precursor to Type 2 diabetes, which affects disproportionately people of lower socioeconomic status and racial and ethnic minorities (Drewnowski & Specter, 2004). Excess weight is also associated with cardiovascular disease, hypertension, stroke, dyslipidemia, sleep apnea, osteoarthritis, and some cancers (endometrial, postmenopausal breast, kidney, and

colon), musculoskeletal disorders, and gallbladder disease (Finkelstein, Ruhm, & Kosa, 2005; Hertz, Unger, McDonald, Lustik, & Biddulph-Krentar, 2004; Kuchler & Ballenger, 2002; Must, Spadnano, Coakley, Field, Coldiez, & Dietz, 1999).

Effects of Poor Nutrition on the Impoverished

Impoverished overweight women suffer from poor health and have babies of low birth weight (Hughes & Simpson, 1995). Dewey reported in 2003, that maternal obesity is linked to a greater risk of complications during pregnancy and delivery. She further stated the environment plays a significant role in this relationship between obesity and pregnancy. Some environmental factors include an abundance of tasty, calorie-dense foods, sophisticated marketing of foods, extremely large portion sizes, and lack of exercise (National Institutes of Health [NIH], 1998). Also, in a report by Trust for America's Health (2005), the environment was defined as the neighborhood one lives in, accessibility to food, play areas, the design of the community, and toxins within the community. Baughcum, Burklow, Deeks, Powers, and Whitaker (1998) reported that maternal obesity disproportionately affects limited-resource mothers and promotes obesity in their offspring; these obese mothers often believe a heavy infant is a healthy infant.

Having healthy babies would prove to be a cost saving for people participating in Medicaid as well as tax payers (American Dietetic Association [ADA], 2002b). Missing one nutrient, folate, in the diet of a young woman before conceiving comes at a high cost. An inadequate amount of this nutrient is associated with birth defects, such as neural tube defect (Boyle, 2003). Other risk factors associated with obesity and pregnancy are an increased risk of death due to high blood pressure, gestational diabetes during pregnancy, and high birth weight babies resulting in Caesarean section delivery (HHS, n.d.b).

Bray and Champagne (2005) report obese women with diabetes have low-birth-weight babies who are at higher risk for developing diabetes than normal-birth-weight babies. They further reported that babies who are breast-fed for a minimum of three months are less likely to become obese adults. Bray and Champagne's findings further justify the importance of nutrition education for the target audience of this study.

Body mass index (BMI) is defined as a measure expressing the relationship of weight-to-height for adults (CDC, 2004). A person is considered overweight if their BMI is between 25 and 29.9. A BMI greater than 30 is considered obese. For children and adolescents, overweight is measured as a sex-and-age specific calculation above the 95th percentile, based on revised

growth charts by the Centers for Disease Control and Prevention. To date, there is no accepted definition for childhood obesity (CDC, n.d.).

Being obese and overweight are major public health concerns that affect 59.2% of young adults, 67.5% of middle-aged adults, and 77% of older people (Hertz, Unger, McDonald, Lustik, & Biddulph-Krentar, 2004). The research is replete with studies indicating that poverty and obesity are highly correlated (Alaimo, Olson, & Frongillo, 2001; Baldyga & Petersmarck, 2005; Drewnowski & Specter, 2004; Farmer & Ferraro, 2005; Fiscella & Williams, 2004; Gibson, 2003).

A recent article written by Olshansky et al. (2005) published in the *New England Journal of Medicine* reported life expectancies will decrease over the next few decades due to obesity. Olshansky et al., and Raebel et al. (2004) reported that obesity in American adults increased about 50% per decade since 1980, and people who are severely obese (those having a BMI of greater than 45) will shorten their lives by 20 years compared to non-obese adults. Approximately 400,000 deaths annually are attributed to obesity, with tobacco use only slightly higher (Finkelstein, Ruhm, & Kosa, 2005).

Genetics, the Environment and Behavior

Genetics and the environment are contributors to obesity. Pi-Sunyer (2002) reported that “30% to 40% of the variance in BMI can be attributed to genetics and 60% to 70% environment” (p. 98S). “Diet and genes interact with each other to cause obesity. Minorities and the poor are more likely to live in polluted environments and work in hazardous occupations that increase the likelihood of exposure to toxins” (Boyle, 2003, p. 45).

Economic, social, and technological advances in the United States have played a large role in advancing obesity (Pi-Sunyer, 2002). America has an abundant food supply that is low in cost, extremely convenient, and readily available (e.g., processed foods, fast foods). Electronic devices such as television remote controls, garage door openers, and wireless telephones limit the movement required for daily living. With both parents employed full-time, often children are home alone and not allowed to play outdoors, and many neighborhoods are unsafe. Sedentary lifestyles for many young people are the result. Technological advances in the workplace are contributing to less energy expenditure (Finkelstein et al., 2005; Paxson, Donahue, Orleans, & Grisso, 2006). Further technological advances resulting in less use of human energy include

television, electronic games, computers, and changes in industry and manufacturing from manpower to machine power.

Becoming overweight or obese is simple: calories consumed are not proportionate to calories expended. It follows that increasing one's activity level will decrease one's weight if no more calories are consumed. A mere 100 extra calories each day can add up to 10 pounds in one year. "In 1997, the average American consumed 53 gallons of soft drinks and 17 gallons of fruit juices or drinks, and children consumed more beverages of all types with an increase in soft drinks and fruit juices" (Finkelstein et al., 2005, pp. 243-244). Finkelstein et al. further reported that "this is a 51% and 40% increase since 1980" (2005, p. 244). HHS (n.d.a) reported one small chocolate chip cookie to be 50 calories. Walking briskly for 10 minutes would expend the ingested calories of the cookie. HHS also indicated that a jelly-filled donut would be 300 calories and that it would take one hour of walking to burn the calories. Over-consumption of food and drink continues to add pounds to people who cannot afford to increase their weight.

No state has been exempt from this increase in obesity. In Trust for America's Health (2005), Virginia was ranked 22nd in adult obesity in the United States. A phone survey of 1,027 Virginians found that 23.7% reported being obese. In 1990, 9.9% of 190 respondents reported they were obese (Kurz, 2005). There is a mass campaign in the state of Virginia to reduce obesity and to educate the citizens of the Commonwealth to use good nutrition practices. One would think that being obese would significantly boost nutrient intake. However, the opposite is happening and dietary deficiencies are prevalent within people's diets. Empty calories are the norm; foods high in fats and sugars have replaced foods that are nutrient dense.

A report published by Mathematica Policy Research, Inc. (2005a) stated that infants and toddlers were consuming too many calories and eating foods high in calories and low in nutrients by the time they were only 6 months old. They were learning to eat like the majority of Americans, with diets high in sugar, sodium, and fat. This report included very disturbing findings: fruit and vegetable intake was below minimum requirements, sodium consumption was too high, and excessive intake of supplements and fortified foods were being consumed. This research information indicates that nutrition education is essential to raising healthy children.

The federal government is considering taxing selective snacks in order to limit the incidence of obesity (Kuchler, Tegene, & Harris, 2004), even though taxation may not prevent people from buying foods low in nutrients. The taxes generated from these food items, however,

could be used for promoting nutrition education programs. The food industry then might be motivated to change or modify some of the taxed foods to provide healthier versions of the snack. Consuming more calories than an individual expends adds weight, whether they are nutrient dense or nutrient deficient foods.

There are multiple reasons for obesity. Linz, Lee, and Bell (2005) reported: The potential mechanisms underlying the observed links between obesity and different measures of socioeconomic status may include biological pathways, family, social and cultural factors, as well as the characteristics of food environments. Life events such as change in marital status, loss of job, death in the family may lead normal weight persons to change behaviors that could increase the risk of change in weight status. Neighborhood effects such as living in areas with depressed economic conditions, inner city or rural areas with high unemployment levels; and low wage employment opportunities have similar effects. For example, results from contemporary research in neurobiology suggest stresses resulting from such events may lead to changes in weight and promote central adiposity through hormonal changes (pp. 6-7).

Economic Burden

There is a direct association between obesity and health outcomes (Allison, Fontaine, Manson, Stevens, & VanItallie, 1999; Hertz, Unger, McDonald, Lustik, & Biddulph-Krentar, 2004). Obesity is an expensive, chronic problem with significant economic burden. The CDC (2005) estimated 1998 costs nationwide related to obesity were \$10.8 billion for Medicare and \$2.7 billion for Medicaid. In Virginia, the parallel costs were \$320 million for Medicare and \$374 million for Medicaid. It behooves all Americans to improve their health status, reduce their weight and BMI, and begin or increase daily exercise to improve their health.

Finkelstein et al. (2005) reported that per person, “the average increase in annual medical expenditures associated with obesity is 37.4% (\$732) and ranges between 26.1% (\$125) for out-of-pocket expenses, 36.8% (\$1,486) for Medicare recipients, and 39.1% (\$864) for Medicaid recipients” (p. 247). Five percent of health insurance expenditures are attributable to obesity: “the average taxpayer spends \$175 each year to fund obesity-related medical expenditures among Medicare and Medicaid recipients” (Finkelstein et al., 2005, p. 248). Boyle (2003) reported that 4 million children have Medicaid-covered obesity-related expenses.

Obesity leads to medical related treatments and expenditures. Finkelstein, Ruhm, and Kosa (2005) reported an 88% increase in medical office visits associated with obesity. They further reported that people with a BMI of greater than 30 have six times the number of medical prescriptions for diabetes and 3.4 times the number of prescriptions for cardiovascular

medications. Finkelstein, Fiebelkorn and Wang (2003) reported that Medicaid patients have a 55.6% higher prevalence of overweight and obesity than non-Medicaid patients, and the government finances approximately half the total annual medical costs associated with obesity. Wang and Dietz (2002) reported obesity is not generally a reimbursable medical expense so pediatricians use different diagnoses, for example, sleep apnea, diabetes, or gall bladder disease so parents can be reimbursed. In 2001 constant dollars, Wang and Dietz (2002) reported hospital costs associated with obesity to be \$127 million per year, for children, during 1997-1999. Finkelstein et al. (2005) reported that in 1998 the nation spent “between \$51.5 and \$78.5 billion on health care related to overweight and obesity among adults” (pp. 223-224). Furthermore, obesity is often a stigmatizing and socially unacceptable condition for any child, which ultimately leads to not realizing one’s full potential and overall self-worth (Schwimmer, Burwinkle, & Varni, 2003).

Medical costs are not the only costs associated with obesity. Obese people, especially women, are more likely to miss work (Finkelstein et al., 2005). Thompson, Edelsberg, Kinsey, and Oster (1998) estimated absenteeism attributable to obesity cost employers \$2.4 billion in 1998, which equated to \$2.95 billion in 2003 (p. 120).

Further research by Finkelstein et al. (2005) reported there may be some differences in employment between obese and normal-weight individuals. They reported obese women normally work in low-paying occupations and are excluded from high-paying positions at the management, professional, and technical levels. These women are more frequently unemployed and experience higher rates of poverty. Bhattacharya and Bundorf (2005) reported that, “obese workers are potentially less productive than their non-obese counterparts” (p. 13).

Finally, the *Surgeon General’s Call to Action to Prevent and Decrease Overweight and Obesity* (2001) stated that in 2000, annual indirect costs of obesity totaled \$117 billion, which suggested that the total (direct and indirect) costs of obesity may be as high as \$139 billion per year. A concerted effort by health professionals, employers, and government is needed to prevent obesity rates from continuing to escalate into the future (ADA, 2002c; HHS, 2001).

Target Population

Forty percent of African-American families headed by women live in abject poverty (National Poverty Center, 2005). The number of single mothers with children has increased dramatically since 1970 (Bowen, Desimone, & McKay, 1995). Bowen et al. (1995) reported that

poor families frequently do not foster efficient learning and nurturing environments. The best assurance for a young woman to avoid poverty is to finish high school, remain childless outside of marriage, find employment, and remain employed (Tanner, 1996).

In April, 2005, I requested from the VDSS data on individuals between the ages of 14 to 42 (child-bearing age) receiving TANF, food stamps, and Medicaid. The list also included names, addresses, children's ages, and education level of the recipient. The VDSS reported 35,412 women receiving TANF, food stamps, and Medicaid. The FSNE and the EFNEP programs examined in this study target poor, young women with children. These recipients are often single mothers, of child-bearing age, have young children, have food security issues, are frequently overweight or obese, and are not self-sufficient (Hess, 2001).

The Personal Responsibility and Work Opportunity Reconciliation Act and TANF

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 changed provisions for women receiving welfare. This new act replaced Aid to Families with Dependent Children (AFDC). AFDC assisted families with cash based on need, income, resources, and family size, and did not include a work requirement. In 1996, PRWORA became a block grant administered by individual states. Each state had specific guidelines for implementing TANF. PRWORA promotes jobs, work, and marriage. It also promotes finishing high school and stipulates penalties for drug use. TANF requires people to work; it has very specific timelines for individuals to leave TANF and become self-sufficient. Individuals receiving TANF have five years in their lifetime to receive these benefits (Danzinger et al., 2000).

During the 1990s, the economy was booming, AFDC was eliminated, and PRWORA was implemented. TANF caseloads declined significantly. The job market was lucrative; “employment opportunities for low-income women were expanding in the tight labor market” (Danzinger et al., 2000, p.1). Presently, the economy is coming out of a recession and finding employment is difficult, especially for the unskilled. Due to PRWORA, women who receive TANF and have not been employed are considered “high risk” because they have not successfully entered the labor market. Comprehensive studies of the barriers preventing this target audience from entering employment and retaining a job have been conducted since the inception of TANF (Besharov & Germanis, 1999; Lattimer, 2004). One of the devastating effects of TANF has been the misinformation associated with receiving food stamps and Medicaid.

Many people eligible for both the Food Stamp Program (FSP) and Medicaid believe that if they do not qualify for TANF they cannot participate in the FSP. Because of this belief, people eligible for both of these programs have not applied. They are relying on community food pantries or are going hungry. Prior to 2001, one in three families with single mothers as the head of the household experienced food insecurity, and 1 in 10 experienced hunger (Burnham, 2001). It was reported by Hall (2004) that 31.1% of single female-headed households with children experience hunger. USDA reported that 11.2% of U.S. households were food insecure (2004c).

Women have left the “welfare rolls” since 1996, with a decline from 1.16 million in 1995, to less than half a million in 2001 (Pati, Romero, & Chavkin, 2002). However, this decline does not mean they are gainfully employed, making a living wage or able to feed, clothe, and shelter their children (Burnham, 2001; Goldberg, 1999; Pati et al., 2002.)

Beginning in October 2006, states are required to attain a 50% work participation rate in TANF or face sanctions. Sanctions will include up to a 5% reduced rate in the TANF block grant. This implies people not complying with TANF provisions will be forced to exit the program and not receive benefits. The most significant factor is our children are living at a higher level of poverty than ever before, and severe poverty increased between 2001-2002, and is now back to the level it was in 1996-97 (Fremstad, 2004).

The most unfortunate aspect of welfare reform has been that a larger number of children are living below the poverty level and are experiencing hunger, poor health, and lagging psychosocial development. These deprivations will ultimately affect success in their adult lives (Fremstad, 2004; Pati et al., 2002). Fremstad further reported that 81% of Virginians who lost TANF eligibility due to state time limits were below the poverty line even though 90% of them worked at some time (2004). Much research has been done since 1996 when PRWORA was implemented. PRWORA intends to move participants into the work force and make them self-sufficient. Axinn and Hirsch (1993) reported that “a psychological state of dependency prevents the poor from joining the mainstream” and “help for the poor should be tied to education, job training, and the acceptance of work” (p. 564). East (1999) and Axinn and Hirsch (1993) further reported that personal problems of the target audience need to be addressed before pushing them into the workforce.

Barriers to Employment

In studying the barriers to entering the workforce, researchers found most employers wanted credentials such as a high school diploma. Danziger et al. (2000) and Bischoff and Reisch (2000) reported that 50% of welfare recipients are high school dropouts, 33% are functionally illiterate, and 40% have no previous job experiences often required by employers. Most jobs require reading, writing, computer, math, and interpersonal skills. Danziger et al. (2000) further reported women attempting to become employed read at the sixth grade level or below and were lacking skills for fully performing basic tasks. Forty percent of TANF recipients had no work experience prior to receiving welfare (Danzinger et al., 2000). Workplace norms or behaviors, commonly referred to as soft skills, were missing. These soft skills are frequently learned by observing a role model. With no role models to emulate how to work, soft skills are often missing from the aspiring worker's abilities. Welfare becomes cyclical. Individuals fail to adhere to behaviors such as punctuality, work attendance, and performing the required tasks, which are essential to being successful at work.

Almost 50% of women receiving TANF are high school drop-outs (Nichols, Elman & Feltey, 2006). These authors reported that "education alone protects against poverty" (p. 1323). However, education is not valued in many families that have experienced generational poverty. Beegle (2003) reported that many students experienced success in school yet had no further direction nor understood the importance of education. They did not view education as a means to being successful in the work force. Many females from welfare families stated that their career goal was to be a mother, and they had no further aspirations.

Impoverished children often do not have the same experiences at school as other children have. School personnel may punish impoverished children by giving them detention for tardiness, which could be a result of having limited access to transportation. These students may not have prepared their homework assignments because their parents cannot help them (Beegle, 2003).

Teacher education programs may not adequately prepare teachers to understand the needs of impoverished children and the importance of being involved in their lives. When Beegle (2003) asked students about their teachers, many students said their teachers were not for them but rather against them due to their appearance, communication skills, and lack of performance in the classroom and on homework.

It is important that children stay in school so that they graduate with a minimum of a high school diploma. Students should have a variety of learning experiences in the classroom. Many students do not understand how classroom learning relates to their current and future lives. The foundation of career and technical education was built on contextual learning integrated with core academic knowledge and technical and occupational knowledge. This type of learning leads to increased skills that will promote career development and ultimately the skills to be successful in the work place (Brand, 2003; Reinventing the American High School for the 21st Century, 2006).

The Center for Law and Social Policy reports a decline in the number of people being served and trained under the Workforce Investment Act (WIA) of 1998. Priority is given to limited-resource individuals for job searching and training. There has been a 14% decline specific to low-income individuals participating in the program. The percentage of single parents taking advantage of the job training programs “decreased from 43.7% in 1998 to 24.6% in 2003” (Frank & Minoff, 2005, p. 4). Fewer people exiting the program are TANF participants. This implies the poorest of poor who need assistance the most are not taking advantage of work training programs (Frank & Minoff, 2005).

Tantamount to being successful at work is emotional and mental health. Women receiving TANF suffer disproportionately from mental health problems that limit employability. Further barriers for these women attempting to enter and be successful in the workforce are dealing with personal situations such as rape, domestic violence, sexual molestation, depression, and other physical and mental health issues (Danziger et al., 2000; East, 1999; Hofferth, 2002; Riger, Staggs, & Schewe, 2004).

The balancing act between work, parenting, maintaining housing, lack of transportation, poor management skills, emotional and/or physical abuse, drug and/or alcohol addiction, and low-paying jobs prevent job retention. Prior to entering into the work force, these issues should be addressed through counseling and training programs (East, 1999).

In her book, *Uncle Sam's Plantation*, Parker (2003) wrote about the welfare system and how it enslaved impoverished women. As a former recipient of this system, she felt she had insight into the plight of a “welfare mom.” In her own words:

...let me make sure I understand you correctly, I inquired of the welfare caseworker as I presented her with my pregnancy confirmation note from a doctor. All I have to do for you to send me \$465 a month, \$176 worth of food stamps, and 100% free medical and

mental assistance is keep this baby. As long as I don't have a bank account, find a job, or get married I qualify for aid? Where do I sign up? (p. 19)

Paradigm Shift

One serious problem in redesigning welfare programs today is how to change the paradigm of young people who grew up in the welfare system. A work-first program, which expects people to be employed, is not a familiar experience to these young people, since many of their mothers were welfare recipients. A new job will not empower people to be successful if they have never had to manage a home environment while working, especially if they are single mothers (Robbins & McFadden, 2003). These authors further reported that working single mothers have limited time to support their children's psychosocial needs. Their children are increasingly dropping out of high school, and they are experiencing minimized parental attention and supervision at home. Robbins and McFadden (2003) reported they have limited money for their children's needs, and work causes conflict and stress for the single mother and for their children.

