

# THE JOURNAL OF NEAFCS



Journal of the National Extension Association of Family and Consumer Sciences

Volume 9, 2014

**Journal of National Extension Association of  
Family and Consumer Sciences  
President's Message**

It is my pleasure to present to you the 2014 *Journal of NEAFCS*. This research-rooted, peer-reviewed journal is one way for our members to inform others in our field and other related fields about our scholarly work as Family and Consumer Sciences professionals. The Journal highlights Research, Best Practices, and Implications for Extension. This is a valuable tool to help our members stay current with programming research and methodology that is specific to our learning and teaching environment.

As you read the 9th volume of the *Journal of National Extension Association of Family and Consumer Sciences (JNEAFCS)*, I know you will find informative and thought provoking information in each article. Consider what you have to share with your colleagues about impacts that have resulted from your programming. Make it one of your professional goals for 2015 to submit an article for a future Journal issue.

As an online resource, the journal is easy to share with your administrators, local and state policymakers and advisory groups, and peers so they are also aware of the valuable work done by Extension Family and Consumer Sciences Educators from across the nation. Help share our story and let others know of our efforts and strong impacts across the nation. Extension work makes a difference! Research proves that!

I would like to extend a huge *Thank you* to Co-editor, Jessica Hill of the University of Georgia Extension and Co-editor, Lauren Weatherford of West Virginia University Extension, and Copy-Editor, Chris Kniep of the University of Wisconsin Extension for their hard work and dedication to the journal. My appreciation goes to the members of the subcommittee, peer reviewers, and to our Vice President of Members Resources, Margie Memmott of the Utah State University Extension, for a quality, peer-reviewed, professional publication that helps preserve our valuable research and resources for the future.

Sincerely,

Dr. Peggy Ann Ehlers, President 2014 -2015

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## Journal of National Extension Association of Family and Consumer

### Sciences From the Editors

Here is your 2014 edition of the *Journal of National Extension Association of Family and Consumer Sciences* (JNEAFCS). JNEAFCS is a refereed journal. We appreciate the opportunity we have had to edit the journal this year and have learned a lot throughout the process. We look forward to serving you in 2015.

Please consider submitting a manuscript for the 2015 edition of JNEAFCS to promote yourself or one of your programs. The submission deadline is March 1, 2015. Choose a program where you can demonstrate impact. Have your colleagues read your manuscript to get input before submitting it to ensure it is of high quality.

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## Research

### **Comprehensive Mentoring of Extension Professionals: Investing in the future of Extension**

Amanda H. Christensen, Amanda H. Christensen, Adrie Roberts, Stacey MacArthur, Melanie Jewkes, and Zuri Garcia

Retirement and job turnover rates challenge the future of Extension. Established Extension professionals must take the initiative to mentor new professionals to become future leaders that keep Extension thriving and relevant. Mentoring can ensure that the expertise of established, soon-to-be retiring professionals is merged with the expertise of new Extension professionals. This article provides practical implications for Extension employees to establish beneficial mentoring practices for potential (i.e., interns and volunteers) and new employees, recommendations for working with administration to support mentoring opportunities, and tips for incorporating expertise of new hires into Extension programs.

Unique factors challenging Extension are the increasing rates of retirement and job turnover. The pending mass retirement of the baby boomer generation includes many established Extension faculty who may be retiring early due to incentives paired with budget cut strategies (Borr & Young, 2010; Martin & Kaufman, 2013). Along with rising retirement trends, Extension faces challenges with employee turnover rates of newer Extension faculty (Borr & Young, 2010; Martin & Kaufman, 2013). Borr and Young (2010) add to the urgency of both issues stating that the combination of attrition rates with rising retirement rates creates a gap in the Extension system, further asking who will fill open positions and how will they be recruited? An effective solution to both challenges is mentoring.

Mentoring is defined as a “unique interpersonal relationship between two individuals” (Janasz et al., 2013). Mentoring pairs an “influential senior organization member with advanced experience and knowledge who is dedicated to providing upward mobility and support” with a mentee who is “new to a particular job or career and would benefit from the knowledge, guidance, and support of [the mentor]” (Mincemoyer & Thomas, 1998 p. 1).

Mentoring is beneficial to new faculty, the established mentor, and the university. Specifically, mentoring improves employee retention (Safrit & Owen, 2010), reduces impact of job turnover (Martin & Kaufman, 2013), increases knowledge and skills in both mentors and mentees (Culp et al., 2010; Place & Bailey, 2010), improves productivity (Place & Bailey, 2010), and increases civic engagement

(Brisbin & Hunter, 2003). In addition, mentoring leads to collaboration on new projects and ideas (Place & Bailey, 2010).

One element missing from the literature is mentoring of *potential* Extension faculty (e.g., interns, paraprofessionals, and volunteers). Planning, organizing, and facilitating successful Extension programs can be an overwhelming challenge. Place and Bailey (2010) stated that new Extension employees must learn to be effective quickly to perform efficiently. New Extension employees who have been mentored previous to securing a job will be more equipped to take on the challenge. Mentoring potential faculty is a form of recruitment which needs to be a priority (Borr & Young, 2010).

