

Positive Quality of Life Factors Identified from EFNEP Participant Stories

Abstract

EFNEP collects stories from participants and educators regarding the program's impacts. The objective of the study reported here was to qualitatively analyze these stories in the context of quality of life. Researchers analyzed 1,057 stories by identifying key words and developing codes to best describe the information. After analysis, codes were grouped into themes. The research demonstrated that EFNEP is perceived to have positively affected the quality of life of participants. These results not only confirm broader EFNEP benefits, but suggest an additional variable (quality of life) to consider as a measureable outcome.

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Introduction

Approximately 60 million people in the United States are at or below 185% of the national poverty level (MacCartney & Mykyta, 2012). The Expanded Food and Nutrition Education Program (EFNEP), a federally funded program, was developed to aid limited resource families, particularly adults who are pregnant or have young children in their care, and youth ages 6-18 years (United States Department

of Agriculture/National Institute of Food and Agriculture [USDA/NIFA], 2009). EFNEP educational lessons teach participants how to select, buy, and prepare foods to improve the nutritional quality of meals. The focus of EFNEP is to address energy excess and prevention of chronic disease (Martin, 2011).

Previous research verifies that graduating from EFNEP improves dietary practices, increases knowledge of nutrition and disease prevention, and improves food security (Arnold & Sobal, 2000; Brink & Sobal, 1994; Burney & Haughton, 2002; Dollahite, Olson, & Scott-Pierce, 2003; Greer & Poling, 2011; Rajgopal, Cox, Lambur, & Lewis, 2002). EFNEP shows significant diet-related benefits for its participants, but also has wider economic benefits for potential health care and family cost savings (Burney & Haughton, 2002; Rajgopal et al., 2002). In addition to these quantifiable benefits, EFNEP has long been believed to positively affect participants' quality of life. The primary objective of the study reported here was to qualitatively analyze participants' self-reported stories about EFNEP's impact on their lives in the context of quality of life.

Quality of Life

For the purpose of this article, "quality of life" can be defined as the degree of satisfaction or dissatisfaction with personal, social, and environmental expectations beyond human basic needs (World Health Organization (WHO), 1995). Domains or key aspects of quality of life include: health, jobs, housing, schools, neighborhoods, culture, values, and spirituality (WHO, 1995). Improving quality of life is a central component of Extension's mission. Might EFNEP affect quality of life through its focus on improving food resource management skills, food security, and overall health and well-being by improving diet quality? Cost-benefits studies of EFNEP imply that it does (Burney & Haughton, 2002; Rajgopal et al., 2002; Dollahite et al., 2003; Greer & Poling, 2001). Amarantos, Martinez, & Dwyer (2001) stated that good nutrition promotes health-related quality of life; however, nutrition and diet have not been a part of research on quality of life and are not typically included among key quality of life domains.

A few quality of life profiles, models, or indices are currently being used to monitor or evaluate quality of life constructs, including the Quality of Life Index, Quality of Life: A Systems Model, and the Human Development Index (Shookner, 1998; Bonini, 2008; Global Development Research Center, 2011). One established tool is the University of Toronto's Quality of Life Profile (QOLP) (Renwick & Brown, 1996), which has recently been used to measure changes in QOL among EFNEP participants and educators (Bauer et al., 2013). The results of the qualitative research described in this article are subsequently tied to the QOLP, which was developed to encompass the components as well as the determinants of health and well-being (Raphael, Brown, Renwick, & Rootman, 1994). The conceptual framework focuses on three domains, being, belonging, and becoming; each has three subdomains. The "being" domain focuses on who one is, "belonging" addresses the connection with one's environment and community, and "becoming" focuses on achieving personal goals, hopes, and aspirations.

Methods

The qualitative tradition of inquiry used for the research reported here was the phenomenology approach, which was used to analyze qualitative stories submitted by participants and paraprofessionals describing the participants' experiences with EFNEP. A phenomenological study

describes the meaning for several individuals of their lived experiences of a concept or a phenomenon (World Health Organization, 1998). The central phenomenon for the research is quality of life.