Educational programs to address home and work issues bring about change. Programs should be tailored to individual needs of each person for successful employment (East, 1999). Workforce training programs are intense. A maximum of 12 months is allowed, however, most programs are 12 weeks in duration. Holzer, Stoll, and Wissoker (2004) reported the approach is to train quickly and get participants employed. With experience on their resume, they can move into better jobs. In many cases, this is not successful due to multiple barriers the participants face in their personal and family lives. For example, lack of transportation and childcare, no high school or GED diploma, or a lack of self-confidence due to previous abuse are barriers preventing success (Banerjee, 2003; Hofferth, 2002). Wilson and Stewart (2000) reported that for welfare reform to be successful it requires community collaboration—stakeholders such as Cooperative Extension, local social service agencies, community employers, and educators need to rally to move TANF participants into the workforce. This empowers families to function while the participants are at work. Fabricant and Fisher (2002) proposed for a participant to self-actualize, agency workers need to develop trusting and mutually respectful relationships with their clients. Participants should be treated as subjects, not objects.

The Food Stamp Program (FSP) and Food Insecurity

The first FSP began in 1939, designed to address the great disparity between those who have financial resources and those who do not. The goal was to create a national program to prevent food insecurity and wipe out hunger. It lasted only four years, yet it reached over 20 million people. The program ended in 1943 because the economy was booming and the food stamps were no longer needed (USDA 2004b).

Food Stamp Use

The program was reinvented in the 1960s by the federal government to create a safety net for people experiencing poverty. The program was reinstated because good nutrition is essential to a healthy life and adequate food for many Americans was not readily available (Winicki, Jolliffe, & Gunderson, 2002). The FSP is an entitlement program (Gunderson & Oliveira, 2001). To be eligible for food stamps, a person must have less than or equal to 130% of the federal poverty guidelines, have limited assets, and be a citizen of the United States, a qualified alien who has been in the United States for five years, or an immigrant receiving certain disability payments. Eligibility is based on income, size of household, assets, housing, work requirements, and other factors (Boyle, 2003). The financial requirements include a gross income limit of 130% of the poverty level, a net income limit (gross income less allowable deductions) of 100% of the poverty level, and a countable assets limit of \$2,000 (Fox, Hamilton, & Lin, 2004).

A typical food stamp/ TANF family receives about \$640 a month in TANF benefits, \$184 allotted in food stamps, and \$154 in countable resources, or money saved (Cunningham & Brown, 2004). McKernan and Radcliffe (2003) reported the characteristics of people receiving food stamps as mostly nonwhite and non-elderly, living in low-income households with children; not homeowners; eligible for the highest rate of FSP benefits; having a household head who is not educated; receiving TANF and/or Medicaid; and located where unemployment rates are high. Families at high risk for being homeless are at a higher risk for food insecurity (Gunderson, Weinreb, Wehler, & Hosmer, 2003).

Fifty-five percent of all food stamp recipients in 2001 were children (Cunningham & Brown, 2004; Fox et al., 2004). This is of significant concern because research reports that up to 30% of American children are overweight or obese (while possibly malnourished), food insecurity is related to obesity (Gibson, 2003), and impoverished populations suffer

disproportionately from health problems due to lack of health insurance (Story et al., 2002). Furthermore, food insecurity implies poor health status among children with negative academic and psychosocial outcomes (Oberholser & Tuttle, 2004). A report published by the Food Research and Action Center (FRAC) (n.d.) stated that hungry children have more individual health problems including weight loss, fatigue, headaches, irritability, inability to concentrate, and frequent colds.

The FSP intended to move people from dependency to self-sufficiency. It is federally funded but administered by individual states (FRAC, 2003). The program has evolved during the past 35 years to meet the needs of the impoverished and move them to self-sufficiency (Fox et al., 2004).

The Economic Research Service reported 7,459,827 people live in Virginia, with 9.6% of the population (or 720,000 individuals) impoverished and almost 214,000 households receiving food stamps (Castner & Schirm; USDA, 2005). This indicates that many people eligible for the FSP do not apply. It is speculated that applications for the program are too lengthy (some are up to 12 pages in length) and too time consuming, with frequent re-certification processes that may take up to five hours of lost work time (Currie & Grogger, 2000; McKernan & Ratcliffe, 2003). Under PRWORA, a single person who is able to work must be employed within three months of receiving food stamps or be volunteering a minimum of 20 hours each week to continue receiving food stamps (Wilde, 2001).

Over the past 10 years, food stamp use fluctuated widely. The economic conditions in America were booming in the mid-1990s and food stamp enrollment was down, but after the bombing attacks of September 11, 2001, the economy moved into recession, jobs were lost, and food stamp use increased dramatically (USDA, 2003).

Beesharov and Germanis (1999) reported that women who receive TANF are automatically eligible to receive food stamps. This allows them to have food for their children and themselves while they participate in workforce training programs offered through the Department of Social Services (DSS) and actively seek employment. Hagerty (1999) reported that good nutrition allows people to strive for goals to improve their well being. Maslow's hierarchy of needs indicates that when food, clothing, and shelter needs are not met, self-actualization cannot take place (Gawel, 1997). Hagerty (1999) stated that supplying food to

people in need begins the process of fulfilling basic needs and allowing movement to higher-levels of self-actualization.

There are many people living in America referred to as the “working poor.” These working poor populations are defined as employed, but in jobs that do not allow for a living wage. These families frequently experience food insecurity. In 2001, 41.3% of Virginia’s food stamp participants were in the category of the working poor (Castner & Schirm, 2004). The rate of participation in the FSP for the working poor families is low: only 51% who were eligible actually participated in the FSP in 2000. Nationally, only 59% of people who qualify for the FSP apply for these benefits (FRAC, 2003).

The FSP was created to supplement an individual’s or family’s income. Daponte, Haviland, and Kadane (2004) reported that food stamp households spend money on food over and above their use of food stamps. In other words, families receiving food stamps supplement their food stamps with their own money, which is not only a boon to the agricultural and retail community, but is an attempt to keep families from experiencing food insecurity.

Thrifty Meal Plan

The U.S. government set minimum nutritional standards for the FSP. The USDA’s Thrifty Meal Plan (TMP) sets the “standard for a nutritious diet at a minimal cost” (Daponte, Haviland, & Kadane, 2002, p. 65). Wherever Americans live, they receive the same dollar amount of food stamps. The standards for food stamps are set nationally (USDA, n.d.a.).

The TMP sets the standard for nutritional adequacy with budget constraints. Planning meals using the TMP dollar amount is a challenge. The EFNEP and the FSNE programs educate low-income family members in how to balance the family’s nutritional needs and their budgets to ensure good health using the TMP. Daponte et al. (2002) discussed how difficult it is to stay within the constraints of the TMP. Their reasons included food spoilage and inability to stay within a strict grocery list while shopping. They stated it would take about three hours every day to prepare meals and stay within the guidelines. Meals would have to be prepared using raw foods and eliminate convenience foods. Additionally, there is disparity between food costs in different states, and food prices fluctuate widely. These discrepancies make staying within a budget more challenging in some states than in others. Finally, the authors discussed that some family members might be on restrictive diets, which would incur further food expenditures.

Food Insecurity

There are 15 federal nutrition assistance programs today. Boyle (2003) reported the programs under these categories: General Food Assistance Programs, Food Distribution Programs, Child Nutrition Programs, and Programs for Pregnant Women, Infants, and Children. Each program is meant to be a “food safety net” (Boyle, 2003, p. 127), providing impoverished citizens with food or the means to purchase food.

Food insecurity exists whenever “the availability of nutritionally adequate and safe foods or the ability to acquire foods in socially acceptable ways is limited or uncertain” (Oberholser & Tuttle, 2004, p. 1). Paradoxically, food insecurity is related to overweight in women, though not in men (Townsend, Pearson, Love, Acterbert, & Murphy, 2001). Alaimo, Olson, and Frongill (2001) and Townsend et al. (2001) reported that mildly food insecure women were 30% more likely to be overweight than women who were food secure. The Center on Hunger and Poverty, as reported by Hall (2004), stated more people experienced hunger in 2003, 36.3 million people (12.7% of all Americans) experienced hunger and food insecurity, and 13.3 million children under the age of 18 live in these households. Hall (2004) stated that parents attempt to protect their children from food insecurity, but it is not always possible, and older children do not fare as well as younger children. In 2003, 400,000 children in America experienced hunger, which can adversely affect cognitive development and impair their capacities for a lifetime. Hungry children do not perform at the same level as food secure children, and they miss more days of school due to the effects of hunger (Hall, 2004).

In a recent report by America’s Second Harvest, it was stated that 66% of households served by emergency food programs have annual incomes below the federal poverty level and 10% of people receiving emergency food had no income (Mathematica Policy Research, Inc., 2005b). More than 36% of all households being served had at least one adult within the home working. Most people being served by America’s Second Harvest are single parents with children while males without families tend to frequent soup kitchens. All races and ethnicities are being served; however, people of color are disproportionately affected (Mathematica Policy Research, Inc., 2005b).

Drewnowski and Specter (2004) found food insufficiency associated with single-parent families with no health insurance and less than a twelfth grade education. These households with children were twice as likely to be food insecure compared to two-parent families. Nord and

Andrews (2002) found in 2000, 31% of households, where the single parent was without health insurance and was uneducated, were food insecure. This comprised 25% of all food-insecure households. Gunderson, Weinreib, Wehler, and Hosmer (2003) reported that homelessness and food insecurity are correlated. The researchers suggested that nutrition education programs such as the EFNEP and the FSNE should be mandated so these families learn how to stretch their food stamps and food dollars.

As stated in Chapter 1, Wilde and Ranney (2000) reported the first three days of the month when people receive their food stamps are when they buy their groceries for the month. Before the end of the month, the food has been consumed due to lack of planning, storage, and transportation. Townsend et al. (2001) reported there is some evidence that disordered eating patterns are related to food insecurity. Food items purchased with food stamps do not have to be nutrient dense, but can be high in fats and sugars. A study conducted by Cason, Cox, Wenrich, Poole, and Burney (2004) reported nutrition education “improves food buying, meal planning and preparation, and food safety practices” (p. 136). Virginia uses an Evaluation/Reporting System (VERS) developed by USDA’s CSREES to report positive effects of the program and behavioral change made through nutrition education programs. Behavioral change is recorded in the FSNE program and the EFNEP. Change occurs in dietary quality, food safety practices, food security practices, and shopping behaviors. In 2005, after participating in the Virginia FSNE program, 87% of participants had acceptable dietary quality and nutrition practices, 85% of participants had acceptable food safety practices, and 56% of the participants had acceptable practices in food shopping, as reported by VERS (2005). In this same year, VERS reported EFNEP participants had an 85% improvement in one or more nutrition practices, 80% showed improvement in one or more food resource management practices, and 70% reported acceptable food safety practices upon completion of the program.

The American Dietetic Association reported that women participating in the EFNEP were more likely to be food secure than the control group (2002a). In 2002, federal food assistance programs provided almost \$38 billion in benefits to low-income families. Despite this assistance, many families turn to food pantries and other food assistance providers for additional help (Mosley & Tiehen, 2004). As of 2002, there were about 33,000 food pantries and more than 5,000 soup kitchens in America. These providers supplied low-income people with

approximately 3.4 billion pounds of food in 2000. Mosley and Tiehen further reported that some people no longer receive food stamps but continue to rely on private food assistance programs.

Interestingly, food stamp participation declined between 1994 and 1999, but demands on food pantries increased (Greger et al., 2002). Recently, food pantries have become a long-term resource for food with 52% of the surveyed clients using food pantries regularly. The researchers reported that food packets contained 100% of the Recommended Dietary Allowance for protein, iron, and folate; and approximately 50% of calcium needs. In surveying food pantry clients, Greger et al. (2002) found less than half of the clients knew how to prepare the food items they received from the pantry. This implies a great need for food preparation lessons to be taught in the nutrition education programs.

Nutrition Education Programs in VCE

As of 2001, the HHS planned to alleviate hunger and the prevalence of food insecurity by the year 2010 (Keenan, Olson, Hersey, & Parmer, 2001; HHS, 2001).

Realizing the complications associated with poverty and health, Food and Nutrition Services (FNS) “renewed their commitment to nutrition education” (Fox et al., 2000, p. 32). The FSNE program developed from this commitment. The mission and focus of the FSNE in Virginia is the same mission that the EFNEP has had for nearly 40 years. The purpose is to assist low-income people “in acquiring the knowledge, skills, attitudes, and behavioral changes necessary for nutritionally sound diets, and to contribute to their personal development and the improvement of the total family diet and well-being” (CSRRES, 2006, n.p.).

The Cooperative Extension Service was established in 1914. Seevers, Graham, Gamon, and Conklin (1997) reported it is the world’s largest youth and adult non-formal educational organization. VCE provides non-formal educational outreach through two land-grant universities: Virginia Tech and Virginia State University. It is also part of the national Cooperative State Research, Education, and Extension Service. The VCE programs are delivered through Extension educators, paraprofessionals, and trained volunteers. The mission of VCE is to provide useful and practical information to citizens of Virginia to enhance their lives (Seevers et al., 1997; VCE, n.d.). The EFNEP and FSNE are implemented in the counties and cities of Virginia by paraprofessionals trained by Family and Consumer Sciences extension faculty. Frequently, the paraprofessionals are indigenous to the audience they work with and live in the communities. Lessons are delivered through an experiential learning process. Participants gain

knowledge in selecting and buying food, food production, preparation, storage, safety and sanitation, and learn to better manage food budgets and related resources such as Food Stamps and WIC vouchers (CSREES, 2006).

Implementing Nutrition Education

The core elements of EFNEP and FSNE are to promote food security, food safety, dietary quality, and food resource management and shopping behaviors (USDA, 2004a). Fiscella and Williams (2004) reported that low socioeconomic status results in health disparities that begin before conception, because the “health of the fetus is so closely linked to the health of the mother” (p. 1140). Multiple risk factors are associated with being poor and lacking health insurance. Pregnancies end in low-birth-weight babies and higher infant mortality due to lack of prenatal care (Hughes & Simpson, 1995). The FSNE program focuses on women with young children, women of child-bearing age receiving food stamps, and their children. Senior citizens receiving food stamps or seniors eligible for food stamps are a secondary audience for the nutrition education program.

In 1996, Virginia applied for the FSNE funds to implement a nutrition program for people either receiving food stamps or eligible to receive them. Over the past 10 years, the funding has grown from \$600,000 to over \$3.5 million. The program educates the target population (people either receiving food stamps or eligible for food stamps who have household incomes below 130% of the poverty guidelines) to make healthy food choices within a limited budget, improve diets of the entire family, gain knowledge of the importance of good nutrition practices, learn how to prepare foods rich in nutrients while practicing food safety and sanitation, promote active lifestyles, and plan and stretch their food stamps and/or food dollars. The ultimate goal of the program is to ensure diets rich in nutrients for good health and an adequate food supply by practicing good food management skills (USDA, 2004a).

The FSNE program is implemented in Virginia by replicating the EFNEP. A paraprofessional model reaches the target audience. Frequently, the program assistants (PAs) are indigenous to the community in which they work. Norris and Baker (1998) reported the paraprofessional model is more effective in reaching the limited-resource audience in both the EFNEP and the FSNE. Local mentoring by paraprofessionals has proven to be successful for the past 38 years. Behavior change is evident through changes in eating patterns evidenced by pre- and post-food recalls and differences measured in responses on pre- and post-behavior

checklists. More than 20,000 adults were reached in 2005 through the VCE nutrition programs. Sixteen thousand children were enrolled in the nutrition programs this same year according to Virginia's ERS data (2005). The EFNEP began in 1968 to aid low-income women of child bearing age who were experiencing hunger and malnutrition. The EFNEP has educated low-income families to adopt good nutrition practices.

A PA teaches a series of nutrition education lessons. Typically, participants receive 6 to 10 lessons either one-on-one or in small groups. There is a pre-entry, food-related behavioral questionnaire given at the first meeting. Examples of the 20 questions are:

- Do you run out of food before the end of the month?
- Do you use salt on your food?
- Do you and your children eat breakfast within three hours of getting up?
- Do you read labels?

A 24-hour food recall is also required for participants at the first meeting. The lessons are taught over several months. Finally, upon completion of the final lesson, an identical behavioral questionnaire and an exit food recall is administered to assess nutrition related behavior change.

Foundation of the Program

The first step in enrolling the target audience in the EFNEP and the FSNE program is to begin building rapport and trust with the client (Mulroy & Lauber, 2002). The PA shows sincere concern and interest in the client and treats the participant with respect (Fabricant & Fisher, 2002; Norris & Baker, 1998). The PA ensures the information is meaningful and relevant to the participant. Because we know that women of low socioeconomic status experience overweight and obesity at epidemic levels and have the potential for manifesting different forms of chronic diseases related to diet (Raebel et al., 2004), their health and the health of their children makes the nutrition lessons meaningful. Life situations are motivators to learn and change behaviors (Hartman et al., 1994). PAs help participants share life situations so the learner discovers relevance and meaning from discussions. Learners need to be actively engaged in learning if behavior change is to occur, so lessons are taught using an experiential model.

Summary

Economically deprived people suffer disproportionately from poor health. Presently, they suffer disproportionately from being overweight and obese, which are precursors to chronic

diseases such as diabetes, heart disease, and certain cancers. Nutrition education prevention programs have proven to be cost effective in preventing poor health according to a study done in Virginia by Lambur et al. (1999).

Health care costs are escalating. Many of the impoverished people who the EFNEP and the FSNE program work with do not have health insurance or depend on Medicaid. Medicaid is funded through taxes paid by all Americans, therefore, it behooves U.S. citizens to practice positive, health-sustaining behaviors to prevent chronic diseases in order to curtail medical expenses.

Diet and exercise are important to good health. However, many limited-resource women receiving food stamps and TANF do not know how to prepare nutrient-dense recipes or plan meals that meet daily nutrient requirements. The EFNEP and the FSNE programs have proven to change behaviors of the participants in nutrition practices, food resource management practices, food security, and food safety practices.

The TANF program requires participants to work and be self-sustaining. The health of their children and their own health along with lack of soft skills and other barriers frequently prevents them from being successful in finding and retaining a job. Through nutrition education programs, women who receive TANF often prevent chronic diseases that impact their lives and prevent them from working.

CHAPTER 3

METHODOLOGY

The purpose of this study was to determine the incentives and barriers to participation in nutrition education programs by women of prime child-bearing age who receive food stamps and Temporary Assistance to Needy Families (TANF). The categories of characteristics that were examined were home environment, educational background, nutrition knowledge, and methods of providing food for their families. Constructivism is learning by building an understanding of an individual's view of reality (Patton, 2002). How an impoverished young woman sees her reality would be very different from how nutrition professionals construct their own reality. The purpose of qualitative research is to immerse oneself in the participant's reality to make meaning out of constructs that are very different than ones' own cultural constructs (Creswell, 1998). Immersion in the targeted population's view of reality will generate new knowledge (Merriam, 1998). This new knowledge will ultimately allow for designing and conducting more effective nutrition education programs.

A qualitative approach was chosen to discover and explore the thoughts and ideas of the target audience. The research questions were:

1. What were the characteristics of the selected food stamp and TANF recipients between 20 and 30 years old? (The categories of characteristics examined were home environment, educational background, nutrition knowledge, and methods of providing food for their families.)
2. What factors did these women perceive as incentives to participation in the FSNE program and the EFNEP?
3. What factors did these women perceive as barriers to participation in the FSNE program and the EFNEP?

Interviews were chosen because they allowed the interviewer to build upon and explore the participants' responses to the posed questions. The participants were asked to reconstruct past experiences which defined how they made meaning out of these experiences (Seidman, 1998).

Research Design

This study attempted to make meaning out of a social and human phenomenon that exists in the American culture: poor health associated with low-socioeconomic status. The most

effective way to explore this health issue is to go to the source with the most significant health issues at stake: women of child-bearing age. Do the individuals in this population understand that health and wellness are important, yet avoid doing something about it? Maslow's *hierarchy of needs* (Gawel, 1997) suggested that an important part of survival is having physical needs met. Without food, clothing, and shelter, people cannot begin to achieve security and, ultimately, self-actualization. Nutrition education may not be useful to individuals if they are experiencing food insecurity.

Understanding the meaning this population gives to food, clothing, and shelter is vital if issues of health and wellness are to be addressed. Discovering the nature of these individuals' views of health and wellness is essential to understanding how best to engage them in the nutrition education programs available to them within their communities. The study explored their perceptions and described themes related to issues of health and wellness within this population.

In addition, this study attempted to generate theoretical explanations using a constructivist approach that entails understanding and listening to the multiple constructs of the interviewees and creating a mutual understanding between each interviewee and interviewer. This approach allowed for communication, interpretation, and negotiation that presented emerging themes (Ary, Jacobs, & Razavieh, 2002).