### **Objective**

Mentoring merges the expertise of established, soon-to-be retiring Extension employees (Byington, 2010; Place & Bailey, 2010) with the interests and expertise of potential and new Extension employees. The objective of this paper is to address effective mentoring techniques that are critical to creating a successful mentor/mentee relationship. This includes creating opportunities to mentor potential employees, beginning with volunteers, interns, and paraprofessionals, as well as mentoring new employees.

### **Method**

The Utah State University Extension internship program was created to provide Extension employees an opportunity to work with college students in need of internship hours. Originally beginning in Cache County, student interns were recruited from Utah State University by Extension and university faculty, and paid through internal grants and/or county funds. Semester, school-year or summer-long internships provided students with hands-on Extension experience. Interns had lead roles in program development and facilitation. By the end of the internship, interns learned the importance of collaborating, budgeting, scheduling, debriefing, and evaluating Extension programs. Together both the intern and the Extension employee were able to improve programs provided to Extension audiences.

### **Results**

The Utah State University Extension internship program has been very successful. Five of 15 interns from Cache County, over the past 10 years, have been hired in successful positions with Utah State University Extension—four as Extension faculty and one as a State Specialist. Due to the success of the internship program in Cache County, Extension administrators expanded funding for interns to work with Extension professionals throughout Utah. Over 300 full-time internships have been funded over the past three years, from 2011 through 2013, statewide. These interns assisted Extension faculty with programming and scholarly efforts and determined career possibilities within Extension.

The mentor-mentee relationship continued for the same five mentees hired in Cache County after they began a career in Extension. The mentor kept an open door for the mentees. They were able to call with questions and ask for professional advice. In addition, all five mentees gained support from each other. These connections created opportunities for professional collaborations on program development, professional conference presentations, and scholarly writing projects.

## **Implications for Extension**

Extension personnel can implement mentoring strategies by following some important practical applications. These applications include tips for mentoring potential employees, mentoring new employees, working with administration to support mentoring opportunities, and incorporating expertise of new professionals into Extension programs.

### **Mentoring potential employees**

Mentoring potential employees takes place as a mentor supervises an intern, paraprofessional, or volunteer. A mentor is able to expose a mentee to the option of working as a full-time employee for Extension. Student internships can be one of the most effective ways to introduce a future employee to Extension. Opportunities to volunteer or job shadow could also be made available if an internship is not a possibility. Not all internships need to be paid. Some students prefer the flexibility that non-paid, voluntary internships allow. A supervisor can adopt a few mentoring principles to effectively introduce interns to the unique structure and demands of the Extension system. Such principles include considering interns as colleagues-in-training, allowing interns to participate, and exposing interns to all aspects of Extension employee's job structure.

#### **Interns as colleagues-in-training.**

Consider interns colleagues-in-training. While hiring interns is an attractive and inexpensive way to get tasks accomplished, allowing the intern to experience the Extension employee's job in full can greatly benefit both the intern's job training and the Extension employee's programming goals. Guide interns through Extension programming, from ground roots to evaluation.

#### **Interns observe and participate.**

Give interns opportunities to participate in Extension programming. As the 4-H slogan states, "Learn by doing." Help interns discover their strengths and discuss how to best use those strengths in the program planning process. Challenge their skills by encouraging them to leave comfort zones to gain new experiences.

#### **Interns learn job structure.**

Expose interns to the Extension employee's job structure. Many Extension agents balance multiple roles in various areas of programming. Some interns may only come with training and education in one specific area. Include intern's current, up-to-date knowledge to update existing Extension programs. This not only gives on-the-job training, but perhaps will influence career and/or future graduate school choices. This type of internship experience provides realistic expectations of Extension faculty positions, and, if hired into Extension, provides established professional ties for writing, program collaborations, professional development, and other scholarship.

### **Mentoring new employees**

New employees benefit greatly from a successful mentoring relationship. Consider assigning new employees an established Extension mentor to alleviate stress and provide a trusted colleague. A study on this topic showed decreased stress and a relationship of trust as a result of having an informal mentor to discuss day-to-day concerns and problems (Place and Bailey, 2010). Mentoring new employees can be done in multiple ways, including pairing mentors to mentees, planning new-hire orientation, providing program-specific trainings, and offering opportunities for job shadowing.

### **Pairing mentors to mentees.**

Many new family and consumer sciences Extension hires come with a background in program-specific education and training. For example, instead of a degree in general Family and Consumer Sciences, some have specific degrees in Nutrition and Dietetics, or Financial Planning and Counseling. Thus, pairing an established Extension professional who has had experience in multiple program areas with a newly hired professional can help expand the knowledge base of the new professional.