EFNEP Coordinators from nine states (Arizona, Colorado, Kansas, Maine, Nebraska, Nevada, Texas, Utah, and Virginia), who had previously participated in a quality of life survey project (Bauer et al., 2013), provided qualitative program impact statements/stories from graduates. The state coordinators submitted 1,057 statements collected from October 1, 2004 to June 30, 2010. The stories were written by EFNEP nutrition educators and/or participants and are short descriptions of the participants' experiences after participation in EFNEP.

The software program ATLAS.ti version 5.2 (2010) was used to organize and analyze the data. Stories were analyzed by highlighting words, phrases, and/or sentences from the stories and creating short one to three word sub-themes that would best describe that information. After all stories were analyzed, sub-themes were grouped into seven major themes.

A second coder independently analyzed 50 randomly selected stories to identify themes that were compared to the original themes and subthemes for validation purposes. The validation process produced 38 codes, and 86.8% were equivalent to the original coder's themes and sub-themes. A second method of validation was consensual validation, which is sharing results and having them validated by experts in the area in which the research was conducted (Whitmore, Chase, & Mandle, 2001). The final themes were presented at an EFNEP North Central (NC): 1169 Multistate Research Work Group Conference in October 2010. The conference attendants, all of whom have extensive experience in EFNEP and research with the EFNEP audience, provided suggestions and feedback regarding results and conclusions. A final analysis occurred when the researchers compared the themes derived from the stories to descriptors of QOLP domains to determine overlap.

Results

Qualitative analysis of the stories produced codes that were categorized into seven major themes and numerous subthemes (Table 1): increased knowledge, improved overall health, enjoyment and desire to learn, appreciating the support from EFNEP staff and participants and gaining confidence in the behaviors they are adapting, impact on family, new perspective on health, and how EFNEP had an overall positive change on their well-being.

Table 1.

Themes and subthemes for EFNEP Qualitative Stories Impact on Quality of Life

Themes	SubThemes
Increased Knowledge	Food Resource Management
	- Budget Management
	- Planning Meals
	- Use Food on Hand
	- Make a List

- Stick to a List
- Smart Shopping
- Compare Prices
- Coupons/Sale Ads
- Buy Store Brands
- Not Shopping when Hungry
- Nutrition Fact Label Awareness
- Eat Out Less
- Waste Less Food
- Utilize Community Resources
- Extend Financial Resources
- Save Money
Importance of Healthy Eating
- Food Groups & Nutrient Needs
- Understanding and Tracking Calories
- Benefits of Fruits and Vegetables
- Benefits of Dairy
- Variety
- Correct Portions Sizes
- Moderation
- General Nutrition Information
Cooking
- Learned how to Cook
- Improved Cooking Skills
- Learned and Tried New Recipes
- Cooking More
- Cooking Healthier
Food Safety
- Sanitation
- Cross-Contamination

	- Proper Thawing Techniques
	Importance of Exercise
Improved Overall Health	Healthier Eating Habits
	- Balanced Meals
	- Breakfast Daily
	- Reduced Portion Sizes
	- Monitoring Intake
	- Eating More of Certain Foods
	- Drinking More Milk and Water
	- Eating More Fruits and Vegetables
	- More Whole Grains
	- More Beans
	- More Fish
	- Eating Less of Certain Foods
	- Less Junk Food
	- Less Fast Food
	- Less Processed Foods
	- Less Soda and Caffeinated Beverages
	- Less Fat
	- Less Sodium
	- Less Sugar
	Increased Physical Activity
Weight Management	
Managing Disease States	
More Energy	
Enjoyment & Desire to Learn	Enjoy Classes
	Excitement
	Helpful
	Look Forward to the Next Class
	Request Continuation of Classes

	Appreciation
	Eager to Learn
Support & Confidence	Formed Relationships
	Seeking Help
	Credible Information Source
	Increased Confidence
	Creativity
	Attainable
	- Pride
	- Role Model
	Determination and Enthusiasm
	Share Information with Others
Family	Family
	Family Happy with Changes
New Perspective on Health	Increased Awareness
	- Realized Need for Change
	- Changed my Thinking
	More Open to New Things
	Take Control
Positive Change	Made an Impact
	Changed My Life

Increased Knowledge

Increased knowledge was associated with food resource management, importance of healthy eating, cooking, food safety, and the importance of exercise. The participants learned simple management principles such as planning ahead, using food on hand, making a grocery list, and adhering to the list. Participants reported making smarter decisions at the grocery store by looking for the best deals, comparing prices, buying store rather than national brand products, clipping coupons, planning meals based on the sales ads, not shopping when hungry, and reading nutrition fact labels to purchase healthier products. Participants also learned they could save money by eating out less, wasting less food at home, and using other community resources. A few participants simply stated, "I learned to economize my budget on groceries," "I learned how to manage my budget," and "I learned how to budget and be conservative with money." All of these strategies allowed participants to save money

and extend financial resources.