Personal, face-to-face interviews were conducted to discover the participants' perceptions as related to their health and their children's health. The perspectives of this targeted population are essential to the future success of nutrition education programs and dietary intervention.

Personal interviews that were unstructured and open-ended allowed for flexibility and responsiveness to emerging ideas and issues for both the participant and the researcher (Schwandt, 2001). In addition, interviews allowed for the transfer of personal experiences by the participant. This was important to the study: to capture an understanding of the participants' feelings and perceptions of past school experiences so that these insights could be considered when decisions are made concerning how to meet the needs of the participants in future nutrition programs.

The purpose of using interviews was to glean insights from the targeted population. Ary, Jacobs, and Razavieh (2002) reported that the response rate is high using personal interviews; therefore, personal contacts were made with the potential interviewees to increase the likelihood

of their participation. Personal contact between researchers and participants may also encourage the participant to provide the desired responses during the interview. These authors further reported that another advantage to interviews may be the order of the interview questions; if questions build upon each answer, the answers may be more truthful because the participant did not know the questions ahead of time (2002). Fontana and Frey (2002) reported that asking questions and getting meaningful answers is more difficult than it seems because participants may answer questions according to what they believe the researcher wants to hear. Furthermore, taping the interviews may have an influence on the participant and the researcher and thus affect the responses. The interview guide was designed with these factors in mind as well as taking into consideration the participants feelings and typical language use.

Loosely-structured, open-ended, information interviews were used to make meaning of the participants' needs and thoughts. Interviews allowed for flexibility and responsiveness to emerging issues for both the interviewees and the interviewer (Rossman & Rallis, 2003). I strived to create a permissive, safe environment that allowed for open discussion. Initially, I asked questions directly related to the research questions, followed by probing questions as they related to the participants' paradigms of health and wellness. This promoted further discussion and advanced different ideas and points of interest. Body language was captured in writing during the interviews by the program assistant (PA).

Prior to developing the interview guide and short questionnaire, the researcher discussed the study with the PAs at two district-wide meetings. The meetings took place in Abingdon, VA, and Charlotte Court House, VA. Approximately 30 PAs participated in these brain-storming sessions. The paraprofessionals assessed the relevance of the two instruments, the short questionnaire and the interview guide, since they best know the clientele.

Flick (2002) suggested that a qualitative interview consists of four parts: a preceding short questionnaire (Appendix B), the interview guide (Appendix C), the tape recording and transcripts, and an interview protocol (Appendix D). After explaining confidentiality of the study, each interviewee was asked questions from a short questionnaire. This 15-question survey consisted of yes or no answers. Flick further suggested a short questionnaire together with the interview guide is important. It "allows the researcher to collect the data which are less relevant than the topics of the interview itself before the actual interview" (2002, p. 87).

An interview guide was developed to address the potential incentives and barriers to participation in nutrition education programs. This guide allowed me to discover categories and themes that emerged throughout the interview process. The interview guide was followed throughout the interviews because the questions built upon each response. It was designed to support the “narrative string developed by the interviewee herself. But above all, it is used as a basis for giving the interview a new turn in the case of a stagnating conversation or an unproductive topic” (Flick, 2002, p. 86).

Questions such as, “Did you participate in home economics or family studies classes in high school?” were important to the study, as the responses may indicate some knowledge of nutrition and food preparation. It was important to query the interviewees about the resources within their homes. Knowing if they had computers, Internet access, televisions, DVD and video players, cell phones, land-line telephones, iPods, and microwave ovens would promote designing appropriate delivery methods for this audience. It was important to know if they would be interested in receiving newsletters. A question was asked about their interest in reading. The participants’ cooking skills were assessed through these survey questions:

- Do you often prepare foods from scratch?
- Did you take home economics or family and consumer sciences classes in middle school or high school?
- Do you prepare raw or cooked vegetables nearly every day?

Following the answers to the preceding questions, I asked probing questions that allowed me to understand their reality about food preparation. Merriam (1998) reported that qualitative studies are emerging and flexible, and are responsive to making adjustments throughout the interview. I allowed for adjustments when necessary. For example, one mother had her 2-year-old child with her, and flexibility in conducting the interview was important for this mother.

The health crisis in America affects limited-income audiences more profoundly than it does people who have more resources (Drewnowski & Specter, 2004). Reaching out to this population through interviews allowed for a better flow of communication and a better understanding of the difficulties in enrolling the targeted population in nutrition programs. Capturing the interviewees’ ideas and thoughts allowed the researcher to discover emerging themes and, in the end, theoretical saturation with regard to themes. Data saturation occurred when no new relevant data was collected that added to the study (Rudestam & Newton, 2001).

The emerging ideas led to the development of strategies that may encourage the targeted audience to enroll in nutrition programs.

Initial efforts to identify possible participants involved contacting the Virginia Department of Social Services (VDSS) because they collaborate on the FSNE project with VCE. This collaboration allowed the VDSS to share information about the participants who receive food stamps with me. I contacted VDSS in January 2005, and requested appropriate data identifying the targeted population. Data requested included name, address, age, number of children, education level, and assistance being received by the women, with enrollment in Medicaid and TANF required for participation. Phone numbers were also requested so the women could be contacted and invited to interviews. A current version of these data was requested of VDSS several times throughout the study, but no updated data were received.

The VDSS list included 65,536 names, phone numbers, and addresses of people between the ages of 14 and 42. Among these persons were 35,412 TANF recipients and 53,037 Medicaid recipients with 24,243 people in the population having one or two children under the age of 19. There were 30,291 people with a minimum of a 12th grade education, and 4,233 people in the population reported no education beyond eighth grade.

The Institutional Review Board protocol and informed consent forms were submitted. Approval for this study was received prior to beginning the research (Appendix D).

Site Selection, Population, and Sample

Rossmann and Rallis (2003) defined gatekeepers as those who may or may not allow a researcher to have access to pertinent information. In the present study, there are two sets of gatekeepers. The first gatekeeper was the VDSS, from whom I requested data concerning the target population.

The other gatekeepers in the study are the paraprofessionals (PAs) who teach the nutrition programs for VCE. The PAs are often people who are indigenous to the audience and thus know their communities and have easier access to the targeted population than would a university researcher.

In January, 2005, I asked the six EFNEP/SCNEP District Coordinators (DCs) to share the names of their most effective PAs. Each DC provided me with the names of five PAs. I called the 30 women, informed them about the research project, and asked if they thought it feasible to recruit 5 to 10 women with the qualifications to attend interviews. The qualifications for the

women were that they be receiving food stamps and TANF, be between 20 and 30 years old, and had not participated in either EFNEP or SCNEP. After speaking with all of the PAs, nine PAs were chosen to assist with the study. The PAs were chosen because of their positive interest in the research project and their belief that they could recruit the necessary women to interview. Four of the selected locations were rural communities and five were urban communities.

It was agreed upon that 30 women would be interviewed unless data saturation occurred earlier in the study. If data saturation occurred prior to 20 interviews, the interviews were to be considered completed after the 20th interview. Program assistants had previously developed relationships with agency representatives who work with limited-income audiences. One recruitment strategy was to recruit women from the TANF job training sites, and many of the PAs work with the TANF recipients at these sites. The fact that the contact with the potential participants came from a person (TANF personnel) they knew probably increased the willingness of the women to participate in the study.

One to three persons were interviewed in each county. Interviews were conducted in the women's natural settings, including their own homes. Young women were recruited to participate in the interviews through known contacts made by the nine PAs.

The PAs extended an invitation to each participant personally using face-to-face invitations or phone calls. (see Appendix E for the talking points used in the invitations.) The PAs worked within the communities where the interviews were conducted and they knew many people within the target population.

The invitation in person or by phone was the first step in making contact. After explaining the purpose of the study and determining that the potential interviewees had never been enrolled in EFNEP or FSNE, the PA invited the participant to the interview. If the answer was positive, the participant received a letter (Appendix F) from me at least two weeks prior to the actual interview. The letter again explained confidentiality, the purpose of the interview, the probable length of the interview (60 to 120 minutes), and the reward of a gift card. The PAs made a reminder phone call to each participant the day before the meeting. Seidman (1998) indicated that it is best to meet with the potential interviewee in person prior to the interview, but due to the fact that interviews were conducted across the state, distances made it impossible to meet in person prior to the interview.

The PAs assisted with selecting appropriate sites and times of day for each interview. The PAs also arranged transportation, and if it was required, a state vehicle was used to transport interviewees.

To ensure a higher rate of participation, a gift card was given to each person who completed the interview. This was explained to the participant at the time of the initial phone call from the PA. Patton (2002) suggested that appreciation is shown when a small gift is given in exchange for information. A gift card from a chain discount store with a value of \$20 was given to each person completing the interview. The gift card was provided through the FSNE indirect recovery funds. The PAs agreed that this specific monetary value would be appropriate to encourage participation.

Prior to the interviews, I worked with each PA to prepare her for taking notes during the interview. This preparation involved in-depth discussion about observing and making notations about non-verbal actions. This note taking was important because it helped to understand the meaning the participant constructed of the questions being asked of them. Upon completion of each interview, the PA and I discussed the different occurrences observed and recorded them in field notes. The verbal data from the interviews were captured using a tape recorder and then transcribed. Schwandt defined field notes as a way to “record thoughts, impressions, initial ideas, working hypotheses, issues to pursue, and so on” (2001). The field notes were used during the conceptual ordering stage.

The Interview

The interviews took place around a small table, which was more conducive to talking than being spread apart from each other. Each participant was asked to sign a consent form giving me permission to conduct and record the interview after it was determined that the participant understood the purpose of the study and the confidentiality conditions (Appendix D). I explained that the participant could stop the interview and the tape recorder at any time. Participants were clearly informed that confidentiality would be observed.

After signing the consent form, the interviewee prepared a snack with me. The snack was a nutrient-dense food, yogurt fruit crunch. This snack preparation allowed the participant to feel more comfortable with the PA and me. All ingredients and equipment were taken to the interview site by me. If children were present, they were invited to assist in making the snack. I

provided a variety of toys and educational videos to entertain the children while we were working with the mothers.

The duration of each interview varied between 60 and 120 minutes. Much of this depended upon the participant's willingness to share her experiences and opinions related to the interview guide (Appendix F). The researcher attempted to create a permissive, safe environment that allowed for open discussion. Initially each participant was asked basic questions followed by probing questions in which the participant was only given minimal supporting information. These questions related to the participants' paradigm of health, nutrition, and attitudes about nutrition programs, including incentives and barriers to attending these programs.

Immediately following each interview, the PA and I discussed the interview experience and described body language and pertinent observations in our field notes. After each interview, I developed a detailed synopsis of each interview experience. This description was sent to the PA who accompanied me on that interview for her review. The PAs and I discussed inconsistencies between my descriptions and the PAs' descriptions and changes were made if discrepancies were noticed.

Data Analysis

Patton (2000) described grounded theory as research that “focuses on the process of generating theory rather than a particular theoretical content” (p. 125). He focused on the inductive and deductive processes using a constant comparative method, comparing different research interviews, and testing emerging concepts with additional fieldwork. What is unique to grounded theory is that it either generates theory or confirms previous theoretical propositions, based on the final themes and categories generated. As data are collected and labeled into tentative themes and categories, they are examined and revised based on additional data collection. This study intended to make meaning through an in-depth, rich understanding of the target audience who are experiencing the phenomena of poverty and possibly poor health in themselves and in their family, yet are not attending local nutrition programs.

Interview Data Management

The interviews were taped using a tape recorder. Each interview was transcribed verbatim into a separate Microsoft Word document by a professional transcriber.

Coding Procedures

Rossmann and Rallis (2003) stated that coding is analytic thinking, “complex and iterative” (p. 285). Coding can be words or phrases that connect it to a more general analysis. Coding was done using a printed transcript of the interview.

Grounded Theory

The three steps to grounded theory are presented in Figure 1: description, conceptual ordering, and theorizing (Strauss & Corbin, 1990). I was immersed in the data, achieved through conducting the interviews, then reading and re-reading the transcriptions to obtain a thorough understanding of the responses.

The second step in the process was to form initial categories of information concerning the phenomenon being studied. Finding key similarities and grouping them into categories to capture the feelings and ideas of the interviewee begins the process of hearing the voices of the women being studied and writing down words or phrases that captured these meanings. Again, I read the transcripts to make sure concepts, categories, and themes had been captured so that true meaning was made from the voices of the women. One major category emerged as the central category of the study. Ary, Jacobs, and Razavieh (2002) stated, “each unit of meaning should be understandable without any additional information. This classification of similar ideas, concepts, activities, themes, setting, and so on represents a category” (p. 466). Other categories related to the presumed central category. This allowed for a central storyline to emerge (Rudestam & Newton, 2001). Further desegregation of the data allowed me to pair certain concepts with others to form common categories and themes, all of which supports the construction of an overarching category or theory.

Credibility of the Study

According to Rossmann and Rallis (2003), credibility of the study must meet three criteria:

- Does the research drive from the participants’ views?
- Does the researcher reflect on her role?
- Can another researcher follow the logic in developing conclusions?

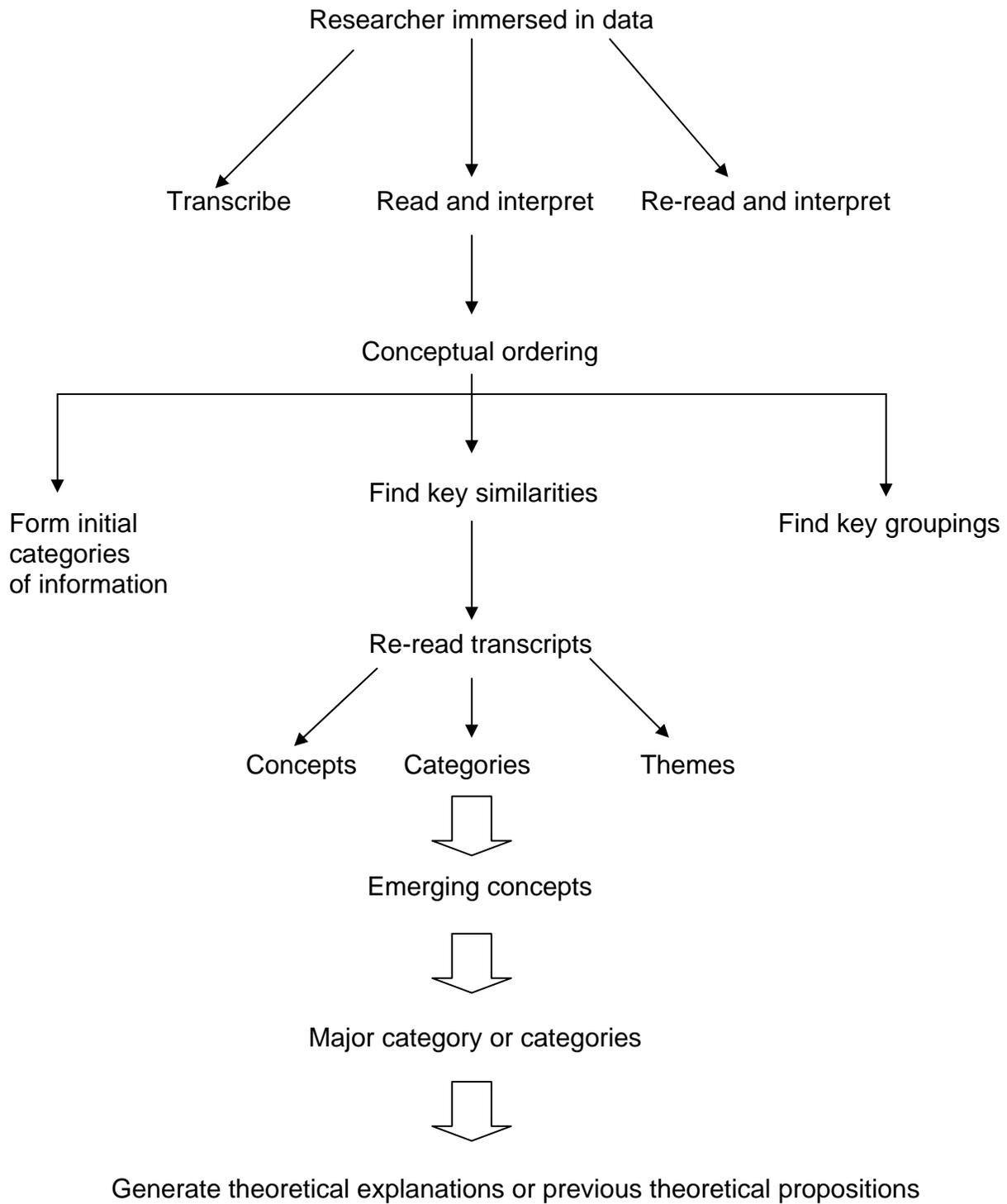


Figure 1. Grounded theory approach to data analysis.

The credibility of this study was addressed by conducting multiple interviews that allowed for prolonged engagement with the target audience. Peer debriefings with the PAs also supported credibility. Finally, field notes documented and revealed how decisions were made. Thick descriptions and purposive sampling allowed for transferability of the study. Dependability of the study was supported by coding and recoding and peer examination. A synopsis of each interview lends to dependability because it is interpretive and infers meaning. These field notes assured the process to be logical, traceable, and documentable.

I practiced reflexivity throughout the study. This self-reflection included thoughts on my biases. How can a professional truly comprehend the life of a young woman who lives at the survival level? Being in the field, in complex and varied interactions with the participants, offered the researcher the opportunity to construct new knowledge, which was interpretive. I kept a journal of my reflections during the study, which included my thoughts, feelings, ideas, questions, concerns, problems and frustrations (Ary, Jacobs, & Razavieh, 2002). Confirmability was attained through reflexivity. I attempted to stay neutral throughout the study, providing research that is unbiased. However, it is difficult to be totally objective; therefore, peer review and reflectivity provided confirmability. Data were analyzed through constant comparison using field notes and observations (Figure 2). The data aggregation included working with an uninformed assistant who read the transcripts and assisted with the coding process.

Peer review was done during the coding phase to achieve consensus. Peers shared their reactions to the findings, which again supported the study's credibility. The peers were the nine PAs who assisted me in conducting the interviews throughout the state and the six DCs were also asked to review the findings; they are immersed within the target population on a daily basis through their work with the PAs. They were each sent a copy of the findings and

discussions followed as I described and analyzed the qualitative data and achieved consensual validation.

Summary

The purpose of this study was to understand the incentives and barriers to participation in nutrition education programs reported by women of prime child-bearing age who receive food stamps and TANF. To achieve this goal, face-to-face interviews took place in four rural and five urban counties in Virginia.

An interview guide that reflected the general research questions was used. The research questions were partially developed by the PAs for the EFNEP and the FSNE program. The PAs gave feedback and suggestions on how to ask questions so that they would be more understandable to the participants.

I served as the interviewer; however, the PA from the respective county or city accompanied me since she is a member of the community and her presence hopefully caused a higher level of trust and less anxiety for the participant.

The study examined patterns, themes, common experiences, and relationships, as well as insights into the incentives and barriers to participating in the EFNEP and the FSNE. Upon completion of the conceptual ordering and discovering the emerging categories, a descriptive, narrative summary of the interview responses was developed.

CHAPTER 4

RESULTS

Presently, in the state of Virginia, approximately 11,500 women between the ages of 20 and 30 receive food stamps and Temporary Assistance to Needy Families (TANF). These women and their children should experience optimal health, but the converse is often true. They experience poor health (Fiscella & Williams, 2004), have low-birth weight babies (Hughes & Simpson, 1995), and they do not have enough food during the month to feed themselves and their children (George, Hanss-Nuss, Milani, & Freeland-Graves, 2005).

This study examined the incentives and barriers to participation in nutrition education programs, specifically the Expanded Food and Nutrition Education Program (EFNEP) and the Food Stamp Nutrition Education (FSNE) program, as perceived by women of prime child-bearing age who receive food stamps and TANF. The characteristics examined were home environment, educational background, nutrition knowledge, and methods of providing food for their families. The voices of these target women were heard through personal interviews and will precipitate changes in the way EFNEP and FSNE recruit clients and teach and market nutrition education programs.

This study was conducted to examine how to communicate with these women and to determine what strategies promote their enrollment in nutrition education programs. In September, 2006, twenty-three personal, face-to-face interviews with these women were conducted in nine communities throughout Virginia. The interview sites were located in both rural and urban areas.