### **Planning new hire orientation.**

Land-grant universities can benefit from planning specific trainings to orient new Extension professionals. Research suggests low job satisfaction influences job turnover (Martin & Kaufman, 2013). New hire or early career trainings organized by Extension administration can introduce newly hired individuals to the Extension system, to promotion and tenure guidelines, and to policies and procedures. New hires may also build professional networks and form partnerships in programming and scholarship.

### **Providing program-specific trainings.**

Extension systems could benefit from creating program-specific mentoring to train new professionals and update long-standing professionals. For example, a food safety specialist could be encouraged to plan a food preservation update, in

conjunction with family and consumer sciences leadership. Similarly, a family relationship specialist could hold trainings on relationship education.

### **Job shadowing.**

Another way to mentor and introduce new hires to the Extension system is through organized job shadowing. Job shadowing could be assigned or voluntary. This allows the new professional to observe day-to-day demands of the job, experience an Extension program, and ask questions about how the experienced professional prioritizes, builds partnerships, advertises for programs, delivers, and evaluates programs. This can help strengthen a newly hired professional's confidence and ability to perform responsibilities and demands of the job.

### **Working with administration to support mentoring opportunities**

Extension administrators hold vital roles in supporting Extension mentors. Extension administrators may budget to support internships. Where funds are not available, Extension administrators can still be key advocates in helping employees partner with other university departments to spread the word about unpaid Extension internship opportunities.

Extension employees and administrators can partner with other universities in their state to help increase awareness of the career opportunities related to Extension. Employees can hold classroom presentations to inform students about Extension and how to become involved. Letters can also be written to applicable university department and practicum/internship coordinators inviting students to complete required hours at county Extension offices.

### **Incorporating expertise of new Extension employees**

Whether they come to Extension straight out of college or from a different profession, new Extension professionals may provide fresh, updated content for topic-specific program areas. Working with mentees can help the mentor stay in touch with the latest means for disseminating research-based information and technological change. Place and Bailey (2010) noted in their study on mentoring that new faculty bring fresh excitement and enthusiasm into Extension program areas. New Extension professionals add to the mentor/mentee experience by providing updated content, technological expertise, and innovative approaches to programming.

New Extension professionals can help experienced faculty incorporate technology and social media into programming. When asked about her successful experience mentoring over 15 interns, the above mentioned Utah State University employee stated:

"The younger generation seems to thrive on being current in technological advances that enable work and communication to become much simpler. By working with the younger generation, the older

generation is able to stay connected to changes in technological progress through a reverse mentoring process. It can be extremely gratifying when you are able to work with those who share your professional interests and goals while learning new ways of accomplishing your work."

Even with several years of experience, seasoned Extension professionals can learn from new professionals. Experienced Extension professionals need not feel threatened by the younger generation of up and coming professionals. Rather, each can learn from this excited and invigorated group who respect the lessons the experienced professionals have learned during their tenure in Extension.

### **Conclusion**

Mentoring is beneficial for all involved; the mentor, mentee and the university all gain from the mentoring that occurs in Extension. Mentoring needs to take place prior to being hired in Extension. Extension professionals are highly encouraged to implement successful mentoring strategies while working with interns and new hires. Extension administrators are highly encouraged to provide student internship opportunities. Administrators are also encouraged to support new hires by assigning formal mentor-mentee relationships. These relationships are the keys to keeping Extension thriving and relevant.

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## Research

### **Afterschool Programming: Creating a Nexus between Extension, 4-H, and Childhood Obesity Prevention**

Mary Lou Mueller

Childhood overweight and obesity has reached epidemic proportions across America. A 4-H Wellness for Life Afterschool Program helped youth learn the importance of proper nutrition and increased physical activity. Three, six-week afterschool sessions were presented to youth in grades three through five, and at a 4-H Wellness for Life Summer Camp. Results of surveys at summer camp indicated that youth could successfully identify healthy behaviors in diet and physical activity, and that they planned to make behavior changes as a result of what they learned, including eating more fruits and vegetables, consuming less sugar, and becoming more physically active.

Childhood overweight and obesity has reached epidemic proportions across America. Today's youth face serious health and emotional risks due to the rising trend of childhood obesity. Contributing risk factors include over consumption of soft drinks, fast foods, and highly processed foods with little nutritive value. In Kessler's (2009) book, *The End of Overeating*, the author states, "Foods today are . . . layered with sugar, salt, fat, and high-tech flavorings . . . hyperpalatable foods are much more the norm today," (as cited in Pretlow, 2011, p. 304). According to Pretlow, today's foods are also more "comforting and addicting."

Another risk factor affecting youth today is the sedentary practice of too much time spent in front of television and computer screens, and too little time spent in physical activity (Tremblay et al., 2011; Beales & Kulick, 2013). Beales & Kulick found that total time spent watching television had more to do with weight gain than what youth saw advertised while watching television. Children today need more opportunities for physical activity.