Participants examined the importance of healthy eating by learning about each of the food groups, understanding nutrient needs, consuming a variety of foods, eating recommended portion sizes, and other general nutrition information. Increased knowledge (and skills) were also shown when participants described learning how to cook and the importance of cooking at home. Some participants reported learning how to cook for the first time, while others improved their cooking skills. One participant stated, "I learned healthier ways to cook and the benefits of eating fruits and veggies." The participants were able to learn and try new recipes, cook more often, and cook in a more healthful way. Participants reported learning about food safety. Stories discussed the importance of kitchen sanitation, decreasing risk of cross-contamination, and proper thawing techniques of meat and other frozen foods. A quote from one participant was, "I am more careful about...and making sure the area is clean when I start cooking and cleaning good afterward." The final aspect for the theme of increased knowledge was the importance of physical activity, as participants reported learning that exercise is an important part of a healthy lifestyle.

Many of these subthemes fit under the QOLP physical being subdomain through concepts such as physical health, nutrition, and physical activity (Renwick & Brown, 1996). The improved cooking skills would fall within the practical becoming subdomain that describes "practical, purposeful activities in your life (such as)...work around home..." (Renwick & Brown, 1996).

Improved Overall Health

Improved overall health was the second theme. Major sub-themes supporting this theme include healthier eating habits, increased physical activity, weight management, management of various disease states, and increased energy. Participants reported several positive changes in eating habits, including eating more well-balanced meals, eating breakfast every day, reducing portion sizes, monitoring intake, and eating more or less of certain foods to improve health. Participants reported drinking more milk and water, and eating more fruits, vegetables, fish, beans, and whole grain foods, while consuming less "junk" food, fast food, processed foods, and carbonated beverages and fewer foods high in fat, sodium, and added sugar. One participant wrote, "I've looked closer at what I eat and I watch what I eat so I can be healthier" and another stated "Our shopping cart now is full of fruits and vegetables; in the past it used to be full of processed and junk food."

Increasing physical activity was another way participants improved their health. As part of the qualitative stories, participants reported walking, swimming, biking, or simply playing with their children. Weight management was a common topic for participants' stories and played a critical role in managing various disease states. Specific health problems discussed in the stories include diabetes, hypertension, lactose intolerance, and high cholesterol. Participants reported feeling better and having more energy as a result of their participation in EFNEP. This theme would also correspond to the QOLP's physical being and practical becoming domains (Renwick & Brown, 1996).

Enjoyment and Desire to Learn

The third theme was *enjoyment and desire to learn*. The stories illustrated that participants were

excited about what they were learning and their positive progress. Numerous participants stated how helpful the program was and expressed their sincere appreciation for being able to participate. Participants looked forward to the next class and requested that EFNEP offer more classes. One story that best represents this concept was a participant who indicated that one thing she would change about the EFNEP classes would be to "offer them more often." The stories described the participants as having a sincere desire to learn and being attentive during the lessons, even staying after class to ask further questions. The following quotes demonstrate the excitement felt by the participants. "Wow! I am learning so much I love this, and it {is} easy too." "The recipes were magnificent." "This class was awesome." "Bread in the bag is awesome, as are all the other mixes. I was amazed how tasty and low budget all the mixes are." "Wow! Anything that can help my family to eat healthy and feel better is the best." Some participants were reported to stop by the office for more information in addition to what was typically covered in the lessons. This type of change would best fit under the QOLP domain of growth becoming, i.e., "adjusting to life's changes and improving yourself" (Renwick & Brown, 1996).