The results described from this study are not exhaustive of all of the categories and themes identified through data analysis. All of the data were analyzed using consistent processes and pertinent categories and themes related to this study. Chapter 4 provides a discussion of the phenomena experienced by limited-income young women in their daily lives. The study was limited by the women's location, age, and socioeconomic status; therefore, the results are not a generalization of the general population. The sample size is similar to other qualitative studies of this nature.

The constant comparative method was used to analyze the data. This method compares occurrences, words, and phrases in the transcribed interviews. Occurrences include direct words

or phrases spoken by the interviewees. This process leads to uncovering rich informative responses from interviewees. I coded the data by reading the 23 transcripts line-by-line and extracting occurrences that related to the research questions. For example, interviewees shared their feelings about their school experiences by responses including hating school, loving school, and failing in school. These feelings became the theme “experiences in school” within the category “educational experiences.”

Each interview was tape-recorded and transcribed except one that was not transcribed due to technical difficulties with the tape. Detailed written notes captured most of the main points in that interview. Because of the consistencies, data saturation occurred by the sixth interview. Interviews were continued because personnel from a number of different agencies had recruited the interviewees and these relationships were too important to curtail the interviews. Parallels were apparent across all of the interviews.

Researcher's Role

Conducting this study provided important insights into the women's lives. Hearing their personal stories will direct nutrition programs to be more effective in the delivery method. In reflecting, I looked within myself and listened to the voice of each interviewee to make sense of how each experiences the world.

I attempted to cultivate a caring, positive, and supportive relationship with each interviewee even though our time together was very brief. I told them how valuable their input was to this study and complimented them on their successes. For example, one mother told me she takes the bus and searches for employment all day long. I told her how great that was and that she should be so proud of herself. In another example, two women came into their interview in a guarded manner. During the course of the interview, I told each of them repeatedly what a great job they were doing. One shared with me that she buys fresh fruits and vegetables and I told her, “You are doing so many good things. Be proud of yourself.” Her guarded attitude started breaking down, and she slowly allowed me to enter into her world. By the time these two interviews were completed, the participants felt very comfortable with the program assistant (PA) and me and began to actively engage in conversation. In addition, when appropriate, each interviewee was told that her answer was similar to that of other participants. This provided encouragement to women who find it difficult to respond in an open manner and often choose to shut down communication if they perceive rejection or failure.

Recruitment of Interviewee

One positive, unintended outcome of the study was a new method for selecting interviewees. The PAs who helped recruit the interviewees were asked to search for women with characteristics that fit the focus of the study. They were given a date for the interviews to take place in their locality. The interviewees were recruited in nine Virginia counties. Originally, the PAs were expected to use the Department of Social Services (DSS) list of TANF and food stamp recipients to select study participants. Instead, each PA made contact with specific agencies that work with clientele similar to those in the EFNEP and FSNE program. The PAs explained to staff members in these agencies the criteria and characteristics for interviewee selection. As a result, the interviewees were recruited by personnel of the TANF job readiness program sites, Healthy Families and their Resource Mothers Program, Department of Social Services, and Head Start Program. Because the agencies' employees knew the clients who actually qualified for EFNEP and FSNE programs, their assistance provided easier access to interviewees. These staff members were enthusiastic about their clients being solicited for a research study and felt the clients would contribute important information to this study.

With the change in recruitment of the interviewees, protocols of the study were changed. Letters were not sent to the interviewees who were recruited by agencies because the names were not provided. Reminder phone calls were not made by the PAs (with the exception of one PA), since the agency recruiter performed this task. A nutritious snack was not prepared after the third set of interviews since the women were hesitant to try the snack.

Twenty-three of the 26 selected individuals were interviewed. The Department of Social Services in one county paid the taxi fare for the interviewees. In another county, the Resource Mothers from the Resource Mothers Program drove the women and their children to the interview site and provided care for participants' children during the interviews.

In their enthusiasm for the research study, the recruiters invited several women who were either older or younger than the targeted age range and some who were not receiving TANF and food stamps. Interviews were in progress before I became aware of women not fitting all of the required characteristics of the study. Each interview was conducted according to plan. The women not meeting the specified requirements of the study responded similarly to the target interviewees when answering the interview questions.

There were four interviewees who were not in the targeted ages of 20 to 30; their ages were 18, 32, 41, and 52. Three women who were interviewed no longer received TANF benefits because they had recently accepted employment. Three women did not receive food stamps because they live with their mothers. All women participating in the TANF program receive food stamps if they live on their own and have children. The women will begin receiving food stamps on their 22nd birthday if they qualify for this benefit.

Characteristics of Participants

Twelve participants were from rural communities and 11 from urban communities. (see Table 1.) The women in the study ranged from 18 to 52 years of age. All of the women had children, except one who was expecting her first baby. The interviewed mothers had a range of one to five children. The 23 interviewees in the study had a total of 50 children.

Table 1

Characteristics of Study Participants

Location	Age Range	Number of Children	Race	Education Range	Government Subsidies
Rural (n=12)	20-32	27	6 African American 5 Caucasian 1 Hispanic	Eighth grade to college classes	3 participants with only food stamps; 4 participants with no TANF; 1 receives SSI; 9 participants with TANF and food stamps
Urban (n=11)	18-52	23	6 African American 2 Caucasian (1 from Eastern Europe) 3 Hispanic	No formal education to some college	1 participant with only food stamps; 1 participant with no TANF but receives SSI; 10 participants with TANF and food stamps

Note: Some participants received more than one type of subsidy.

The study participants included four Hispanic women, seven Caucasians (one from Eastern Europe), and 12 African Americans. No race requirements were specified for the women in the study; however, the proportion of TANF recipients who are women of color is greater than the percentage in the American population (Cancian, Meyer, & Wu, 2005). A translator who

serves as an EFNEP PA assisted with communications during the interviews. The interviews began in English and eventually switched back to Spanish with the PA providing translations.

The educational level of the women ranged from no formal education to more than three years of college. One of the interviewees from El Salvador had no formal education. Her mother abandoned her at 3 months of age and her grandmother rescued and raised her. To prevent her biological mother from kidnapping and possibly harming her, she was kept out of school. Eleven women had dropped out of school between the eighth and twelfth grade. Of these 11, two had passed their General Education Diploma (GED) exam and were awarded diplomas. The other women indicated that they want to pursue a GED. Several of the women unsuccessfully attempted to pass the mathematics exam, which prevented them from obtaining their GED. Five women dropped out of school due to pregnancy and three of these pursued their GED. One mother who dropped out of school has passed her GED exam.

When invited to participate in the research study, all of the women except two were receiving TANF. These two received Social Security Income (SSI) because they have disabilities. Three women received and accepted job offers after they were invited to interview. During the interview, they stated that their TANF benefits had been terminated. One interviewee's benefits were terminated because she would not disclose the name of the father of her children. She said:

Because they told me to keep it going, I would have to take my boyfriend up for child support and I didn't want to do it at that time because he was giving me more money than what I was getting from TANF so I didn't take him up.

Fifteen of the women had a vehicle, but many said they constantly experience major problems with vehicle maintenance. Interviewees in rural areas who cannot afford a vehicle are isolated due to lack of public transportation. To participate in the TANF job readiness program, transportation is supplied.

Only the three immigrant women, who recently arrived in America, said they do not run out of food before the end of the month. The other women typically run out of food by the third week of the month. Research by Wilde and Ranney (2000) substantiated this phenomenon.

Participants in EFNEP and FSNE typically miss classes due to various reasons including bad weather. One interview day, Hurricane Ernesto impacted eastern Virginia. Winds exceeded 60 miles per hour and were accompanied by torrential rains. Despite the weather, all three of the

women recruited by DSS fulfilled their commitment to be interviewed. Two of the interviewees brought their children with them. One brought her mother who assisted with her 2-year-old son. Another had both of her children with her, a 2-year-old and a baby less than 1 year of age. Having all three women participate in interviews under storm conditions was atypical based on previous history of attendance in our nutrition education programs.

Categories and Themes of Incentives and Barriers

This study attempted to generate explanations regarding the incentives and barriers to participating in community nutrition programs using a grounded theory approach. This entailed listening to the multiple constructs of the interviewees and creating a mutual understanding between each interviewee and me. Three categories emerged with multiple themes in each. Ary, Jacobs, and Razavieh (2002) suggested that themes emerge through communicating, interpreting, and negotiating the phenomena being studied.

Personal face-to-face interviews provided insights about the target population. Interviews were effective in constructing meaning from the 23 participants because all of the women gave similar answers that enhanced transferability to the study's findings. Ary, Jacobs, and Razavieh (2002) suggested that researchers be cognizant of the interviewee not providing desired responses during an interview. This did not prove to be the situation for this study. The similarity in answers across interviews enhanced the credibility of the study. Each interviewee's reported reality was consistently similar to the others, which allowed meaning to easily be constructed from their answers.

Categories revealed in this research included health, educational experiences, and home environment. The over-arching category that influences participation in nutrition education programs for this population was isolation. Figure 3 presents a schematic of the findings. Each category contained several themes.

Results by Research Question

The face-to-face interviews included a 16-question interview guide with additional probing questions. The following research questions were addressed:

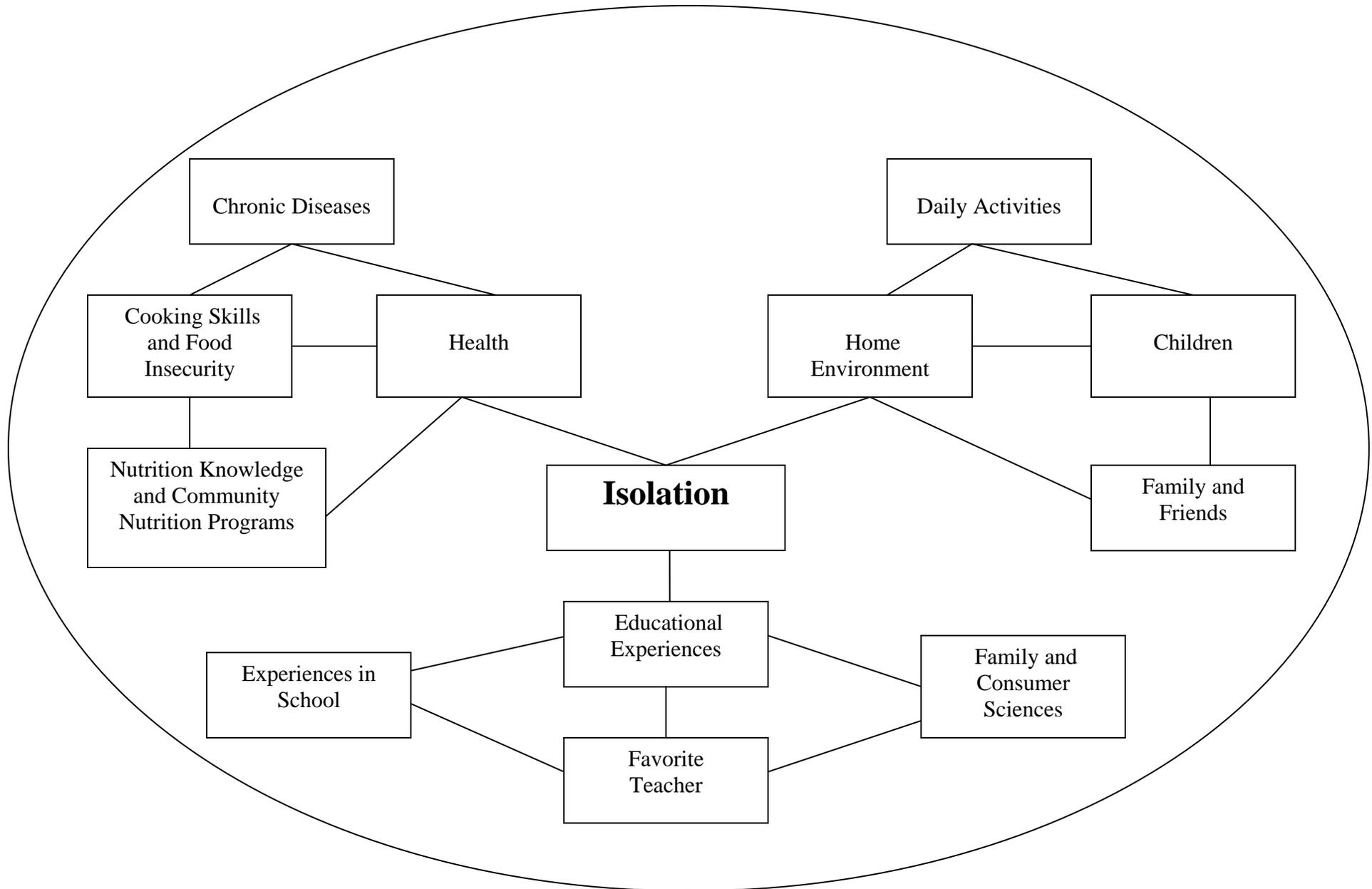


Figure 3. Incentives and barriers to participation in nutrition education programs.

1. What were the characteristics of the selected food stamp and TANF recipients between 20 and 30 years old? (The categories of characteristics examined were home environment, environment, educational background, nutrition knowledge, and methods of providing food for their families.)
2. What factors did these women perceive as incentives to participation in the FSNE program and the EFNEP?
3. What factors did these women perceive as barriers to participation in the FSNE program and the EFNEP?

Descriptive summaries of the findings including participant quotations related to the research questions follow. Participant anonymity was maintained throughout the study.

Research Question 1

What were the characteristics of the selected food stamp and TANF recipients between 20 and 30 years old? (Specific categories characteristics examined were home environment, educational background, nutrition knowledge, and methods of providing food for their families.)

Category: Home Environment

Home environment themes that emerged from this study were daily activities, children, and family and friends. Two women invited us into their homes for their interviews. One made arrangements for a friend to take her children to a fast food restaurant while she was being interviewed. Her house was clean and stark with very few pieces of furniture. The other woman's town home was very cluttered. Toys were strewn across the floor and walking was difficult. Her kitchen had food everywhere. She sat in a rocking chair and nursed her 7-month-old baby while she was interviewed. Activities the participants are involved in are reported in Table 2.

Daily activities. Daily activities varied for each interviewee.

One woman described her typical day as follows:

I get up in the morning; get me a cup of coffee. Sometimes 6 or 6:30 a.m. Wash my face, take a shower, put my clothes on. I turn my gospel channel on and I have my Bible study and I go down in prayer. From there I clean up and maybe by 12 or between 12 and 3, I'll start cooking dinner. Early in the morning, I just can't eat. After dinner, sit back, watch TV a little bit, talk to my children. We have our conversations and then sometimes we

play Spades. Sometimes I go to bed about 11 or 11:30 and I read in between there until I fall asleep in the process. You know read until I feel so sleepy.

Table 2

Educational and Social Activities and Employment

Location	Educational Activities	Social Activities	Employment
Rural	None	None	No
Rural	Bible study	Church	No
Rural	Previous medical coding course	Family	Part-time
Rural	Job readiness program	Church and family	Full-time
Rural	Job readiness program	None	No
Rural	Job readiness program	Only family	No
Rural	None	Only family	Part-time
Rural	Previous community college classes	Church	Yes
Rural	Previous CNA classes	Church, family	Part-time
Rural	None	None	No
Rural	None	None	No
Rural	GED	Only family	No
Urban	GED; job readiness program	Church	No
Urban	Associate degree	Family and friends	No
Urban	Previous community college	Only family	No
Urban	Previous community college	Only family	No
Urban	Previous college	Family and two friends	No
Urban	None	A few friends	Part-time
Urban	Job readiness program; GED classes	Only family	No
Urban	Job readiness program; previously two years of business school	Two friends	No
Urban	Job readiness program; Bible studies	Church	No
Urban	GED classes; job readiness program	Only family	No
Urban	Job readiness program	Only family	No

The daily schedule for one woman with a young baby included:

I wake up with my baby, around 10:30 and we get up and play. I wait about 45 minutes to feed her breakfast so she can play. After that we watch a little bit of TV and for the rest of the day we play or go to the park, come home, take a nap, get up, eat a little snack and pretty much watch TV and play. That's our routine. I don't have a car. We eat dinner around 6 or 7. After that she'll get a bath and I'll get her dressed. She'll play with her cousin for a little bit.

Another woman described starting her day by getting her children ready for school: I get up at 6:40 a.m. Get my kids up and ready for school. The kids are 11 and my baby girl is turning 4 tomorrow. They get free breakfast. The bus comes at 7:20. I go back home and clean up, usually for an hour. I sit down and I cook myself something to eat. I sit down and relax and watch TV. I do that until like around 12:30. Then I clean some more, find something else to do. Around 2 p.m. I cook dinner. The kids get home at 3:30. They wind down and we do homework. Their play is in the house. There are some dogs running around in the neighborhood. Dinner is around 7 p.m. If I try to make them eat earlier, it don't work. They waste everything, they pick at it. About 7, they have wind down and ready to eat then. They take a bath and they will watch a little TV. Nine o'clock they are asleep. Then I'm on the telephone. I go to bed around 2 in the morning.

One woman with a one-year-old son believed in a very structured schedule:

I get up at 8 and he gets up at 9. We have a very tight schedule because babies do better. I wake up and I start breakfast. My son gets up a little after that and I feed him breakfast and he plays in the living room while I straighten the house. I usually do that for three hours every morning. I'm a germ freak. Then we start with a snack for lunch. I read him a book and he takes a nap. In the evening, I sit and play with him and we watch TV or a movie. Then usually we go to my mom's house, his grandmother's house, and we play outside. I don't let him play in the house there because it's nasty there. We play there with the dogs. We go home for the evening and have dinner and I read him a bedtime story and he goes to sleep. He goes to sleep about 9:30 or 10. After I clean up everything from the day, usually about 12, I go to sleep.

There were differences between living in a rural and urban environment. The women in the urban areas had access to public transportation and more educational opportunities. Three women living in rural communities and four women living in urban communities had some form of post secondary education. Jobs were more plentiful in urban areas; three women from rural communities had part-time employment, only one woman from an urban community was employed part-time.

Children. Separation from their children was reported to be a significant source of stress for the interviewees. One woman who had dropped out of school in tenth grade said that her daughter was enrolled in Head Start. However, she said that she "changed my mind right before

it started” and took her out of the class. She was anxious about letting her daughter go to this program because Head Start is not mandatory.

One woman said her kids are “right there with me unless my older son is with my dad and my little girl is with her dad, but other than that, they are with me. I am focused just on me and my kids right now.”

Another interviewee does not want to leave her 2-year-old son and expressed concern about leaving him to take classes. “I wouldn’t want to be away from my son for the time to take them. If it was something where he could go, then I would like them.”

All of the interviewees expressed that they want to be good mothers. They want their children to have the best possible childhood, and many of the women are concerned about their children’s health. They believe that having children with them at all times makes them good mothers. One woman said, “They are my children, maybe I’m misunderstanding, but when I had my daughter I gave up my freedom. My life is basically my children.”

Families and friends. The interviewees talked about their families and friends. Many of them reported that they do not have friends. Those with families spend time with them, but activities are limited by access to transportation.

One woman said she talks on the phone with her friends late into the night, but, said, “It’s too much violence out there. I stay home. I don’t leave my house unless I’ve got to go to the grocery store.” She spoke about her father and how she asks him for help when she runs out of food around the third week of the month.

Another woman lives with her parents since her husband became disabled. She is looking for a job. The only activity she participates in is church. She stated:

The way me and my husband feel, we’re not going to go out and do anything unless our daughter can be there with us. So, we pretty much stay at home right now until she gets old enough to do a lot of things.

One woman has siblings and two friends she is close to. They belong to a birthday club and celebrate their birthdays together. Her children are active in sports. She believes this is important for her boys and makes sure they have these opportunities. She lives in an urban area with recreational and learning activities that are easily accessed.

Due to a lack of resources, the 23 women interviewed were isolated in several ways: relationships, resources such as transportation, and a lack of monetary resources. Their social

skills isolate many of them. A lack of job skills creates isolation and forces them to be alone every day.

Category: Educational Experiences

The three themes that emerged in the educational experiences category were experiences in school, favorite teachers, and family and consumer sciences classes. (see Figure 4: Elements Shaping Educational Experiences for Study Participants.)

Experiences in school. The interviewees described a large range of school experiences. One woman had no formal education. Eleven women dropped out of high school. Eleven women graduated from high school, and eight of these women have pursued some form of post secondary education.

The women's educational experiences ranged from hating school to loving school. Nine women hated school, and one of these dropped out of school due to pregnancy. Five women who enjoyed school dropped out due to pregnancy when it became too hard to stay in school and take care of their baby.