Youth who do not eat right and do not get adequate physical exercise are at risk of not only excess weight gain and early obesity, but also increased incidence of serious health and emotional risks. Unhealthy weight in children can result in liver disease, kidney disease, high blood pressure, hardening of the arteries, high cholesterol, heart disease, type 2 diabetes, and sleep apnea—conditions once rarely diagnosed in children. Even without early onset of disease, obese children run a greater risk of developing these ailments as they age. Overweight children are more likely to become overweight adults (Singh et al., 2008). Overweight children also experience more social isolation, school absenteeism, bullying, low self-esteem, anxiety and depression, difficulties in school settings, and other behavioral risk factors, including suicidal thought and actions (Li et al., 2012; Lumeng et al., 2010;

Puhl & Lanter, 2007; Rofey et al., 2009, Strauss, 2000).

According to findings of a study conducted by the National Center for Health Statistics (NCHS, 2004), the number of overweight children in American doubled between 1974 and 2004. This study, which measured children's height compared to weight, or BMI (Body Mass Index), identified that children maintained fairly stable weight from the 1960s to the 1980s. However, since 1994, childhood obesity has increased at an alarming rate (NCHS, 2003-2004). Findings from the National Health and Nutrition Examination Survey indicated that childhood obesity has nearly tripled since 1980, with approximately 17 percent of youth between ages 2 to 19 years being obese (Ogden & Carroll, 2010). A more current review from 1999 through 2010 found that over 30 percent of youth in the U.S. were overweight or obese (Ogden, Carroll, Kit, & Flegal, 2012). The Utah Department of Health (2012) found that nearly one-third of Utah's third grade school children were at an unhealthy weight, as were 20.8 percent of school children overall (Childhood Overweight in Utah, 2012; Utah Department of Health, 2012).

### **Extension Afterschool Programming and 4-H**

Why utilize 4-H to address childhood obesity prevention? In 1999, the National 4-H Impact Design Implementation Team identified eight essential elements of a 4-H experience (Samuel & Rose, 1999). These elements provided a perfect model for the 4-H Wellness for Life Afterschool Program including 1) a positive relationship with a caring adult, 2) a safe environment, 3) an inclusive environment, 4) engagement in learning, 5) opportunity for mastery, 6) opportunity to see one's self as an active participant in the future, 7) opportunity for self-determination, and 8) opportunity to value and practice service for others.

Research also indicates that afterschool programming gives children tools they need to succeed. Children in afterschool programs experience improved behavior in school, better social skills, improved self-confidence, and less delinquency (Beets et al., 2012). Afterschool programming can contribute up to one-third of a child's daily physical activity (Beets et al. 2010), and can provide an ideal venue for delivery of nutrition education and modeling healthy snacking behaviors (Beets et al., 2011).

### **Purpose/Objectives**

The purpose of the 4-H Wellness for Life Afterschool program was to provide youth with education and experiential learning activities to encourage improved nutrition, a healthier diet, increased physical activity, and consistent exercise. The objective was to prevent childhood obesity through afterschool education designed to enhance children's diet and exercise behaviors.

### **Method**

A six-week 4-H Wellness for Life Afterschool Program was offered three times (once each for grades three, four and five) for one hour a week at Blanding Elementary School in San Juan County, Utah. Additionally, one six-hour 4-H Wellness for Life Summer

Camp was offered for youth who could not attend an afterschool session. The 4-H models of "learning by doing" and the 4-H eight essential elements were utilized in implementing and delivering the program. Due to the low socioeconomic status of the population, the program was offered free of charge. All expenses were covered by a Utah State University Extension Applied Research Grant of \$7,500.

#### **4-H Wellness for Life Afterschool Procedures**

The 4-H Wellness for Life Afterschool Program was advertised through notes sent home from school with students in third, fourth, and fifth grades. Children were enrolled when parents returned their signed 4-H registration, medical release, and picture release forms, plus one dollar for 4-H insurance (unless youth were already enrolled in 4-H and had paid their dollar for that year). Each grade was taught as a cohort, starting with the fifth grade, with one six-week session beginning as the previous session ended.

Each afterschool meeting lasted one hour and was conducted as a regular 4-H club meeting, beginning with the Pledge of Allegiance and the 4-H Pledge. A vigorous physical activity followed, which helped youth work the wiggles out after a long day at school, and demonstrated important benefits of increased physical activity. Following the exercise activity, youth received nutrition education and participated in hands-on food preparation activities. Two part-time assistants were hired using grant funding, and several 4-H volunteers contributed their expertise by leading activities such as yoga instruction, fitness exercises, and a GPS (Global Positioning System) excursion.

#### **Weekly Activities**

At the first week's afterschool 4-H club meeting, youth created name badges and were assigned to a team representing one of the five food groups (i.e., Grain Giants, Veggie Vikings, Fruit Falcons, Milk Chargers, and Meat Titans). Each team created a poster with facts about their food group and examples of representative foods, and teams took turns presenting their information to the entire group. Each week the focus was on a different food group, with a culminating activity featuring MyPlate (e.g., youth molded colored play dough into different foods and arranged them on a paper plate to demonstrate portion sizes and a well-balanced meal). Nutrition/exercise bingo was another activity that served to reinforce learning.