Appreciating The Support from EFNEP Staff and Participants and Gaining Confidence in the Behaviors They Are Adapting

The fourth theme was *appreciating the support from EFNEP staff and participants and gaining confidence in the behaviors they are adapting*. Participants described a foundation of support from the relationships they formed with other participants as well as with EFNEP instructors. Participants realized they are not alone in their struggles and others are dealing with similar issues. Certain stories showed that participants were seeking help and were able to find that support by going to their EFNEP paraprofessionals, who provide them with credible information. Participants reported realizing the changes they needed to make were attainable and being proud of their progress. For example one participant noted about her EFNEP instructor, "because of you I am becoming positive, I look good and I feel good about myself." Another participant wrote, "I will succeed with the knowledge of eating right that I have learned from you." Confidence was represented by their increased creativity, most notably in their cooking skills, and by acting as role models for their family and friends. Participants became exemplary figures through their determination and enthusiasm to make positive, healthy changes and by sharing information they learned with others. These descriptors relate to the QOLP social belonging domain—"how you fit with the people around you...relationship with a spouse or special person....other people you know..." and the psychological being domain—"...reflects mental health...self-acceptance, satisfaction with self, freedom from stress and thinking and acting independently"(Renwick & Brown, 1996).

Family

The fifth theme was *family*. The stories demonstrated that family is one of the most important priorities for EFNEP participants. Family was the most frequently identified sub-theme in all the qualitative stories. Several stories described family as being a motivator for the participant to learn new things and make positive changes. One participant noted,

I would like to thank you for the opportunity you gave me to learn how to feed

my children in a better way and thanks to the classes my children showed more interest in what we eat. My oldest daughter showed more interest in the food we bought at the store regarding the food we prepared at home because she made a habit of reading the ingredients list and reading the nutrition facts label. The classes taught me another way to share with my family by planning meals together and more importantly they're healthy choices.

Participants discussed that in many situations, and often to their surprise, the family was happy with the changes they were implementing. As with the fourth theme, the impact on family appears to fit best the description of social belonging (Renwick & Brown, 1996).

New Perspective on Health

The sixth theme was *a new perspective on health*. The stories described participants' new perception of health through increased awareness, realization of the need for change, changes in thinking, being more open to new strategies, and taking control of their health. Participants described increased awareness of misinformation and negative behaviors, as well as positive behaviors and changes that would help to make themselves and their families healthier. Many stories described a particular moment when the participant realized the need for changes and the importance of EFNEP to help implement positive change. One individual stated, "This program has really opened my eyes to the importance of an active and healthy lifestyle." Participants stated that the program changed their way of thinking about the importance of health and good nutrition. Participants described going outside of their comfort zone by learning new cooking skills, cooking with foods they had never used before, or tasting new types of food. Ultimately, participants reported learning to be responsible for their health. These themes relate most closely to the QOLP growth becoming domain (Raphael et al., 1994).

Positive Change

The seventh and final theme determined from the qualitative stories was how EFNEP had *an overall positive change on their well-being*. Participants wrote stories that showed the program had a positive impact and, for some, changed their lives. An individual stated, "If I continue to follow the nutritional guidelines that I have been instructed (on) I will increase the years of my life." Although this theme is somewhat of a catch-all topic, it does appear to reflect the spiritual being domain of QOLP—"having personal values, personal standards to live by, and spiritual beliefs. Spiritual beliefs may or may not be characterized by formal religious beliefs...include feelings of hope and purpose, acting in an altruistic manner, etc." (Renwick & Brown, 1996).

In a longitudinal survey of EFNEP participants using the QOLP, Bauer et al., (2013) only found changes in the three being domains (physical, psychological, and spiritual) and social belonging. No changes were seen for any other belonging or becoming domains. The different results reported here may primarily reflect a difference in methodology—qualitative versus quantitative.

Implication for Extension:

The qualitative stories provided a holistic view of participants' experiences with EFNEP. The first two

themes act as the foundation on which the final five themes build. Results indicate that participants have more knowledge to make better decisions and have used that knowledge to improve their overall health. The knowledge to manage resources effectively is essential in order for participants to feel that they are in control of their lives. Participants must learn how to eat healthier and how to make healthier food choices before implementing healthier eating habits. If participants learn to cook with supervision and are provided with simple, fast, and healthy recipes, they will feel more comfortable and capable. When a person has the opportunity to learn and practice a skill, her self-efficacy is likely to improve (Bagozzi, 1992). The qualitative stories support the perception that EFNEP participants are gaining confidence and changing behaviors. Participants can overcome barriers to new behaviors if they have the opportunity to practice skills and receive encouragement (Contento, 2011).