One woman shared her love for school and said:

I only got through the eighth grade. That's the last grade I went to. I had a lot of problems at home with my stepfather. My daughter is actually my stepfather's child, and I left home early so I didn't have the opportunity to go through school. I loved school.

Another participant reported she disliked school because:

I could do home school better because I don't have distractions. That was my problem in school was distractions. I always had kids talking and I couldn't pay attention. I wasn't a bad kid; I never got into trouble. Never saw the principal, but my problem was sickness. I've always been sick.

<p>Characteristics of Favorite Teacher</p> <ul style="list-style-type: none"> • Loving and fair • Made learning exciting • Kind, compassionate, and warm-hearted • Made me feel included • Welcoming • Treated me with respect • Listened to me • Spent time with students after school • Made me feel valued • Loved kids 	<p>Preferred Method of Learning</p> <ul style="list-style-type: none"> • Hands-on • Fun • Interactive • Small group activities • Involved • Told students what they were doing right • Teacher helped • Showed and tried new activities
<p>Negative Experiences in School</p> <ul style="list-style-type: none"> • All students not treated equally • Tore the student down • Failure • Distractions • Fought and in trouble • Failure, couldn't keep up but dropped out • Made fun of her for being handicapped • Rebellious • Bored, lazy, too many lectures • Begged for help but was not helped • Got spat upon, made fun of 	<p>Positive Experiences in School</p> <ul style="list-style-type: none"> • Teachers helped • Love learning • Participated in Special Olympics • Excelled • The more education, the better • Brought excitement into the classroom
<p>Family and Consumer Sciences</p> <p>Negative Experiences:</p> <ul style="list-style-type: none"> • Mean teacher, yelled a lot • Did not learn much • Not a meaningful class 	<p>Family Consumer Sciences</p> <p>Positive Experiences:</p> <ul style="list-style-type: none"> • Prepared you for life • Made a pillow and a cake • Successful • Earned sewing license • Learned management skills • Learned how to make a fruit pizza • Cooked basic foods

Figure 4. Elements shaping educational experiences for study participants.

An interviewee shared her negative high school experiences:

High school, I didn't like. The rest of my school experiences I liked. I would ask the teachers for help. And it all dealt with my brother who was one of the bad kids. They thought he was like that, so I was going to be like that. I begged them to put me in a slower learning class. I was in ninth grade for three years and then I quit. The last year I actually completed was eighth grade. I would ask for help. I'm not stupid, but if someone is asking for help, I think you would give it to them. They didn't.

Another woman communicated a similar experience, "I hated school because I couldn't keep up with the lessons so I dropped out. I finished eighth grade." She continued to tell me about her school experience, "I'm afraid to even be in a classroom with other people sitting around getting a GED." I asked her if people made fun of her and she responded, "Yeah, they did, but they got beat up for it. Then I was sitting there thinking, 'Forget it, instead of getting suspended all the time. I'll forget it.' I dropped out."

A participant said: "I didn't like school. The school I went to was basically on looks and your race. I got spat on, talked about, pushed around. I hated it."

Another participant shared a different experience: "I liked school. I liked to learn. It was kind of hard because I was having so many different things going on. Not as far as working hard, but trying to keep grades up." She took college courses since graduating from high school and plans to return to school.

All the women preferred hands-on, fun, and interactive learning. In this study, they were asked to design the perfect classroom experience. Their answers were similar.

One woman said:

Definitely, no desks, we'd have to meet in a mat in the middle of the floor. I want you close to me. I would talk. A paperless environment, no paper. No studying, no failure, no "F." You would know if you needed to work on what we're doing, but there would be no chance for failure. Some people can't handle that, so no chance to fail. Most important, let everybody know they are important.

A different woman wanted, "Small classes, and mostly hands-on. I think that's the best way to learn – hands-on."

Another woman wanted, "more activities, showing them more about what they should do, not what they shouldn't do."

One woman said, “I think that by giving them recipes or certain things healthy and good for them to eat and preparing it. I don’t think I would do it, we’d do it together.”

Another woman stated she would, “teach them how to really get down in the kitchen and cook it.”

One woman wanted to learn about it and participate in cooking experiences, “I’ll take cooking classes. The more education you have the better person you are.”

Another woman said:

Regular cooking classes would be fine. I like to make different stuff. I like to watch the cooking network. A cooking class would be great, it would be fun. Hands-on, I would rather. You were saying that’s the biggest thing I didn’t like about school – just lecture, lecture, lecture. I don’t like to just sit and be bored out of my mind. I like hands-on stuff.

Clearly, the preferred learning style of this audience was hands-on activities.

Favorite teacher. This section elicited emotional responses from the interviewees. Each woman easily shared the name of her favorite teacher. It brought back memories of important and significant people in their lives.

As she talked about her favorite teacher, one woman cried:

My favorite teacher was in fourth grade and her name was Ms. _____. She had compassion. She was, it will make me cry going back to this, compassionate, concerned, and she cared. I loved that she taught us French and she was a warm-hearted person. She made me feel like I mattered, my life mattered. She was more than a teacher, just warm, welcome, didn’t overlook anybody. “How was your day, how was your evening?” If you made mistakes she didn’t condemn you. I’ve had teachers who said “What is wrong with you, are you stupid?” She didn’t.

Another woman described her favorite teacher:

She was just a great teacher. She was like a mom to me. I think that’s the main reason I liked her. You could talk to her. She would talk to you and she was just a nice, friendly, loving person and everybody pretty much liked her. But I liked her so much because she was like a mom. Her class wasn’t like you’d go in there scared about your test or you have to be just lectured and you’re going to go to sleep. It was a great class to be in. She treated everyone the same. I took from her that she loved everybody the same. She just loved kids. If you had a problem you could come and talk with her after class or during class actually, if you had a problem, she would take you to the side privately and talk to you if you had a bad day. She valued you.

Each woman was able to articulate the importance of her favorite teacher. Some of the women shared that they still communicate with this person who made a difference in their life.

Family and consumer sciences classes. Participant responses varied about their impressions of family and consumer sciences (FCS) classes as educational experiences. At the time they took these classes, the title might have been home economics or work and family studies, but the current term FCS will be used here. One woman loved this class. Another signed up for FCS classes because she wanted to learn. She ended up disliking the class because learning was not possible due to the confusion in the classroom.

One interviewee was enrolled in ninth, tenth, and eleventh grade family and consumer sciences classes and shared, “In middle school we did cooking. I learned about apples, oranges, fruits, vegetables, the grains, breads, a lot of things like that.”

Another woman shared thoughts about family and consumer sciences classes:

I loved going in there. I learned cooking and I can get out of other classes that I didn't want to be in. It was like I didn't want to be in the classes with the other kids because I felt like they were going to joke me on my learning disability so I go to family and consumer sciences. The teacher let us know the most important was the vegetables. We got to eat our vegetables no matter if they are messy or not. We have to stay eating vegetables. And, make sure we don't eat too much of food that's fattening. Just small portions of that.

One woman was enrolled in family and consumer sciences classes in another country. She said:

She made some delicious dishes. I used to love going in her class. We learned how to bake cakes, how to fry apples, learn about fruits and vegetables and milk. I liked her class to eat there. She had sewing, but I wasn't into it.

One woman said she liked learning about food preparation:

We learned how to prepare food without putting a lot of fat. She would teach how to substitute something, like butter, substitute something else. Learned how to read labels and fiber. She taught us how to use meat, like use lean hamburger instead of regular hamburger, or sausage, try to find ground beef instead.

Another woman had negative experiences in family and consumer sciences classes and stated, “We pretty much didn't do nothing in there to be honest. It wasn't a home ec class that you actually got something from, to be honest.”

The women who participated in the family and consumer sciences classes had very diverse experiences. They enrolled in the classes to acquire skills to enhance their home lives and business lives.

Category: Health

Health emerged as a category due to the pervasive attention to obesity and overweight in the United States. The women in this study suffered from multiple health issues. Themes they addressed in this category were chronic disease, and nutrition knowledge and community nutrition programs.

Chronic disease. Seven of the 23 interviewees reported experiencing some form of chronic disease. They reported having cancer, diabetes, high blood pressure, fibromyalgia, asthma, and lupus. By my observation, 17 of the women were overweight, obese, or morbidly obese. They were concerned about their children being overweight. For example, one mother said she has diabetes and is very concerned about her child's health:

My little girl, she is picking up weight because she don't eat that much. She just eats little pieces, but she is up to 55 pounds at 3 years old and no one can tell me why she is gaining so much weight.

This concerned mother asked pediatricians to diagnose the problem, but there are no answers yet. She explained:

When she was a baby, she had the acid that we have in our body, she had that at an early age, so she had to stay across the bed for like a month and a half so they could get that under control. She was on a strict diet, nothing but vegetables.

Another interviewee shared her concerns about her 2-year-old son:

He's big enough now, he's got asthma so he takes a lot of breathing treatments and the doctor said that's what's keeping him big so I don't want to put no extra weight on him or on me either.

A mother of two daughters shared her concerns about her children:

My daughter is 9 and she is starting to be a little overweight now. She's always been a thick child anyway, but from watching TV, at 9 she already says she wishes she was thin. Me and her teachers ask her why and she says because when you look at TV, it's always the smaller people is in and fat people are not supposed to be.

Other mothers shared similar concerns about their own health and their children's health.

Nutrition knowledge and community nutrition programs. The interviewees had basic nutrition knowledge. They equated nutrition with health, but did not know how to read labels,

did not understand the concept of caloric balance, had not attained basic cooking skills, lacked understanding of major nutrients, and struggled with food insecurity issues.

None of the women interviewed had heard of the SCNEP or EFNEP, but all participated in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Both WIC and EFNEP/SCNEP are available to impoverished women. The programs seek to increase nutrition knowledge for better health for limited resource families.

One woman shared her experience with a federally funded nutrition program:

The assistance program offered no nutritional thing to people; it's more or less that you go in there through the federally funded program. For two minutes you sit at the other desk and she looks at your form you filled out about your eating habits and she tells you "don't eat this, eat that, change this." My 12-month-old is lactose intolerant so they wanted to put him on whole milk. The doctor completely disagreed and said don't give him whole milk. It hits him so fast. And he gets a rash and there is nothing that you can put on it. He has a reaction to the milk. So they are sitting there telling me to do this, and the doctor tells me something else, and they say it's better if you do what we tell you. Well, medically it's healthier for my child to have 2%. They have a two-minute thing where you walk in there and they tell you, "Here is something wrong, and you need to change that, or your son is overweight." My 5-year-old is 85 pounds. So when the doctors said don't worry about it, the weight will drop. But when I go there, they tell me he's obese and he needs to go on a diet.

Other interviewees had similar experiences. One shared:

They have a little nutrition guide in the folder. It really don't say a lot. It basically points out the reason they have cereals they have picked out to be on the food list. That's basically it. They don't have nothing.

One mother shared a positive WIC experience:

She showed me how to grind foods up and put fruits and nuts in cereal. Put a little flavor into it so it's not bland. Sometimes he doesn't want to eat the food so I wouldn't put any seasoning in it. I'll put it in the grinder and he thinks it's something big. Here they want you to know about fruits and juices and vegetables. Make sure you get it straight and you're not feeding them what some of these other people are feeding their kids. They want you to take your time. In 15 minutes you can make a wholesome meal without rushing out and getting fries.

Interviewees are not aware of nutrition education programs in their communities with the exception of WIC. They reported varying perceptions of the value of the WIC program.

Cooking skills and food insecurity. All the women in this study expressed an interest in learning how to prepare nutritious meals, except one who said she knows how to cook. She said,

“I like my food, Russian food, I don’t want to change.” The women want to know how to prepare more nutritious food for their children. Many of these women said they watch the Food Network. This is consistent with their preferred method of learning: hands-on. They want to learn how to cook by actually preparing the food.

Most of the women perceive they know how to cook. I asked them to tell me what they cook on a daily basis and I got answers like roasts, fried chicken, mashed potatoes, and green beans. With further probing I discovered they actually cook hot dogs, pizza, macaroni and cheese, and other convenient, processed food items. One woman shared her frustration about cooking:

There is stuff I wish I could cook. I just don’t know how. Like the oven chicken, like you can go pick up. Normally, I’ll pick those up from Wal-Mart because mine comes out dry.

Another interviewee said she looks through magazines for new foods to prepare. We talked about her fixing a “spinach lasagna because that looked good.” When I asked her about preparing it she said, “I bought the oven-ready lasagna that Wal-Mart had. I don’t know how it will come out.” My immediate perception was it was cooked from scratch until I probed into how she prepared the lasagna and discovered it was pre-cooked.

Mothers shared their interest to “lose weight now, so I just try to eat the right stuff.” Another mother shared she wants to know “the amounts of fruits and vegetables I should get every day.”

Fifteen women use the microwave to warm foods and the remaining women use it to prepare foods like microwavable dinners. When asked if they prepare vegetables nearly every day, 11 reported they do. Two women said they sometimes prepare vegetables daily, and the remaining 10 said they do not prepare vegetables every day.

Eleven women stated their grandmothers were instrumental in teaching them how to prepare and cook traditional Southern style foods, such as fried chicken. Nine women learned how to cook from their mother or from both their mother and grandmother. Four fathers helped teach them how to prepare foods with their mothers or grandmothers. Frequently, they said they were too tired to cook so they bought junk food. Fast food restaurants were also used as treats for the children on their occasional outings.

Food insecurity was a financial and health concern for interviewees. Most of the women run out of food stamps the third week of each month. The exception was the three immigrant women who do not run out of food stamps or food by the end of the month. The women who run out of food have community resources to draw upon the last week of the month to supply some types of food items for their families.

The food insecurity findings in this study are substantiated by the literature review presented in Chapter 2 of this study. For example, one woman said: “Like, most of the time, in the middle of the month. I don’t go without food. I’ll take away from something else before me and my kids go without food.”

One woman shared:

I do and have to use cash a lot of times. Normally, when I go on the first I spend if not all of them, very close. Like this is the 8th and I’m down to nothing. I went on the 1st and went back this week and spent the other \$40 something dollars. It’d be pretty close, but something comes through. My mom lives where I live and sometimes she will bring something down or my oldest daughter.

Research Question 2

What factors did these women perceive as incentives to participation in the FSNE program and the EFNEP?

Results of this study consistently showed that the interviewed women want to receive incentives for participating in nutrition education programs. The participants wanted to learn how to prepare nutritious meals and snacks for their children. Many of the mothers were concerned about the health of their children. They know their children weigh more than they should for their age. They also realized the health implications for being overweight at a very young age.

One mother of a toddler wanted to learn “how to get my daughter to eat, just to learn about nutrition, and what certain kinds of foods should I eat and how to cook.” Mothers wanted recipes geared toward children and snacks that their older children can prepare on their own.

The mothers wanted to receive nutritious recipes in classes. One mother expressed, “Having the recipes there, three or four preparing this meal together, and you get to eat this nutritious meal after you prepare it.” Another young mother said, “Hands on and do a class in how you can actually work fresh vegetables and fruits into a tight budget. Interactive, that’s the only way I learn.” Another participant shared that she would like to learn, “How to eat healthier,

to prepare meals that are more nutritious and less cholesterol, foods to stay away from, and more of what we need to eat.”

Another incentive mentioned often was taking food home so their food dollars and stamps lasted longer. They wanted programs to teach how to prepare nutritious recipes and then give participants those food items to take home so the recipes could be replicated.

Weight control classes are important for the young mothers interviewed. One interviewee shared, “I don’t want to put no extra weight on him or on me either.” The mothers consistently shared the fact that transportation was a concern, “The classes need to be closer to home.”

Nutrition education programs could be modified to meet the needs of the women who shared their experiences in this study. They value having someone “tell us what we are doing right, not what we are doing wrong.” They want to prepare more nutritious meals, “There is stuff I wish I could cook. I just don’t know how.” They realize chronic disease and obesity are issues they are dealing with. They are running out of food by the third week of the month and they have already spent their food stamps: “I go on the first, I spend, if not all of them, very close.” Past educational experiences bring thoughts of failure to the women, “I’m afraid to even be in a classroom with other people.” They want “more activities” that are hands-on and fun experiences. Incentives need to be built around the women’s expressed desires.

In summary, the incentives the interviewees suggested were as follows:

Class Format

- Positive learning environment and positive reinforcement
- Hands-on learning that is fun
- Group work; no lectures

Content

- How to plan nutritious meals, how to add fruits and vegetables daily
- Cooking classes and nutritious recipes
- How to motivate their children to eat
- How to stretch their food stamps
- Food to take home from classes
- Weight control classes

Research Question 3

What factors did these women perceive as barriers to participation in the FSNE program and the EFNEP?

The women shared multiple barriers to participation in the FSNE program and the EFNEP. The most glaring barrier to participation in these programs was lack of knowing about either of the community nutrition education programs. Twenty-three interviews were conducted across Virginia, and not one person interviewed had heard of either nutrition education program. The only community nutrition education program the participants had information about was the WIC program. The women participate in the WIC program because it provides vouchers for specific nutrient-dense foods while they are pregnant, breastfeeding, and have children under five years of age. The women also participate in the food stamp program but were unaware of the FSNE program.

Transportation and childcare were also discussed as barriers to participation in FSNE and EFNEP. In reality, transportation and childcare should not limit participation in either program because the program assistants teach lessons in participant's homes and will involve the children if they are old enough to participate. Teaching participants one-on-one is far more effective than teaching small groups because the behavior change is more significant when the PA works closely with the participant.

Several mothers believe people in general are not interested in learning about nutrition, "they just don't care because they think poor nutrition is not going to affect them for gazillion of years." Another mother said, "Laziness, they don't know about them, they don't care about them or they think they already know how to cook. Some people, you can't tell them anything." A participant shared:

Some people if they hear somebody else thinks its negative they don't want to try it because they think it is negative or stupid. Some people are stuck in their ways and don't want to learn new things. They think the way they have been taught and the way they are doing things are correct so they don't want to have somebody tell them they are doing wrong.

One mother expressed the importance of personal support for class participation:

I guess they figure if they come to nutrition classes, people will tell them you got to eat this and that and some people if they are big boned, may look at it and say you're trying to call me fat instead of saying you are looking out for their best interest health wise. A

lot of people don't know much about the nutrition classes and some of them don't care and don't want to know.

One other barrier mentioned multiple times was separation from their children:

Our children [are the reason], because it would take more time away from us with being with them. A lot of women my age would have a problem with that because they are not used to being away from their kids but for certain periods of time of day.

Time was frequently mentioned as a barrier to participating in any type of program. The mothers felt they were too busy taking care of their children to get involved in a nutrition program.

Fear of failure was mentioned by several women as a barrier to nutrition class participation. Their past educational experiences were negative. They were laughed at and made fun of in school, so they wanted to avoid putting themselves in a similar situation. Several women shared, "Don't tell us what we are doing wrong, tell us what we are doing right."

In summary, barriers to participation were:

- Unaware of the nutrition programs
- Fear of failure and previous negative school experiences
- Transportation
- Leaving their children and child-care issues
- Perception that poor nutrition is not important and will not affect their lives
- Perceive they are too busy to attend nutrition classes
- Perceive they know how to cook
- Do not want someone telling them they do not know how to do things properly

Summary

This chapter examined categories and themes related to the common experiences, characteristics and relationships of the interviewees, as well as their insights into the incentives and barriers to participating in EFNEP and FSNE. Interviews were analyzed and findings developed from a descriptive summary of the responses to the three research questions.

The findings were generated through 23 personal, face-to-face interviews using a short questionnaire and a 16-question interview guide with related probing questions. The 23 interviewees shared their life experiences and educational opportunities. The findings suggest that the women in this study are isolated due to educational experiences, health issues, and their home environment.

CHAPTER 5

SUMMARY, DISCUSSION, AND CONCLUSIONS

Presented in this chapter are conclusions from a qualitative analysis of the data generated by this study, including a concise summary of the purpose and research questions that grounded this inquiry. Also presented are the implications and recommendations for future research and practice.

Purpose of the Study

This study was conducted to determine the incentives and barriers to participation in nutrition education programs that were perceived by women of child-bearing age who receive food stamps and Temporary Assistance to Needy Families (TANF). The characteristics of participants examined were home environment, educational background, nutrition knowledge, and food provision for their families. The voices of these women were recorded so the Expanded Food Nutrition Education Program (EFNEP) and Food Stamp Nutrition Education (FSNE) programs could better reach and impact this population. This study allowed me to better understand how to reach these young women and what strategies will motivate them to enroll in nutrition programs.

Women of prime child-bearing age (specifically between 20 and 30 years old) receiving food stamps and TANF were recruited for personal, face-to-face interviews. Twenty-three women participated.