While Utah does not have a standard afterschool policy for nutritional snacks and physical exercise, Utah's Food \$ense program (also known as SNAP-Ed) provided excellent resources such as Baxley, Riggs, & Acker's (2012) helpful fact sheet on using fruits and vegetables in afterschool programming. Hands-on food preparation activities were preceded by instruction on proper hand cleansing and food safety. Each week a different recipe was featured from one of the five food groups. Recipes included: Strawberry Banana Smoothies (fruits), Veggie Snack Pizza (vegetables), Trail Mix (grains), Corn and Bean Salsa (protein foods), and Tin Can Ice Cream (dairy). Youth compiled recipes in a cookbook that was held till the last week and distributed when the program ended (see recipes in Appendix A.)

At the end of each six-week session, youth invited their families to participate and see them demonstrate what they had learned. Teams shared their posters and the recipe for their food group, and the meeting ended with youth receiving their finished cookbooks and certificates of completion.

#### **4-H Wellness for Life Summer Camp**

For youth who could not attend a 4-H afterschool session during the school year, a 4-H Wellness for Life Summer Camp was held duplicating all six hours of activities and instruction. Summer camp was advertised in notes sent home with third, fourth, and fifth grade students before school dismissed for the summer. Parents or legal guardians were required to transport youth to and from camp, sign 4-H release forms, and pay the one dollar for 4-H insurance, if needed. The Extension Agent met with all parents/guardians to describe the program and acquire consent for their child to participate in survey approved by the Utah State University Institutional Review Board. Youth also signed their assent. Camp ended with a picnic lunch for families where youth demonstrated what they had learned and received certificates of completion.

#### **Results**

A total of 102 youth participated in 4-H Wellness for Life afterschool or summer camp venues. The first six-week session included 19 fifth grade youth; the second session included 21 fourth grade youth; and the third session included 23 third grade youth. Summer camp included 39 youth.

#### **Pencil and Paper Survey**

Approval to test youth was acquired from the Utah State University Institutional Review Board. However, members of the San Juan School District board rejected a request to allow school children to be surveyed. They were concerned that with "No Child Left Behind," parents and students were inundated and overwhelmed with letters and testing. Consequently, no surveys could be conducted for afterschool programming during the school year. However, parents of 37 (out of 39) youth attending summer camp signed consent forms, with youth assent. All 37 youth completed a pencil and paper survey, while the two youth who could not participate in the survey completed another activity.

The survey consisted of two questions 1) "What diet/nutrition changes will you make as a result of what you learned at 4-H Wellness for Life Summer Camp?" and 2) "What changes in exercise and physical activity will you make as a result of what you learned at 4-H Summer Camp?" Responses were aggregated into "like" categories. For example, if a respondent wrote that they would eat more fruit or eat more vegetables, their response would be categorized as "eat more fruits and vegetables." If they responded that they would play more football or basketball, their response was categorized as "play more sports."

## **Survey Results**

Of the 37 respondents asked about changes they would make to their diet and nutrition, 26 youth (70%) indicated they would eat more fruits and vegetables; 19 youth (51%) would eat less sugar; 9 youth (2%) would eat less junk food/fast food; 6 youth (2%) would drink less soda pop; and 4 youth (1%) would eat more dairy.

Of the 37 respondents asked about changes they would make to their exercise and physical activity, 27 youth (73%) indicated they would be more active (actual responses included: bike, swim, skateboard, rollerblade, dance, jump rope, night games); 22 youth (59%) would walk, jog, or run more; 10 youth (29%) would play more sports (actual responses included: football, basketball, softball, and tennis).

Survey results demonstrated that children could successfully identify healthy behaviors in diet and physical activity as a result of what they learned at 4-H Wellness for Life Summer Camp. There was a significant correlation (70%) between children's responses and education about the importance of consuming more fruits and vegetables. There was also a strong significance (73%) in children's ability to identify ways to increase physical activity, which correlated with principles taught regarding exercise. All children (100%) identified at least one healthy behavior change they would make as a result of what they learned in each category (i.e., diet and nutrition, and physical activity and exercise).

## **Discussion**

Limitations to the 4-H Wellness for Life Afterschool Program included the school district's decision that youth could not be surveyed during the school year. Despite the lack of quantitative results from afterschool sessions, qualitative measures, such as direct observation and anecdotal comments, indicated that youth enjoyed the program. Their continued participation and completion of each six-week session indicated that youth valued experiential learning activities emphasizing healthy nutrition and physical exercise. Research shows that experiential learning reinforces knowledge so this education must have been of some benefit, even if it could not be measured.