EFNEP has been considered a flagship Extension program since its beginning (Brink, 2000), and its immediate effects on individuals and families is well-documented. However, as Chase, Kuehn, and Amseden (2013) noted, it is critical to develop ways to measure and quantify long-term impacts of Extension programs and provide measurable results. Finding a way to measure quality of life might be one way to assess long-term impacts.

EFNEP and Quality of Life

Healthier eating habits, increased physical activity, weight management, and managing various disease states play significant roles in improving overall health (WHO, 2003; USDA/NIFA, 2010). Limited resources, poor eating habits, little physical activity, and excess weight are challenges for many EFNEP participants (Strolla, Gans, & Risica, 2006; USDA/NIFA, 2010). Participants and their families must learn to deal effectively with these issues.

The themes of increased knowledge and improved overall health add support to the belief that participants are eager to learn new information and have increased their enjoyment of learning since participating in EFNEP, suggesting that they value the program for its potential for improving their lives. Enjoyment and desire to learn are part of psychological health and adjustment (Renwick & Brown, 1996).

Participants expressed their enjoyment and appreciation for EFNEP classes, which supports the concept that the classes provide an important support system. Experiencing this foundation of support adds to the confidence participants have already established. Participants have shown increased confidence by learning to manage their finances successfully, making healthier and safer choices when they purchase and prepare food, becoming more physically active, managing their weight and health issues, and showing their enjoyment and desire to learn. An important aspect of change is the confidence to achieve it. Social belonging refers to relations with family, friends, co-workers, neighborhood, and community, which best describes the support participants receive from other participants (Renwick & Brown, 1996).

Participants demonstrated that increased knowledge, improved overall health, increased enjoyment and desire to learn, and having increased support and confidence positively affected their lives as well as their families' lives. The stories show that a healthy family is a priority for EFNEP participants and would be an important factor in participant quality of life.

EFNEP and Change on Health

The stories and statements previously described provide evidence that participants completing EFNEP lessons develop a new perspective and understanding of health. Participants described an increased awareness and realization of the need for change. A change in thinking allows participants to be more open to new ways of thinking about health, eating, cooking, and the importance of taking control of their health. Control was not a common theme, but is important when exploring the EFNEP participant's quality of life.

The seventh and final theme has been a recurring phrase in the analysis and discussion of all previous themes: *positive change*. Positive change was illustrated by the participants' increased knowledge and use of information to improve their overall health, expression of enjoyment in life and showing a desire to learn, confidence and support to make necessary changes, and the perception of positive impact on their families. Ultimately, positive change is evident through participants' new perspective on health. This theme is perhaps more indicative of overall quality of life, which includes all domains and subdomains (Renwick & Brown, 1996). Positive change could be the most important theme because it describes the overall effect EFNEP has on the quality of life of its participants.

Limitations

The limitations of the study involve credibility and interpretation of the qualitative stories. The credibility and value of the stories are based on the assumption that participants and staff submitted stories that give true representation of the participants' lives. Second, a large percentage of stories were contributed from Nebraska. The research included all available qualitative stories from each state, and researchers could not control the number contributed from each state. The final limitation is the interpretation of the stories. Validation procedures were used to address this limitation as discussed in the methods section.

Future Research

Documentation of improved quality of life for EFNEP participants is a valuable component to measure program success, in addition to current methods. Other Extension programs might consider examining the impact of their programming efforts on quality of life as well. Developing tools to efficiently measure quality of life would provide EFNEP (and similar programs) with a way to document broader program outcomes. In the short term, EFNEP might begin to collect stories more systematically as a way to make them more representative of its participants. Development of a quantitative quality of life survey tailored to EFNEP (or similar programs targeting limited-resource audiences) could lead to a measured outcome that might be linked to sustained behavior change or perhaps tied to cost-benefit analyses.

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