The following research questions were addressed:

1. What were the characteristics of the selected food stamp and TANF recipients between 20 and 30 years old? (The categories of characteristics examined were home environment, educational background, nutrition knowledge, and methods of providing food for their families.)
2. What factors did these women perceive as incentives to participation in the FSNE program and the EFNEP?
3. What factors did these women perceive as barriers to participation in the FSNE program and the EFNEP?

The result of this study confirmed previous theoretical propositions based on the common categories and themes generated. The over-arching characteristic common to the women in this

study was isolation. The three categories of concerns that emerged were health, educational experiences, and home environment. Each category also had several themes. The themes in the health category were chronic disease, cooking skills and food security, and nutrition knowledge and community nutrition programs. In the educational experiences category, four themes emerged: experiences in school, preferred method of learning, favorite teacher, and family and consumer sciences classes. In the category of home environment, three themes emerged: children, daily activities, and families and friends.

Rationale for the Study

Families of low socioeconomic status suffer disproportionately from poor health. The adults have a higher incidence of chronic diseases associated with being overweight and obese, as do their children (Baldyga & Petersmarck, 2005; Drewnowski & Specter, 2004; Fiscella & Williams, 2004; Gibson, 2003; Linz, Lee, & Bell, 2005; Pi-Sunyer, 2002). Furthermore, there is a strong association between medical costs and overweight and obesity (Finkelstein, Flebelkorn, & Wang, 2003). Health care costs are escalating due to this epidemic of obesity in the United States (Long, Coughlin, & King, 2005). Prevention programs such as nutrition education are far more cost effective than intervention or treatment.

Nutrition education programs intend to reach low socioeconomic populations in communities across Virginia. The EFNEP and FSNE programs strive to empower limited income people to live healthier lives through nutrition education. The EFNEP and FSNE program are available in every city and county across Virginia. Recruiting and enrolling people in the program is challenging and time consuming, and participant numbers are low in comparison to the total number of food stamp recipients, who are the target audience for both nutrition programs.

Summary of the Methodology

The study began by recruiting EFNEP and FSNE program assistants (PAs) to participate. The PAs who recruited the interviewees and worked with the study are successful nutrition educators in their communities. They collaborate with many local agencies and partners in their counties. It was anticipated the PAs would successfully recruit women for the study through a list of TANF women supplied to the EFNEP and FSNE program by the Division of Benefits, Department of Social Services.

The PAs were informed of the purpose of the study and the criteria for the study that included specific demographics for study participants. They contacted agencies that work with this target audience, including the Department of Social Services, the Head Start Program, and the Healthy Families program, which sponsors the Resource Mothers Program. To my knowledge, there had not been an attempt in Virginia to recruit nutrition education research participants through agency contacts who work with the target clientele.

One PA in Northern Virginia who works directly with the Hispanic population recruited her own interviewees. The PA teaches in Spanish and she recruited women who speak Spanish. The nine PAs identified and invited a total of 26 women to be interviewed. The fact that 23 agreed to participate was higher than expected for this audience. These women frequently do not keep appointments and irregularly show up for programs.

There was one problem with recruiting interviewees through agency representatives. The recruiters did not adhere to the criteria for selecting study participants. Four women did not meet the age criteria, and several women were not participating in TANF and/or the Food Stamp program at the time of the study. To preserve the partnership with these agencies, interviews were still conducted. One positive outcome of this situation was that all of the women interviewed who did not meet the criteria of the study answered the questions similarly to those who met the criteria.

Due to these anomalies, several aspects of the plan for the study were not followed:

- The Virginia Department of Social Services (VDSS) data were not used to recruit interviewees. However, the success rate for the women participating in the study would probably not have been as high if recruitment had taken place using the VDSS data.
- The PA did not initiate contact with the interviewee with the exception of one PA who directly recruited the interviewees in her locality.
- Letters were not sent to the interviewees who were recruited by agencies because the agency personnel did not share the interviewees names with me.
- Reminder phone calls were not made by the PAs (with the exception of one PA), since the agency recruiter performed this task.
- A nutritious snack was not prepared after the third set of interviews since the women were hesitant to try the snack.

Thirty interviews were to be conducted unless data saturation occurred prior to reaching that threshold. If data saturation occurred prior to 20 interviews the interviews were considered completed after the 20th interview. Data saturation occurred by the sixth interview; however, since the interviews continued to enhance agency relationships, 26 women were invited to the interviews. A total of 23 personal face-to-face interviews were conducted. Agency support for the interviews was an important outcome of the study. The EFNEP and FSNE programs strive to work collaboratively with agencies to reach this target population. These agencies were committed to being involved with the research and their involvement strengthened this project.

Face-to-face interviews, of approximately 60 to 90 minutes, were conducted with each participant. A short 15-question yes or no survey was administered with the interviewees. The questionnaire examined the types of technology each woman had access to, what methods of food preparation were used, and if they participated in family and consumer sciences classes in middle school or high school. The interview guide consisted of 16 questions, with each followed by probing questions. Interviews were recorded and transcribed by a professional transcriber. I coded and analyzed the data using the printed transcripts. Triangulation was achieved through perceptions gained from multiple methods of audio-tapes, reflexivity, conceptual ordering, and constant comparison. In addition, PAs were asked to verify responses of the interviewees after each interview. The constant comparative method of analysis was used to analyze the data, and categories and themes emerged through this process.

The Interviews

Personal interviews can be uncomfortable for this target audience (East, 1999). However, in this study, women openly discussed their lives. They shared stories of sexual abuse, incest, rape, physical abuse, abandonment, rebelliousness, and emotional abuse. They shared how important their children are to them, and that they want a better life for their children. Besharov and Germanis (1999) and Lattimer (2004) reported that these were characteristics of this target audience.

To encourage their participation, each interviewee was given background on the study and the importance of their contribution. They were told there were no correct or incorrect answers to the questions being asked.

There was some presumption that interviewees would not participate in the study due to multiple barriers. East (1999) and Axinn and Hirsch (1993) reported that personal problems of

this low-income TANF recipients prevent them from joining the mainstream. Three women out of 26 did not keep their interview appointments. However, three women in an eastern county of Virginia came to their interview on time during hurricane weather. Two of the women had to bring their children with them. One mother had two babies she brought into the building with no assistance. Participating in our programs during inclement weather is atypical of the population and may imply a commitment to the agency that recruited them for the study. A \$20 gift card for participating was also a possible incentive.

There was concern that the women might not truthfully answer the questions. East (1999) reported truthfulness may be limited by a lack of trust. This was not experienced; none of the women knew me or the PA prior to the interview and every woman answered the questions similarly, which seemed to indicate truthful responses. Sharing with each participant that I was a single mother with some understanding of their difficult lives may have made a connection with them.

Transportation was supplied in several counties. The Department of Social Services in one county paid for taxi fare for the women to participate in the research study. At one site, the PA provided transportation. The transportation at three sites was provided by the TANF job readiness program. In four counties, the women came to the interview using public transportation or supplied their own transportation. Frequently, members of this particular clientele do not keep appointments due to transportation problems.

The Interviewees

The results of this study identified a phenomenon occurring in the United States: poor health among limited-income people who do not attend nutrition education programs in their communities. The 23 women in this study had multiple health issues, their young children have potential long-term health issues, and they lack monetary resources, educational resources, and support networks. Nine of the 23 women had no form of transportation, and for those living in rural communities, this lack of transportation isolated them from needed resources.

The study participants included four Hispanic women, seven Caucasians (one of whom was from Eastern Europe), and 12 African-Americans. No race requirements were specified for the women in the study; however, women of color are a higher proportion of TANF recipients that they are of the American population (Cancian, Meyer, & Wu, 2005). An EFNEP PA who

served as a translator assisted with communication during the interviews of the Hispanic women. These interviews began in English and eventually switched to Spanish with the PA translating.

The women in the study ranged from 18 to 52 years of age. All of the women had children, except one who was expecting her first baby. The interviewed women had between one and five children except for the pregnant interviewee. The 23 interviewees in the study had a total of 50 children.

The women ranged from having no formal education to having some college courses. One woman has an associate degree. Many of the women are from families that had been recipients of welfare in previous generations. Changing their paradigm is very difficult without role models to learn different tasks and a work ethic. TANF requires them to work, and training programs are available for the women in this study. East (1999) and Axinn and Hirsch (1993) reported that personal problems of the target audience need to be addressed before moving the TANF recipients into the work force.

Summary of the Research Findings

Research Question 1: What were the characteristics of the selected food stamp and TANF recipients between 20 and 30 years old? (The categories of characteristics examined were home environment, educational background, nutrition knowledge, and methods of providing food for their families.)

Findings from this study support the research reported on TANF participants, food stamp recipients, health-related issues of impoverished populations, and education of this target group. All of the women participating in the study were impoverished at the time of the interview. They were enrolled in one or more of these public assistance programs: TANF, food stamps, Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and Social Security Income (SSI).

Category: Home Environment

The participants' home environments were significantly impacted by their dependence on public assistance, level of education, their own health or their children's health, and their family and social networks. Of the 23 women interviewed, two were married, and 21 were single mothers.

The women interviewed are the product of life experiences and choices. Four women were employed part-time and one full-time when the interviews were conducted. Nine women were participating in the TANF job readiness programs, a three-week program meeting on a daily basis. The remaining women were at home receiving government assistance.

The mothers at home with their young children have simple lives. They awaken late in the morning. Many of their daily activities focus on watching television. Four of the women spend time with friends, and 12 mentioned spending time with their mothers and siblings.

Moffitt, Cherlin, Burton, King, and Roff (2002) reported that about 40% of women on TANF dropped out of school without a high school diploma and suffer from mental illness, such as depression, which is prevalent in this population. They also deal with issues of domestic violence. Moffitt et al. (2002) further reported that these women suffer more from poor health than people who have left the TANF program. Danzinger et al., (2000), East (1999), Hofferth (2002), and Riger, Staggs, and Schewe (2004) further substantiated these findings.

Mothers in this study believed they should not leave their babies and young children. The interviewees did not want to leave their children to participate in classes. They also watched television with their babies on a constant basis. Several mothers mentioned they were too busy every day taking care of their children, which prevents them from getting involved in activities outside the home.

For nine of the women, lack of transportation was also a barrier to participating in activities. The women with vehicles expressed concern about their cars needing constant repair. One mother in a rural community shared the fact that she does not have a vehicle nor is public transportation available in her county. She is dependent on her boyfriend's mother to transport her to the grocery store to buy food for herself and her three children. Several mothers shared that they are house-bound on a daily basis due to lack of private or public transportation.

The mothers felt strongly about making life better for their children. In studying the transcripts, I discovered that many hours of each day the children are being entertained by television, sometimes with their mothers and sometimes on their own. Bowen, Desimone, and McKay (1995) reported that poor families frequently do not foster effective learning and nurturing environments. The best assurance for a young mother to avoid poverty is to finish high school, remain childless outside of marriage, find employment, and remain employed (Tanner, 1996). One mother who lived in a rural community and was a high school drop-out shared her

concerns and apprehension about sending her daughter to the Head Start program. The day before classes started, she withdrew her daughter from the program. Barnett and Belfield (2006) and McNeal (1996) reported that women who drop out of school are less likely to enroll their children in Head Start. They further reported that “preschool programs raise academic skills on average” (p. 73). To ensure success in recruiting these young mothers into EFNEP and FSNE programs, the program activities must not appear to be like school or classroom experiences. School symbolizes stressful experiences and failure to many since almost 50% of the TANF population dropped out of school (Nichols, Elman, & Feltey, 2006).

The balancing act between low-paying jobs, parenting, housing, lack of transportation, poor management skills, emotional and/or physical abuse, and drug and/or alcohol addiction prevents job retention. Prior to entering the work force, these issues should be addressed through counseling, training programs, and other support (Danzinger et al., 2000; East, 1999; Hofferth, 2002; Riger, Staggs, & Schewe, 2004).

Category: Educational Experiences

The women in this study shared stories of failure, rejection, and dropping out of school. They also shared stories of enjoying school. Twelve women had experiences ranging from no formal education to dropping out of high school. Of the 11 women who dropped out of school, two passed their general education diploma (GED) exam and were awarded a diploma. Several of the women unsuccessfully attempted to pass the mathematics exam, which prevented them from obtaining their GED. Five of the 11 women dropped out of school due to pregnancy and three of the five pursued their GED. The other women indicated they wanted to pursue a GED. Attaining a GED is essential for entering the work force. Employers require skills such as reading, writing, computer skills, math, and interpersonal skills (Danziger, Corcoran, Danziger, Heflin, Kalil, Levine, 2000). Eleven women graduated from high school, and seven of the high school graduates took postsecondary classes.

One of the interviewees from a third-world country had no formal education. Her mother abandoned her at 3 months of age and her grandmother rescued and raised her. To prevent her biological mother from kidnapping and possibly harming her, she was kept out of school.

The school environment should to be a safe haven for all children. The women interviewed had very strong feelings about their school experiences. These feelings ranged from hating school to loving school. The women who loved school had teachers who were willing to

help, loved learning, participated in Special Olympics, and brought excitement into the classroom. The women with negative experiences shared stories of failure and how all students were not treated equally. One interviewee was made fun of because of her disability.

The women who dropped out of school experienced failure, were teased, quit school due to pregnancy, and could not keep up with classes. Jackson, Brooks-Gunn, Huang, and Glassman, (2000) reported that poverty is directly associated with “diminished school achievement and high behavior problems, even when factors such as parental education, mother’s age at birth, family structure, and residential relocations” are considered (p. 1409). Dealing with persistent poverty affects psychological well-being.

There is a strong relationship between a person’s socioeconomic status, health, and education; the lower the level of education the stronger the risk for poor health (Winkelby, 1992). Furthermore, there is a direct relationship between education and poverty (Fremstad, 2004). In 2002, 40% of families headed by single African-American women lived in abject poverty. The proposed solution to this significant problem is to invest in proven anti-poverty measures, and to provide access to education and training programs (National Poverty Center, 2005). It is essential for people to see the connection between education and careers and how this relates to their future. This must happen in the classroom, family, and community to avoid the student dropping out of school.

All interviewees readily shared stories about their favorite teacher and what that person meant to them. One mother was emotional about discussing her favorite teacher and cried as she discussed this special person. The women described characteristics of these teachers as loving, caring, understanding, listening, helping, spending time with them, and being there for them. One mother shared one special teacher who never gave up on her, and that positive relationship allowed her to graduate from high school. This relationship with a favorite teacher gave the women a sense of belonging and the feeling of being cared about whether they failed or succeeded.

Every woman in the study stated the best way to learn is through hands-on, fun experiences. The interviewees did not learn by sitting in a chair and listening to lectures, which were perceived as being meaningless. The women shared how they would design a classroom environment if they were in charge. “More activities, showing them more about what they should do, not what they shouldn’t do” was their advice. Other words used were “interactive” and “fun.”

Asking the interviewees if they participated in family and consumer sciences studies was an attempt to find out if they learned about cooking and nutrition in middle or high school. There was a wide continuum between not learning how to cook to learning how to cook. Several of the women learned how to cook a few foods, and one woman from a foreign country learned how to prepare many different types of foods. Taking family and consumer sciences classes was not a strong indicator of learning about nutrition and cooking with these participants. Interviewees felt the classes “prepared them for life,” they “learned management skills,” and “loved it because I could succeed.”

Category: Health

In the United States, approximately 64% of adults are obese or overweight (HHS, 2005). Seventeen of the interviewed women appeared to be overweight, obese, or morbidly obese. The women indicated they have diabetes, high blood pressure, cancer, asthma, lupus, and fibromyalgia. They shared concerns about their children’s health issues as well. Several women wanted to know why their children are “thick.” The burden of diseases related to these health conditions falls disproportionately on people of low-socioeconomic status, less educated women, and people of color (Baldyga & Petersmarck, 2005; Drewnowski & Specter, 2004; Fiscella & Williams, 2004; Gibson, 2003; Linz, Lee, & Bell, 2005; Pi-Sunyer, 2002). Furthermore, children from impoverished families disproportionately suffer from serious health problems (Case & Paxson, 2006).

The interviewed women reported that medical professionals often tell them and their children they have serious health issues but don’t give them solutions to change these conditions. Case and Paxson (2006), in *The Future of Children*, reported that poor children “receive less and lower-quality medical care for their problems” (p. 151). Lower-socioeconomic children have more severe health problems and fewer resources to draw upon and are not well equipped to deal with health problems due to lack of resources.

Family members with low education levels and low incomes consume poor diets, partly because their understanding of nutrition concepts is limited (Bhargava, 2004). Shim, Jaychandran and Blaylock (2000) reported that many Americans are falsely optimistic about their diets. Promoting dietary change is difficult and requires a long-term strategy.

Many studies positively correlate poverty and obesity (Alaimo, Olson, & Frongillo, 2001; Baldyga & Petersmarck, 2005; Drewnowski & Specter, 2004; Farmer & Ferraro, 2005; Fiscella

& Williams, 2004; Gibson, 2003). Presently in America, 64% of the population is overweight or obese (HHS, 2005). It was interesting that this closely paralleled the current study's participants, in that 65% of the women interviewed were visibly overweight. Two mothers shared that their children were overweight: one 3-year-old weighed 55 pounds and one 5-year-old weighed 85 pounds. Olshansky, Passaro, Hershow, Layden, Carnes, and Brody, et al. (2005) and Raebel, Malone, Conner, Xu, Porter, and Lanty (2004) reported that people who are severely obese shorten their lives by 20 years compared to non-obese people. The U.S. Department of Health and Human Services (2006) reported that overweight children and adolescents often become overweight or obese adults. Children overweight at 8 years of age will be more severely obese as adults. This same report (2006) disclosed another alarming estimate: one in three American children born in 2000 will develop diabetes in their lifetime. This grave news has severe implications for health care and the economy of the United States of America.

The women in this study shared concerns about their children playing outdoors in local neighborhoods. They feel it is not safe for children to play in the public housing areas where they live; therefore, their children get minimal exercise. One mother said her children play indoors all the time. Lack of exercise is a major contributor to poor health and becoming overweight (Serrano & Cox, 2005).

In this study, each woman was asked about her food preparation skills. Until I began asking probing questions, I thought the women were preparing foods from basic ingredients. They perceived they were cooking all of their meals and snacks "from scratch." With further questioning, I discovered most of their daily food intake came from processed foods. They believe they are cooking from scratch because they put a few processed ingredients together or prepare foods such as frozen entrees dinners in the microwave.

All but one study participant wanted to take cooking classes. They want to know how to prepare more nutritious foods and how to motivate their children to eat more health-sustaining foods. The mothers were frustrated by not knowing how to prepare nutrient-rich foods. If the women participated in nutrition education programs centered on cooking experiences, they could avoid using processed foods typically high in fat and sugar content and frequently nutrient deficient.

The women shared their grocery shopping knowledge during the interviews. They looked for grocery advertisements and compared prices. They shopped at stores that provided the best

buys, but they did not use a grocery list. If they learned through the nutrition education programs to plan their meals and use a grocery list, it would possibly alleviate food shortages and prevent the purchase of nutrient-deficient foods.

Oberholser and Tuttle (2004) defined food insecurity as a situation in which “the availability of nutritionally adequate and safe foods or the ability to acquire foods in socially acceptable ways is limited or uncertain” (p. 1). Food insecurity is a serious problem for these 23 women. Almost all of the women reported what has been called “experiencing periodic or episodic hunger” (Wilde & Ranney, 2000, p. 200). They deplete their food stamps by the third week of the month. This means they have to buy food with their limited funds or find alternative ways to feed their family. They developed systems to find alternative resources when they need them. They could learn through EFNEP and FSNE programs how to stretch their food stamps and make it through the month without food insecurity.

The women expressed an interest in learning how to prepare healthy, nutrient-rich foods. These same lessons will teach the women how to stretch their food stamps and food dollars so that food is available to them at the end of the month. Food insecurity would be improved if planning was part of their grocery shopping experiences.

None of the 23 interviewed women had heard of the EFNEP or the FSNE programs, even though the programs are located throughout Virginia. However, the women who were interviewed for this study were isolated from the mainstream activities of everyday life. It seems that marketing for the two nutrition programs is totally lacking in terms of success in reaching these women. Because isolation is such a barrier, marketing will need to be planned and implemented through innovative avenues to reach this specific audience.