Funding is also a limitation to any program. When grant funding is not available, youth might be asked to pay registration fees to cover costs. Forming collaborative partnerships with community partners with like interests is also essential; partners bring added value to programming through direct and indirect contributions. Our recommendation would be to work closely with all partners to gain an understanding of their policies, and to assure that they understand and agree with the purpose and objectives of the program. If a foundation of trust and reciprocity had been built with the school district board (as was done with the school principal, staff, and teachers) prior to implementation of the 4-H Wellness for Life Afterschool Program, the board may have recognized how valuable surveys would have been to the school district and the researcher.

## **Conclusion**

The current trend of childhood obesity must be addressed in order to restore health to America's children and assure their future well-being. The 4-H Wellness for Life Afterschool Program provided 1) a critical nexus between Extension and 4-H, 2) an ideal vehicle for delivering experiential learning activities that encouraged youth to improve diet and exercise behaviors, and 3) evidence that youth planned to improve diet and exercise as a result of what they learned. Programs that replicate these concepts are essential—even if they reach only one child at a time.

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## Appendix A

### 4-H Wellness for Life Afterschool Recipes

#### **Corn and Bean Salsa**

16 oz. frozen corn (thawed)  
15 oz. can black beans (rinsed and drained)  
1 diced red pepper  
1 diced green pepper  
Juice one lime  
2 tsp. chili powder  
2 tsp. ground cumin  
1 tsp. sugar  
¼ cup olive oil  
¼ cup cider vinegar  
Diced avocado  
Salt to taste.

Mix together. Serve with corn chips.  
Makes approximately 30 servings.

#### **Trail Mix**

Any combination of dry cereal, goldfish or cheese crackers, dried fruits (cherries, cranberries, raisins, etc.), miniature pretzels, and/or nuts.

#### **Tin Can Ice Cream**

1 cup milk  
1 cup whipping cream  
½ cup sugar  
½ tsp vanilla

Mix all together and pour portions into small, leak proof containers. Pack containers into gallon cans with tight fitting lids. Pack ice around containers and sprinkle liberally with rock salt. Seal lids with duct tape. Shake or roll for 10 to 15 minutes and serve. Makes 4 servings. (Gallon cans were collected from school lunch kitchens.)

#### **Strawberry Banana Smoothies**

1 large banana  
1 cup frozen strawberries  
1 1/3 cup orange juice  
1 container strawberry yogurt (8 ounces)

Peel banana and place in blender. Add strawberries, orange juice, and yogurt. Cover and blend until smooth. Makes 3 servings.

### **Veggie Snack Pizzas**

1 English muffin  
1 Tb. cream cheese  
¼ cup chopped broccoli  
¼ cup diced tomatoes  
Sprinkle of diced carrots

Spread cream cheese over the muffin. Add chopped veggies to taste. Makes 1 serving.

NOTE: Be aware of food allergies such as nuts, wheat, soy, etc. in children and substitute or exclude ingredients.

## Research

### Parenting Education Needs Assessment for Parents of Young Children

Yaebin Kim

A parenting education needs assessment was completed in southern Nevada (five counties) to determine what was required to provide and expand parenting education programs for parents of young children (0~5). Findings provided insights on topics of interest specific to these parents, desired delivery methods, what might attract parents to parenting workshops, and differences among parents. Results indicated that while all parents of young children were highly interested in finding inexpensive activities for their children, several differences were found regarding parenting education topics and preferred delivery methods.

Children's first six years of life have a significant effect on their development; parents play the most important role in that process (Papalia, Olds, & Feldman, 2002; Shonkoff, 2009). Parenting is a learned skill (Smith, Cudaback, Goddard, & Myers-Walls, 1994) and changing parent-child interaction has been the primary focus of most parenting education programs (Belsky, 1990; Hamner & Turner, 1990). Parenting education is defined as programs, services and resources provided to parents and caregivers to support or increase their ability and confidence in raising children (Carter, 1996). Several studies have indicated that effective parenting education programs improve not only parenting skills but also child outcomes (Degarmo, Patterson, & Forgatch, 2004; Hodnett, Dellinger, & Maher, 2009).

The proven need for parenting education goes back to the 1970's (Harmon and Brim, 1980) when society saw several changes (e.g., family nuclearization, erosion of community, role differentiation and specialization, etc.) and this need continues today. It was reported that parents in Nevada need information about parenting and child development (Martin & Evans, 2004). A 2009 Nevada Statewide Assessment by the Department of Health and Human Services – Division of Child and Family Services, further reported that parenting classes scored 4.46 (out of 5) in importance to ensure that children remain safely in their homes.

All family life education programs must be based on the immediate needs of families, so past parenting researchers have emphasized the importance of assessing parents' felt needs, before developing parenting education programs (Bartz, 1978; Devolin et al., 2012; Jacobson & Engelbrecht, 2000; Mullis & Mullis, 1983). Effective parenting education programs address the specific needs of parents and embrace various aspects of parent characteristics (Samuleson, 2010). Although assessment of needs, interests, and learning preferences is important for program planning, there have been few recent needs assessment studies about the felt needs of parents of young children.