Some of the women discussed their experiences with the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), which is funded through the United States Department of Agriculture. The Department of Health administers the WIC program in Virginia. The women shared WIC stories of both success and discouragement. A nutritionist often told them they were doing things improperly. They felt there was no substantive nutrition education. One interviewee’s pediatrician gave her a diagnosis on what type of milk to feed her baby and the WIC nutritionist told her to follow her diagnosis, not the pediatrician’s. These messages are confusing to young mothers. One mother shared a positive story. She was given a lesson on preparing baby food from scratch. The young mother was elated about learning how to prepare

meals for her baby. The main reason the women attended WIC programs was to receive the vouchers for food. Formula is given to the mothers through this program, as well as other nutrient-dense food items.

Words from one interviewee resonated throughout this study: “Tell us what we are doing right, don’t tell us what we are doing wrong.” There is more power in words of encouragement than in words of discouragement. Every mother interviewed works tirelessly at being a good mother. If time is spent building these young women up, they will return for more educational experiences.

Research Question 2: What factors did these women perceive as incentives to participation in the FSNE program and the EFNEP?

The interviewed women shared incentives for them to participate in community nutrition programs. They want to learn how to prepare nutritious foods for their families. These programs need to be “hands-on” experiences that are fun. The women want the classroom environment to be a positive one. Many of the women previously experienced negative learning environments and will avoid similar situations now that they are adults and have choices about their activities. A positive learning experience requires a nurturing teacher who will give the women a sense of belonging.

The women were interested in weight control classes. These classes could teach good nutrition practices related to the food groups, portion control, exercise, incorporating fresh fruits and vegetables into daily meals, and cooking experiences. There would be emphasis placed on caloric expenditure and portion sizes. The program should be advertised to meet the participants’ needs and interests.

The women were interested in receiving nutritious recipes. If these recipes were taught through cooking experiences, they would be more meaningful. Working in groups was discussed during the interviews and could be less intimidating for the target audience.

Since the women experience isolation on a daily basis, having classes closer to home was mentioned by the women in both urban and rural areas. One mother shared how afraid she is to participate in any type of class because of past negative experiences as a child. Home visits could meet this need. EFNEP and FSNE programs need to provide this type of opportunity for future clients. Building a rapport with clients is essential to the success of behavior change. Programs need to be built around meeting the needs of the learner. This is difficult to do when class sizes

are large. One-on-one lessons or very small group classes are the most effective way to meet the interviewees' needs.

The women wanted food to take home. When class participants learn how to prepare a nutritious recipe, they want to take home those same ingredients to prepare it for their families. Working with some of Virginia's food banks has allowed EFNEP and FSNE programs to develop a model to send home food items to prepare after learning how to cook the food. This model is not available in most of the state. Food donations should be pursued to accomplish this goal.

Research Question 3: What factors did these women perceive as barriers to participation in the FSNE program and the EFNEP?

Multiple obvious barriers were prevalent throughout the study. Due to isolation of the participants, they reported that they had never heard about EFNEP or FSNE programs. This is a major concern because marketing to women who are isolated on a constant basis will be difficult and costly. Reaching the clients through a mediator will be the most effective way. Possible mediators might be WIC clinic staff, DSS eligibility workers, or pediatricians. The other two barriers mentioned were transportation and child care. The transportation issue would not be difficult to rectify if we can promote the programs in different venues. The PAs make home visits and work within public housing areas. In regard to child care, the children frequently accompany their mothers to EFNEP or FSNE programs.

The interviewees perceived that they are too busy taking care of their families to be a part of nutrition education programs. They also perceived that they know how to cook and prepare nutrient-dense meals for their families. Some of the interviewees shared that they do not believe people care about their health and how lack of proper nutrition will affect their lives.

The most important barrier to overcome was their negative school experiences and the perception that people tell them that they do everything wrong. Positive role models could overcome this barrier to participating in educational programs.

Limitations of the Study

This study was a qualitative study that employed personal interviews. A limitation of a qualitative study is that it is not generalizable to the population (Schwandt, 2001). The purpose of using interviews was to glean insights from the targeted population. Ary, Jacobs, and

Razavieh (2002) reported the response rate is high using personal interviews. The criteria for selecting the women for this study was that they were TANF recipients receiving food stamps and between the ages of 20 and 30; therefore, this study was limited to their perspectives.

Fontana and Frey (2002) reported that asking questions and getting meaningful answers is more difficult than it seems because participants may answer questions according to what they believe the researcher wants to hear. The women in this study did not know each other or talk to each other before or after their interviews, yet all of the women answered the questions similarly.

Therefore, a bias was not detected.

The sample was purposive. Personnel from the Department of Social Services, Head Start Program, and Healthy Families program (which sponsors the Resource Mothers Program) identified the interviewees. These agencies serve the same population as EFNEP and FSNE programs. One Spanish-speaking PA recruited two women for the interviews. Because the study consisted of purposive sampling techniques, study results cannot be generalized to other populations.

To control for researcher bias, I asked the PAs who attended the interviews to participate in validating the field notes. This helped assure that I interpreted the data appropriately. The data aggregation included working with an uninformed assistant who read the transcripts and assisted with the coding process.

Discussion

This was a grounded theory study. The theory was built by gathering data from people's experiences and building a theory from the bottom up. From this study, I theorize that the major reason the study participants do not participate in nutrition education classes was their isolation.

The Hidden Meaning

The real issue concerning the incentives and barriers stems from the interviewees' isolation, which was pervasive throughout their lives. They have limited family and friends, they stay within their own homes and neighborhoods, they frequently have limited educational experiences (12 of the interviewed women did not complete high school), and they cannot find employment. Therefore, I believe isolation is the main reason women do not participate in EFNEP and SCNEP.

The lack of seven types of capital contribute to isolation: social, economic, human, natural, cultural, political, and built. Social capital is defined by Putnam (1995) as “social connections and the attendant norms and trust” (p. 665), including relations developed with one another; the more we connect with one another, the more we trust. People who join activities build trust (Putnam). Forms of social capital exist as trust, information sharing, and norms with effective sanctions. Social capital is inherent in the structure of relationships and is diminished when individuals withdraw from social networks. Social networks exist within families and communities. Social relationships and networks provide the potential to acquire valued resources (Stanton-Salazar, 1997). This building of social capital directly relates to the level of isolation discovered in the lives of the women in this study and is the key factor in determining their participation in nutrition education classes.

Economic capital refers to individual wealth or economic resources available to a community. Human capital is one’s knowledge and skills acquired through life experiences. Emery and Flora (2006) further defined human capital to include skills and abilities attained by people that further enhance their resources and extend their knowledge base. An example of human capital would be a parent spending time with her child and assisting the child with homework. It would increase the child’s human capital by promoting interest in schoolwork, ultimately leading to earning a high school diploma and possibly further education.

These three types of capital — social, economic, and human — are interrelated and connect to the findings of this study. For instance, a parent could use her financial assets (economic capital) to send a child to a private school and then on to post-secondary education to develop the child’s human capital as well as social capital, and ultimately economic capital. Parents (human capital) who spend time with their children develop social capital in their children. Examples of opportunities for building social capital include churches, schools, organized sports in schools, 4-H community clubs, book clubs, and EFNEP and FSNE programs.

Putnam reported that communities played a large part in developing social capital through schools and churches. Today, the technology explosion has changed the way communities operate. People do not interact with each other as they did in the past. Communities with a “substantial stock of social capital” (Putnam, 1995, p. 66) are more successful because they foster an atmosphere of reciprocity, collaboration, and social trust.

There are serious implications from this study for all seven forms of capital, but most specifically social, human, and economic capital. The over-arching finding of the study was the isolation of these women from families, friends, and daily activities. The study centered on categories and themes related to home environment, experiences in school, and health. All of the interviewed women lack one or more of these forms of capital. These forms of capital relate to education, monetary resources, social networks, and other important resources such as an inadequate food supply, role models, and exposure to different ideas.

Putnam suggested that education has a profound effect on civic engagement and trust (1995). He further suggested that there are two types of social capital: bonding and bridging. Granovetter (1973) reported that social networks shared with friends “varies with the strength of their tie to one another” (p. 1360). He referred to these networks as weak ties and strong ties. For example, if Mary and Jane are from the same neighborhood and become friends with Ann who is from a different neighborhood, Ann may bring Karen, who is from a different neighborhood, into the friendship. Through their friendships, these women will exchange ideas and life experiences that will broaden each woman’s views. This provides “people with access to outside resources and promotes information diffusion by creating linkages across diverse social cleavages” (Putnam, 2000, p. 22). Putnam referred to this as bridging social capital, while Granovetter referred to these as weak ties. The converse of this concept is bonding or strong ties. EFNEP and SCNEP clientele typically spend time with their families and friends from the same small neighborhood. Their connections are mainly “like-minded,” which prevents expanding their present paradigm. This bonding or strong ties philosophy promotes a narrow solidarity.

Putnam (1995) suggested that the strongest predictor of isolation is television. The most significant daily activity for the 23 interviewees was watching television alone or with their children. Television watching prevents social interaction, which disrupts opportunities to develop social capital. Furthermore, technology continues to develop new ways of promoting isolation, for example, DVDs and video games.

Isolation also results in few opportunities to view the world through different frames of reference. Twelve of the interviewees in this study lived in rural communities that provide no public transportation. Some of the interviewees have personal transportation; however, their vehicles frequently require expensive maintenance, which limits their ability to socialize and be mobile.

Complicating this further, 12 women had dropped out of high school. The other 11 women graduated from high school, but it seems their world is very limited. They all have minimal social, human, and economic capital opportunities, partly due to living on public assistance, within public housing communities or in rural communities without close neighbors, and limited interaction with people. These same women have few opportunities for employment to sustain their basic needs.

Forming social capital at a young age is essential to the development of a child. Parents must spend time with their children to enhance social capital. Fritch (1999) reported that when only one parent is present in the home, social capital is weaker. This is important to this study because only two of the women who participated in the interviews were married, and many of the women did not have significant others in their lives. Spending time with their children means taking advantage of opportunities such as organized athletics, 4-H programs, school-sponsored field trips, or church activities. Furthermore, strong social capital comes from other significant adults in their lives, such as teachers, 4-H leaders, religious program teachers, and other family members from outside of their neighborhood. These are constructs that the women in the study would find difficult to practice.

The core of the issue is far more involved than teaching nutrition to a target audience. Developing communities by reconnecting families and friends is the first step in developing social, human, and economic capital (Bridger & Alter, 2006). Social capital is developed through trusting relationships and norms of reciprocity. From this emerges “repeated and regularized interactions that are bounded in time and space” (Bridger & Alter, 2006, p. 6).

Cooperative Extension has the ability to build the capacities of people, families, and communities. The mothers interviewed have dreams for their children and their futures. Extension can contribute to these dreams with educational tools, opportunities, and holistic approaches to moving people from dependence into self-sufficiency.

Implications

Since isolation is so pervasive in the interviewees’ lives, EFNEP and FSNE programs will have to develop new strategies to reach women and their children. Once women are engaged in classes, the PAs must ensure environments of success for each participant.

- Learning must be relevant to each participant.

- New delivery methods may need to be pursued.
- Cooking classes would improve their diets and teach through “hands-on learning” experiences.
- Advertising weight control classes may be a marketing strategy, as well as marketing cooking classes.
- Developing strong trusting relationships with the participants will be required if the participant is to learn and to continue in the classes. This relationship cannot be nurtured if class sizes are large.

Understanding the importance of developing a trusting relationship with each person enrolled into the EFNEP or FSNE programs is basic to internalizing the nutrition message. It is also tantamount to developing a relationship to each other (weak tie), which will broaden their views of the world. This study confirmed the importance of developing a relationship through hearing their voices as they shared what their favorite teacher meant to them. When District Coordinators hire new employees, the most important qualifications a person needs to demonstrate are the ability to relate to people, empathy, and compassion for all people. Being indigenous to this particular audience of limited-resource families and possibly having been a former food stamp recipient is essential to understanding the audience. The employee can learn good nutrition practices, but relationship building may not be something learned in a classroom environment. Once a nurturing relationship is developed, PAs can share other important resources with the women. PAs know their communities very well; however, there seems to be a disconnect, since none of the women in this study had ever heard of either nutrition program.

A concentrated effort to find marketing strategies that work with this target audience should be designed and implemented. Presently, EFNEP and FSNE programs are conducting a social marketing campaign with a local television station in the Tidewater area of Virginia. The intention of the campaign is to make people aware of positive nutrition messages and to promote the two nutrition programs. How new clients seek out the nutrition programs from this campaign may help address the barrier of isolation. Reaching isolated people is difficult but should be actively pursued. Isolation prevents this study’s interviewees from participating in community activities. It is essential to the success of EFNEP and FSNE programs to explore more effective ways to market programs to help low income women connect with others in their community. The women in this study were not interested in nutrition education but said they would

participate in cooking classes and weight control classes. Tying programming to the well-being of their children may be an avenue to reaching them and involving them in programs.

As a result of this study, training modules should be developed, keeping the following objectives in mind:

- To incorporate the importance of relationship building in training new PAs.
- To incorporate how learning is constructed by each individual. People learn using combinations of intelligences. If people can be taught using different intelligences, meaning takes place at a higher level and human potential is developed.
- To incorporate the career and technical education model that uses contextual learning and integrated learning to make learning meaningful for each student.
- To teach through experiential learning and dialogue methods. PAs should make learning meaningful through simulations, demonstrations, role modeling, and role playing.
- To promote a small class size for EFNEP and FSNE to enhance more individualized learning opportunities and create a positive learning environment for participants, which builds upon their successes.

Retaining the young women in high school until graduation is a significant step in reducing poverty. Five women in this study dropped out of high school due to pregnancy. Seven other women dropped out due to various other reasons, mainly failure to keep up, being made fun of, becoming rebellious, and not understanding how school related to their future. Women expressed these thoughts during the course of the interviews. Emphasis should be placed on finding creative ways to engage this population in classes that bring meaning to the learner. Without meaningful educational opportunities, these high school drop-outs may continue a lifetime of poverty. This poverty most likely will be passed on to their children, as they experience education as meaningless (Association for Career and Technical Education, 2006).

Virginia Cooperative Extension is positioned to work with these limited-income populations through building the communities this population inhabits. Nutrition is only one small piece of personal development for these women. If the nutrition programs are structured properly, the participants will begin developing trust and reciprocity, which limit them now due to lack of social capital. Extension should build educational programs around human development, financial management, and nutrition. The educational programs cannot be one

dimensional, but rather programs must be structured to develop the entire being. Community development will enhance the development of the individual by offering them opportunities.

Future Research

This dissertation attempted to represent the experiences, meanings, and life experiences of women who receive TANF and food stamps in nine counties of Virginia. The results of the study cannot be generalized to the entire population of women receiving these government subsidies. There is still much to be explored with this same population.

The results of this study indicated that isolation prevents the women from participating in community nutrition programs. Voids in the development of social, human, and economic capital seem to prevent them from joining and participating in activities outside of the home. Additional research is needed to better understand these gaps in the women's lives. For example, does isolation also prevent these women from attending church, voting, or other community functions?

This study would have benefited from being an ethnographic study. Immersing oneself in the participants' daily lives could offer a well-grounded understanding of how complicated their lives are and enrich a researcher's understanding of the processes of daily living. This immersion would create a more detailed understanding of how the clients perceive food, food preparation, and the functions of health and well-being related to nutrition concepts. Furthermore, uncovering the mothers' previous backgrounds could help discover how to move them to a higher level of understanding the importance of feeding their family nutrient-dense foods to improve their future health. The interviewees suggested that food does not affect their future lives because health is genetic; it has already been decided who will suffer from chronic diseases. This mentality could be changed by developing a relationship with the participants that builds their readiness to hear the message that today's food choices do matter to one's future health outcomes.

Future research is also needed to determine what builds communities from the inside out and how nutritionists can work in a community effectively to empower people to healthier living. Hypothetically, if nutritionists can tap into building human capacities, individuals will grow by connecting to each other. This ultimately will increase individuals' social and human capital and their health and well-being. Opportunities for research exist in exploring ways to discover and utilize gifts and talents of the indigenous members of the community as the community develops to a higher level of functioning and regeneration.

This research study used personal interviews as the primary methodology. Different research methods such as a focus group or case studies could have been used to discover the incentives and barriers to participation in community nutrition programs. These methods could reveal the root causes of the incentives and barriers to participation.

For the past eight years, EFNEP and the FSNE programs partnered with the Capital Area Food Bank to conduct a 4-H camping experience for children from impoverished neighborhoods. Further research could explore if this type of experience builds social and human capital in the lives of impoverished children. Exploring educational and developmental experiences such as 4-H and other youth programs related to building human capacities could give insight into the long-range impacts of such programs. Exploring the impact of a camping experience (such as the one mentioned previously) on teen leaders from middle class families could also be insightful. How do these teens perceive impoverished children once they have spent five days with them? What long-range outcomes impact their lives from an experience such as this?

In a different vein, research could be done to determine how a community nutrition program impacts the development of human capacities in the lives of impoverished women. Do the women participate in other programs because of the success and empowerment attained through EFNEP and FSNE programs? What does this mean for their economic and social standing in their community and family?

A comparison study could be conducted with single mothers not receiving TANF and participating in nutrition programs as compared to mothers receiving TANF and participating in the same programs. What are the differences between their income and TANF benefits?

Two mothers in the study had their children enrolled in extra-curricular activities. Further research could explore what happened in the mothers' lives that they recognize the value of programs outside of school for their children. As a result of these extra-curricular activities, are the mothers and their children building social and human capital? What long-range effects will these extra-curricular activities have upon the children and the mothers' ability to self-actualize?

Finally, a research opportunity would be to conduct a cost benefit analysis comparing one group of TANF women who participate in intense career training to another group of TANF women who receive the minimum 12-week job skill training. An example of this intense training might be graduating from a technical school. The study would explore the outcomes related to self-sufficiency and social, human, and economic capital in the women and their children.

Future Programming

Virginia Cooperative Extension's EFNEP and FSNE programs are searching for new ways to deliver nutrition programs. A two-day workshop is being planned to bring our top performing PAs together to address how to effectively market our two nutrition programs, incorporate learner-centered activities in every lesson, incorporate more cooking experiences into each lesson, and train all PAs across the state to address this new way of programming. One important role of the PAs is to find ways to reinforce positive behavior. This will empower the participants while they are engaged in the learner-centered activities.

Another strategy will be to work with the 4-H agents to develop community clubs with children of the adult participants in EFNEP and FSNE program. Interventions of this nature will expose the children to not only nutrition information, but also character-building and other 4-H programming efforts.

It is important to involve family and consumer sciences agents to build a multi-dimensional program that addresses nutrition, human development, and finance and consumerism. This will broaden the participants' exposure to necessary life skills.

Advertising the programs through a professional marketing company is a strategy that could be developed when preparing the annual budget. This will require obtaining matching dollars to implement. Public service announcements might be an outcome of a marketing campaign.

Summary

This inquiry confirmed previous scholarly work focused on the health and well-being of TANF and food stamp recipients. The health and well-being of the target population for this study and their children is at stake due to pervasive health issues related to poor nutrition. Prevention programs are more cost effective than treating diseases such as diabetes, cancer, and heart disease. However, the challenge is how to reach the women and enroll them in nutrition education programs, specifically EFNEP and FSNE programs. Findings from this study suggest that isolation is the main impediment to involvement in these programs. PAs should be trained to use more effective teaching methods, incorporate multiple learning styles, use more individualized strategies to create an environment of success for each student, and make sure

participants see the connection between nutrition, what one eats or feeds their children, and their present and future health and well-being.

Most challenging will be finding appropriate ways to market programs to these women. The potential participants suffer from isolation, frequently struggling to survive and provide for their family. They may not see the importance of good nutrition practices, especially when they do not have enough food to last the entire month. Furthermore, many of these women dropped out of school, and if they perceive nutrition classes to be like school, participation will be low.

The women must perceive that classroom experiences provide friendship, caring, and sharing with women similar to themselves. Appropriate marketing strategies and messages are important to bring the women into these nutrition programs, and effective learning experiences must keep them returning. One of the important outcomes of the women participating in nutrition programs is the development of social capital, which leads to learning how to trust people and reciprocity.

Two of the potential benefits of the EFNEP and FSNE programs are building social and human capital in the participants. New knowledge was generated in this study: women who are the target audiences for our programs have limited social and human capital. Extension can play a significant role in building communities through the intersection of partnerships with nutrition educators and community developers.