Even with limited resources, University Cooperative Extension System recognizes the importance of this type of assessment as it aligns with their goals of providing parenting educational content important to future success to families most in need of support. In order to develop new parenting programs or maintain existing programs as an extension specialist, it is necessary to identify parenting education needs. Therefore, this needs assessment was conducted to determine program priorities for families with children from birth to 5 years of age.

### **Objective**

The main objective of this needs assessment was to find out what parents of young children want from parenting education programs or resources. Specifically, parenting topics, delivery methods, parents' perception about their own parenting, and parents or caregivers' opinions about parenting workshops were identified. In addition, different characteristics of families were compared in regard to preferred parenting topics and preferred delivery methods.

### **Method**

Extension faculty conducted a needs assessment in 2011 in southern Nevada to learn about the felt needs of parents of young children (Please contact YaeBin Kim for survey and details). Parents of 0 to 5 years olds (passers-by) were asked to fill out questionnaires at community centers, libraries, Family-to-Family Connection sites, and Head Start Programs across the geographic area. Six hundred ninety eight parents who lived in 23 Zip Code areas answered the survey; information from 684 complete surveys is reported in this paper (The potential number of families with young children in southern Nevada in 2011: 137,731). The questionnaire consisted of five sections: 1) a list of 17 potential parenting topics (five point Likert scale: 1 = no interest to 5 = a great deal of interest) and one item that participants suggest; 2) eight preferred sources of parenting information (Yes/No); 3) parents' perceptions about their parenting; 4) parents' preferences for workshop delivery formats; and 5) demographic information.

### **Results**

#### **Demographic Characteristics of Families**

As reported in Table 1, most parents were from urban areas. There was considerable variation in age, number of children, education, and ethnicity, reflecting the diversity of southern Nevada. Over half were between 26 and 35 years of age and almost three-fourths were married or living with a partner. The vast majority were mothers who had two or more children. Relatively large numbers of parents reported lower incomes and use of at least one form of public assistance. Few graduated from college. Twenty-eight percent were Caucasian. Almost half were Latino/Hispanic; Spanish was their first language. Over 90 percent had mobile phones and almost 80 percent had computers at home, most with an Internet connection. Overall, relative to

the general population of southern Nevada, there were more Hispanic, married and low-income parents than expected, and fewer Caucasian parents (27 percent Hispanic and 53 percent White Caucasian in the overall demographics of southern Nevada).

## Survey Outcomes

Preferred parenting information topics. Rank order of averages for each topic appears in Table 2. The average rating for 13 items was over four, indicating considerable interest in those topics and the greatest interest in receiving information about inexpensive activities that will help their child learn and develop. However, parents were less interested in the topics of choosing child care, parenting support groups, and dealing with their own challenges and education. Only 30 parents suggested additional 18 parenting topics of interest and those topics were based on their families' specific needs (see Appendix A, page 22).

A closer look at parenting topics by family demographics. Preferred parenting topics differed according to several family characteristics (see Table 3). Parents expressed high interest in exploring inexpensive activities for their children, regardless of demographic differences. Parents with the following characteristics were more interested in most of the parenting topics than their counterparts: high school or below, lower family income, non-native English speakers, other ethnic groups, social service recipients, and no internet access at home.

Only families living in urban communities showed statistically significantly higher interest in finding available community resources than rural residents. Most parents shared a similar level of interest in reading books with children, but non-Caucasian parents and non-native English speakers showed significantly higher interest in learning how to share books with their children. Although parents of children in child care programs and their counterparts showed similar interest in most parenting topics, they were significantly more interested in talking with child care providers, teachers or doctors, selecting good child care programs, handling stress and challenges, and building their own education or skills.

Preferred delivery methods for parenting information. The largest percentage of parents preferred information through the mail, while radio was the least popular delivery method (see Figure 1). Notably, over half preferred to receive parenting information electronically. Furthermore, 30 percent of Smartphone using parents wanted to receive information through electronic applications.

A closer look at preferred delivery methods. There was no significant difference overall between parents who wanted and didn't want information via brochures/booklets (38 to 50 percent) or online video (12 to 16 percent). However, with the exception of community type (urban vs. rural), specific family characteristics did influence parents' preferred delivery method for parenting information (see Table 4). Parents with a partner and higher education and income, White/Caucasian parents, and native English speakers were significantly more likely to receive parenting information through email or Internet. Parents with lower income, those receiving at least one social service, or those learning English as a Second Language were significantly more likely to prefer attending parenting workshops than their

counterparts. Interestingly, among Smartphone users, parents with a partner, higher education and income levels, those not using child care, Internet users, and White/Caucasian parents the preference was for Smartphone applications. Conversely, there were still some (25 ~ 61 percent) parents who liked to receive parenting information through TV/DVD and Radio: parents of more than one child, parents with lower income, social service recipients, race other than White/Caucasian, non-native English speakers, and non-Internet users.

Parents' perception about their parenting. Of the 684 respondents, 523 answered an open-ended question about their parenting strengths. A detailed content analysis revealed that parents identified 13 distinct strengths (see Figure 2). The three most frequently reported strengths were 1) ability to discipline children, 2) parents' love and care for children, and 3) spending quality time with children.