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APPENDIX A

2006 POVERTY INCOME GUIDELINES

Published in the Federal Register January 24, 2006
for All States Except Alaska and Hawaii

Household Size	100% of Poverty		130% of Poverty (SCNEP Use)		185% of Poverty (EFNEP Use)	
	Monthly	Yearly	Monthly	Yearly	Monthly	Yearly
1	\$ 817	\$9,800	\$1,062	\$ 12,740	\$ 1,511	\$ 18,130
2	1,100	13,200	1,430	17,160	2,035	24,420
3	1,383	16,600	1,798	21,580	2,559	30,710
4	1,667	20,000	2,167	26,000	3,083	37,000
5	1,950	23,400	2,535	30,420	3,608	43,290
6	2,233	26,800	2,903	34,840	4,132	49,580
7	2,517	30,200	3,272	39,260	4,656	55,870
8	2,800	33,600	3,640	43,680	5,180	62,160
9	3,083	37,000	4,008	48,100	5,704	68,450
10	3,367	40,400	4,377	52,520	6,228	74,740
11	3,650	43,800	4,745	56,940	6,753	81,030
12	3,933	47,200	5,113	61,360	7,277	87,320
13	4,217	50,600	5,482	65,780	7,801	93,610
14	4,500	54,000	5,850	70,200	8,325	99,900
15	4,783	57,400	6,218	74,620	8,849	106,190
16	5,067	60,800	6,587	79,040	9,373	112,480
17	5,350	64,200	6,955	83,460	9,898	118,770

APPENDIX B

SURVEY QUESTIONS

The purpose of the following questions is to find out possible ways to offer nutrition education programs to women like you and to see how they prepare foods for their families.

1. Do you have a television at home?	YES	NO
2. Do you have a DVD player?	YES	NO
3. Do you have a video tape player?	YES	NO
4. Do you have a computer at home?	YES	NO
5. Do you have an Internet connection?	YES	NO
6. Where can you go to connect to the Internet?	<hr/>	
7. Do you like to read?	YES	NO
8. Would you be interested in learning about good nutrition by receiving newsletters?	YES	NO
9. Did you take home economics or family studies courses in middle school or high school?	YES	NO
10. Would you like to learn how to prepare tasty, nutritious recipes?	YES	NO
11. Do you use a microwave oven to prepare foods?	YES	NO
12. Do you often prepare foods from scratch?	YES	NO
13. Do you prepare raw or cooked vegetables nearly every day?	YES	NO
14. Do you have a cell phone that has text messaging?	YES	NO
15. Do you have an iPod that can podcast?	YES	NO

APPENDIX C
INTERVIEW GUIDE

1. Would you describe for me a regular day from the time you get up until you go to bed?
2. Let's talk about cooking, tell me about preparing foods for you and your children.
 - Do you cook?
 - What do you like to cook? If you do not cook, what are some ways you get food for your family?
 - How often do you prepare these types of foods you just mentioned?
 - Why do you prepare these foods you just mentioned?
 - Do you also buy cooked or processed foods from food stores or fast-food chains?
 - Why do you buy these foods?
 - How often do you grocery shop?
 - Where do you buy your groceries?
3. I would like to talk to you about activities that you participate in outside of the home.
 - Would you describe these activities to me?
4. Let's talk about school. Tell me about your experiences in school.
 - What was your favorite subject?
 - Tell me about your favorite teacher.
 - What was she like and how did she treat you?
 - Did you take any classes called home economics or work and family studies in high school?
 - If you did, were there any lessons about nutrition?
 - Tell me about what you learned, especially about cooking and good eating habits.
5. When you hear the word "nutrition," what comes to your mind?
6. If you could plan the perfect class in nutrition and healthy meal planning, what would that class be like?
7. Please tell me about the types of educational programs you have participated in since your school days as a teenager.

8. What do you think about taking cooking classes?
 - Are you aware of healthy cooking and eating programs within your community?
9. Have you ever heard of either of the following two nutrition programs: the Expanded Food Nutrition Education Program (EFNEP) and the Smart Choices Nutrition Education Program (SCNEP)?
 - What do you think about the names of the programs, SCNEP and EFNEP?
 - Do they seem unusual?
 - Do you have any suggestions for a more interesting name for either of the classes?
 - What might they be?
10. Have you ever wanted to learn more about healthy eating habits?
 - Let's talk about what you would like to learn from this type of program? Tell me about how you like to learn things.
 - Would you like to hear someone talk about a subject?
 - Would you like to learn by trying new things yourself?
 - Please share with me your ideas.
11. What do you think keeps young women in your neighborhood from attending our healthy cooking and eating classes?
12. How can our activities meet your needs?
 - What could we do better to get women to come to our activities?
13. Do you have any further ideas on how to improve the nutrition classes?
14. How do you feel about the TANF work program that you are participating in now?
 - Are there parts you especially like and dislike about it? Let's talk about those things.
15. Tell me about some things you have learned in the TANF program?
 - Have you learned anything about good eating and cooking?
 - I'd like to hear about those things.
16. Are there any other ideas you would like to share with me?

APPENDIX D

INFORMED CONSENT FOR PARTICIPANTS

**Virginia Polytechnic Institute and State University
Informed Consent for Participants
In Research Projects Involving Human Subjects**

Project Title: The Incentives and Barriers to Enrolling in Virginia's Expanded Food Nutrition Education Program (EFNEP) and Smart Choices Nutrition Education Program (SCNEP)

Investigator: Mary M. McFerren, Project Director, EFNEP and SCNEP
Doctoral Candidate, School of Education, Virginia Tech

Advisors: Dr. Daisy Stewart and Dr. Michael Lambur

Purpose of Research

The purpose of this study is to determine what encourages women of child-bearing age who receive TANF and food stamps to participate in Virginia's nutrition education programs, EFNEP and SCNEP.

Procedures

In order to learn more about women's participation in nutrition programs, I would like to interview women of child-bearing age who participate in the TANF program. The interview will be tape recorded.

Risks

The risks are minimal since your name or other identifying information will not be used in any documents.

Benefits

While there may be no direct benefit for you from the study, the results of this study will inform me and similar program leaders how we can better serve women in the future to increase their participation in nutrition programs in their communities.

Compensation

If you participate in this study, you will receive a \$20 gift card to use at Wal-Mart.

Freedom to Withdraw

There is no penalty if you decide to withdraw from participating in this interview. If you decide to give me permission today, and then decide to withdraw at a later date, you must let me know. My phone number is 540-231-6393 and my email address is mmferre@vt.edu. You may also contact _____, the PA who will be with us at the interview. Her phone number is _____. If you do not want to talk to me about the research study, you may contact the Chair of my Dissertation Committee, Dr. Daisy Stewart at 540-231-8180 or daisys@vt.edu. You may also contact Dr. David M. Moore, the Chair of the Virginia Tech Institutional Review Board, at 540-231-4991 or moored@vt.edu if you have questions about your rights as a participant in this project.

Subject's Permission

If you agree to participate in the interview, please sign and date this form. I have extra copies if you would like to have one to keep.

_____ Date _____
Subject's signature

APPENDIX E

TALKING POINTS FOR INVITING YOUNG WOMEN TO THE INTERVIEWS

(This will be a phone call from the program assistant in the respective community or a personal invitation at a work force site where women are enrolling in the jobs program.)

1. Hi, my name is _____.
2. I work in the Smart Choices Nutrition Education Program (or the Expanded Food Nutrition Education Program). I work here in _____ County or City. We have a mutual friend, _____.
3. Do you know about our program, the Smart Choices Nutrition Education Program (the Expanded Food Nutrition Education Program)? It is called SCNEP (or EFNEP) for short)? (Name the program which is appropriate for that locality).
4. The SCNEP/EFNEP is inviting young women to participate in an interview. Through this interview, we want to figure out how we could make our program better for young women like you.
5. The interview will last approximately one to two hours. After the interview, you will receive a \$20 gift card to spend at _____ (a chain discount store).
6. Would you like to be a part of this interview? We would be willing to come to your home, or you could meet us in _____ (site close to the participant). We can send a state car to take you to _____ and back home.
7. The interview will be conducted by Mary McFerren and I will also be there. Mary is a student at VA Tech and is working on gathering this information. You will later receive a letter from Mary about the interview.
8. I will call you the day before the interview and remind you of the time and the place.
9. After finishing the interview, you will receive the \$20 gift card.
10. Ask for clarification of their address for mailing purposes.

APPENDIX F

LETTER TO INTERVIEWEES

Dear _____,

Thank you for letting me meet and talk with you. We will discuss ways that a nutrition program in Virginia could be more interesting and fun for young women like you.

In this interview, we would like to get your ideas about why young people like you may not come to the nutrition programs, and how we could make them more exciting for you.

The interview will take about one to two hours. We will meet in your home (or other place) on _____, 2006, from ___ a.m. (p.m.) until ___ a.m. (p.m.). After the interview, you will receive a \$20 gift card to spend at a chain discount store, which you can spend however you want.

Your help is very important to us. Your ideas will help us make our nutrition programs better for young women in Virginia.

If you have any questions, please call _____, the program assistant in your county at the Extension Office, at this phone number: _____. I look forward to seeing you on _____ (date).

Sincerely,

Mary M. McFerren

APPENDIX G

IRB AMENDMENT 1 APPROVAL



Office of Research Compliance
Institutional Review Board
1880 Pratt Drive (0497)
Blacksburg, Virginia 24061
540/231-4991 Fax: 540/231-0959
E-mail: moored@vt.edu
www.irb.vt.edu

FWA00000572(expires 7/20/07)
IRB # is IRB00000667.

DATE: June 26, 2006

MEMORANDUM

TO: Daisy L. Stewart
Mary McFerren

FROM: David M. Moore 

Approval date: 6/22/2006
Continuing Review Due Date: 6/7/2007
Expiration Date: 6/21/2007

SUBJECT: **IRB Amendment 1 Approval:** "Incentives and Barriers to Participation in Nutrition Education Programs", IRB # 06-359

This memo is regarding the above referenced protocol which was previously granted approval by the IRB on June 22, 2006. You subsequently requested permission to amend your IRB application. Since the requested amendment is nonsubstantive in nature, I, as Chair of the Virginia Tech Institutional Review Board, have granted approval for requested protocol amendment, effective as of June 26, 2006. The anniversary date will remain the same as the original approval date.

As an investigator of human subjects, your responsibilities include the following:

1. Report promptly proposed changes in previously approved human subject research activities to the IRB, including changes to your study forms, procedures and investigators, regardless of how minor. The proposed changes must not be initiated without IRB review and approval, except where necessary to eliminate apparent immediate hazards to the subjects.
2. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.
3. Report promptly to the IRB of the study's closing (i.e., data collecting and data analysis complete at Virginia Tech). If the study is to continue past the expiration date (listed above), investigators must submit a request for continuing review prior to the continuing review due date (listed above). It is the researcher's responsibility to obtain re-approval from the IRB before the study's expiration date.
4. If re-approval is not obtained (unless the study has been reported to the IRB as closed) prior to the expiration date, all activities involving human subjects and data analysis must cease immediately, except where necessary to eliminate apparent immediate hazards to the subjects.

cc: File

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE UNIVERSITY AND STATE UNIVERSITY
An equal opportunity, affirmative action institution

VITA

MARY M. MCFERREN

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Virginia Polytechnic Institute and State University
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Phone: 540-231-6393, Fax: 540-231-7576
mmferre@vt.edu

Home Address:
185 Wind Song Lane
Christiansburg, VA 24073

EDUCATION

Ed.D. in Career and Technical Education, 2007
Virginia Polytechnic Institute and State University, Blacksburg, VA

M.S. in Adult Continuing & Occupational Education, 1987
Kansas State University, Manhattan, Kansas

B.S. in Home Economics, 1970
University of Southwestern Louisiana, Lafayette, Louisiana

TRAINING

Institute for Educational Leadership, Inc., 2000
Virginia Collaborative Leaders Program, Richmond, VA,

Introduction to Conflict Analysis & Resolution, 1999 - 2000
Institute for Conflict Analysis & Resolution, George Mason University, Fairfax, VA

Cultural Diversity Training, 1995

Focus Group Training, 1994

Unit Director Supervisor Training, 1993

Total Quality Management Training, 1993

Post Graduate, Nutrition, 1998
Virginia Polytechnic Institute and State University, Blacksburg, VA

Post Graduate, Financial Management, 1998
Virginia Polytechnic Institute and State University, Blacksburg, VA

PROFESSIONAL EXPERIENCE

Project Director, EFNEP/SCNEP, HNFE, Virginia Tech, December, 2005 to Present

- ◆ Provide primary management and leadership of EFNEP and SCNEP in accordance with federal guidelines and identified needs and goals of limited resource families/individuals in Virginia
- ◆ Provide daily supervision to Unit Coordinators and District Program Coordinators, EFNEP/SCNEP, and, indirectly, to all unit staff members
- ◆ Provide overall coordination and leadership in planning, developing, implementing, evaluating, and reporting EFNEP and SCNEP policies and management recommendations to district and unit staffs. Prepare and revise (as

needed) and distribute the Virginia EFNEP/SCNEP Policy and Procedure Manual (with the District Coordinators)

- ◆ Interpret and communicate EFNEP and SCNEP policies

Project Associate, EFNEP/SCNEP, HNF, Virginia Tech, November, 2003 to December, 2005

- ◆ Assisted the State Coordinator in budget preparation
- ◆ Assisted in making statewide staffing decisions
- ◆ Assisted in preparing the yearly SCNEP Plan and Budget
- ◆ Oversaw the use of funds
- ◆ Managed the process of identifying and documenting matching funds for SCNEP
- ◆ Collaborated with the five District Coordinators to identify and meet staffing and training needs of the Program Assistants and agents with EFNEP/SCNEP responsibilities
- ◆ Provided support and technical assistance to the five District Coordinators in personnel actions related to hiring, evaluating, and terminating EFNEP/SCNEP field staff
- ◆ Collaborated with the State EFNEP/SCNEP Coordinator in nutrition education programming decisions and strategies for both the Adult and Youth phases of EFNEP and SCNEP.
- ◆ Ensured that federal guidelines are followed and effective nutrition education is conducted with limited-resource individuals and families across Virginia

Area Program Coordinator, EFNEP/SCNEP Virginia Cooperative Extension, Northern District - Warrenton, Virginia, 1996 to 2003

- ◆ Supervised up to 25 Program Assistants and 2 Administrative Office Specialists across Northern District and upper Northwest District.
- ◆ Worked directly with State EFNEP/SCNEP Coordinator to ensure federal guidelines are followed.
- ◆ Managed EFNEP/SCNEP operating budget for Northern District and upper Northwest District.
- ◆ Worked directly with Extension Agents (Unit Coordinators, FCS, 4-H, and Agriculture agents) to ensure quality programming within their communities.
- ◆ Collaborated with the District Director to keep him/her informed of programming efforts, personnel issues and staffing opportunities.
- ◆ Worked with Personnel Services, Human Resource Specialists at Virginia Tech regarding employee issues.
- ◆ Coordinated with State EFNEP/SCNEP Coordinator on staffing decisions in Northern District, PD 6 and PD 7.
- ◆ Worked with Program Assistants to ensure match dollars are identified, documented and reported for Food Stamp Nutrition Education grant.
- ◆ Initiated and coordinate activity to recruit, interview, and hire Paraprofessionals and Administrative Office Specialists.
- ◆ Collaborated with District Coordinators to identify training needs for Program Assistants for statewide trainings.
- ◆ Initiated and implemented statewide training and district bi-monthly trainings for Paraprofessionals on foods and nutrition and related subject matter, program policies, procedures, records and reporting, and on recruiting and enrolling families and/or youth into adult and/or youth programs.
- ◆ Conducted and oversaw nutrition education programs in the community for targeted audience and teach nutrition classes when asked.
- ◆ Trained and guided Paraprofessionals and Administrative Office Specialists on EFNEP/SCNEP policies, procedures, and program implementation.
- ◆ Developed/implemented the performance evaluation process for up to 25 Paraprofessionals and 2 Administrative Office Specialists.
- ◆ Promoted EFNEP/SCNEP through displays, networking, and writing MOU's.

- ◆ Secured grant funding for the Kids Café Camp at the Northern Virginia 4-H Educational Center.
- ◆ Wrote grants and proposals to supplement budgets with food and monetary donations.
- ◆ Audited unit records and ensured policies and procedures are being followed by Program Assistants.
- ◆ Worked the Extension Leadership Councils across the district to make them aware of what impact the EFNEP/SCNEP Programs are having within their communities.
- ◆ Participated in two separate Extension Leadership Councils (Fairfax and King George Counties).

Manor Healthcare Corporation – Arlington, Virginia, 1995 - 1996

Williamsburg Unit Director

- ◆ Managed and gave leadership to 20 full-time employees of a 30-bed nursing home unit, which is Manor Healthcare Corporation's premier product to the community.
- ◆ Provided training to all unit, center, and regional staff as required by the federal government.
- ◆ Provided on-going educational programs to residents and families of the Williamsburg unit.
- ◆ Served as a role model of customer service in attitude and actions.
- ◆ Inspired team to excel in customer service.
- ◆ Recognized and rewarded accomplishments of the team.
- ◆ Ensured social service requirements were met for federal, state, and company stipulations and regulations.
- ◆ Managed the unit budget.
- ◆ Evaluated employees.
- ◆ Marketed the unit to the public.

Virginia Cooperative Extension - King George, Virginia, 1987 – 1995

Unit Director/Extension Agent, Family & Consumer Sciences/4-H

- ◆ Served a population of over 14,500, which included: monitored and developed county budget, supervised and managed two office professionals and one Extension Agent, supported and assisted state and district administration in recruiting qualified candidates for classified and faculty positions, evaluated personnel performance and counsel for needed improvement using a coaching style to motivate, encourage, and support unit staff, promoted staff development for unit staff, and provided leadership to the unit program efforts.
- ◆ Recruited, trained, and managed extensive volunteer staff of over 100.
- ◆ Prepared and delivered comprehensive, community-based educational programs in Home Economics and 4-H that enhanced the economic capacity and quality of life of families.
- ◆ Interacted with all segments of the community as the senior staff person representing Virginia Cooperative Extension in King George County. Worked with the County Administrator and the Board of Supervisors to keep them abreast of VCE programming within the community and involved them with the programming process.
- ◆ Conducted needs assessments through community research to identify the issues facing the local community and implemented strategies to address those issues.
- ◆ Served as chair and/or member of numerous agency and coalition committees to foster teamwork and cooperation to reach the committee goals.
- ◆ Wrote grants as needed and where county issues dictated the needs.
- ◆ Recruited and trained the first Extension Leadership Council in King George County

PROFESSIONAL ORGANIZATIONS

- ◆ American Association of Family and Consumer Sciences, 1987 - present
- ◆ National Association of Extension Family and Consumer Sciences (NAEFCS), 1987 - present
- ◆ Virginia Association of Extension Family and Consumer Sciences (VAEFCS), 1987 – present
- ◆ Virginia Extension Professional Association, 1987 – present

AWARDS

- ◆ NAEFCS, “Community Partnership Award,” Kids Up Front Camp, 2003
- ◆ Epsilon Sigma Phi, “State Team Award,” Kids Up Front Camp, 2003
- ◆ VAEFCS, Community Partnership Award, Kids Up Front Camp, 2002
- ◆ Epsilon Sigma Phi, “Outstanding Program Award,” Child and Adolescent Obesity Education, 2002
- ◆ Epsilon Sigma Phi, “Outstanding Unit Award,” awarded to King George, Extension unit staff, 1995
- ◆ Recognition of outstanding teamwork and dedication to Virginia Cooperative Extension, 1994
- ◆ “Outstanding Leadership Award,” awarded by State Senator John H. Chichester on behalf of Virginia Cooperative Extension programs, 1992

PUBLICATIONS

- ◆ McFerren, M. (2005). Welcome to Virginia Expanded Food and Nutrition Education Program (Pub. No. 360-026). Blacksburg, VA: Virginia Polytechnic Institute and State University, Virginia Cooperative Extension.
- ◆ McFerren, M. (2005). Welcome to Virginia Smart Choices Nutrition Education Program (Pub. No. 360-027). Blacksburg, VA: Virginia Polytechnic Institute and State University, Virginia Cooperative Extension.
- ◆ Elledge, J., & McFerren, M. (2001). *Eat smart. Play hard. A guide to healthy eating and exercise for children and adolescents.* Blacksburg, Virginia Polytechnic Institute and State University, Virginia Cooperative Extension.
- ◆ Elledge, J., & McFerren, M. (2001). *Eat smart. Play hard. Making Virginia children more healthy.* Blacksburg, VA: Virginia Polytechnic Institute and State University, Virginia Cooperative Extension.

VOLUNTEER EXPERIENCE

- ◆ St. Mary’s Catholic Church, Blacksburg, VA, Eucharistic Minister and Lecture