A slightly larger number of respondents (559 parents) answered an open-ended question about the most challenging aspect of parenting. A detailed content analysis revealed that parents identified nine distinct challenges (see Figure 3). The three most frequently mentioned challenges were 1) disciplining their children, 2) educating their children (high school graduation, early childhood education, teaching reading/writing, etc.), and 3) parental time management.

Parents' opinions about parenting workshops. While only 38 percent of parents reported that they preferred to attend parenting workshops to receive parenting information given other options, 63 percent of parents were willing to attend hypothetical future parenting workshops, when asked to answer whether or not they would attend. Among parents who showed interest in attending parenting workshops in the future (N = 409), only 28 percent said that they had attended parenting workshops in the past.

Three questions about how parenting workshops would be delivered were asked. Fifty percent of parents wanted their children to be with them during the class (59 percent Hispanic and 25 percent White), 23 percent wanted to have child care near the meeting room (67 percent Hispanic and 23 percent White), only 8 percent wanted their children to stay home with someone else (17 percent Hispanic and 83 percent White) and 19 percent said they do not care (39 percent Hispanic and 35 percent White). The largest percent of parents preferred weekday mornings and only 7 to 8 percent of parents preferred to attend parenting education workshops during weekends (see Table 5). A large majority of parents (69 percent) did not care about the instructor's ethnicity or language, while 25 percent wanted an instructor who speaks the same native language as they do (mostly Spanish) and only 5 percent wanted an instructor with both the same ethnicity and language.

## **Discussion**

The information from this survey will inform current and future parenting programs on what to develop, what to offer or continue offering in the community, and how to offer it. Parents of young children in southern Nevada rated 17 parenting topics based on their level of interest, chose their preferences from eight information delivery methods, identified their strengths and challenges as a parent, and shared their opinions about parenting workshops.

There was a considerably high interest in most parenting topics, but parents were comparatively less interested in topics related to themselves and their life. Finding inexpensive activities was the most popular topic of interest regardless of family characteristics. Perhaps unsurprisingly, parents or caregivers with limited resources or support were significantly more interested in most of the parenting topics. Therefore, extension professionals should provide programs or resources about inexpensive activities to the public, but specialized programs to participants with different family characteristics, such as those with few alternative options. This study also identified parents' strengths and weaknesses as parents and it was found that discipline is one thing that parents find easy and challenging at the same time. This result reflects that even parents who do really well with discipline feel difficulty in disciplining their child; therefore, extension programs might want to consider offering a discipline support group or a discipline-specific program to parents of young children.

The current study reflects recent changes on preferred delivery methods: despite, the largest percent of parents still wanting to receive information through the mail, they now want technology to play a bigger role. Extension programs may soon have to rely more heavily on electronic transmissions such as email or Smartphone applications. This is not to say, however, that technology trumps in-person information exchange. This study also suggests that there are still a large number of people who want to attend parenting workshops, regardless of their family characteristics. Therefore, while it will be necessary to use different delivery methods for some different types of families (i.e., mail and TV/DVD for those with limited resources), some overall trends were noted that should help inform extension programs on how to proceed.

Cooperative Extension in southern Nevada has been delivering parenting workshops throughout the area where the needs assessment was conducted, so a separate question about parents' willingness to attend workshops was asked. Interestingly, more parents were willing to attend future parenting workshops, but, of those parents, 78 percent had never attended parenting workshops before. This suggests that there are still many potential participants that extension professionals can recruit. When they do so, programs should make parents feel comfortable and at ease about attending parenting education classes. Parents preferred to be with their children during the class, so programs might want to design family-centered workshops. Based on information provided here, these workshops should be on weekday mornings, rather than weekends, and include an optional non-English session for those who do not speak the language.

It should be noted that there were several limitations to this study. First, by using convenience sampling, generalizability of the results may be called into question. Furthermore, demographic data indicated more Hispanic, married, and low-income parents in the sample than in the overall population; also indicating that this information may not generalize. Finally, although needs assessment is helpful in planning parenting education programs, it is important to note that interest level does not always guarantee actual attendance.

While there are clear limitations to the generalization of this study, the information collected has been of benefit to others within the state of Nevada with

similar participants, and could potentially be useful to those in other states with similar programs and demographics. Further, the current study collected data on several family characteristics to help define how to meet the needs of specific audiences. It could be used as a model for other areas to determine the specific needs of their population.

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Table 1

*Demographic Characteristics of Participants (N = 684)*

Characteristics	Number	Percent
Type of community		
Rural	46	6.7
Urban	638	93.3
Parent age groups		
Under 19	6	0.9
19 to 25	89	13.0
26 to 35	344	50.3
36 to 45	168	24.6
46 or older	25	3.6
Did not answer	52	7.6
Marital status		
Single/ never married	110	16.1
Divorced or separated	52	7.6
Married ore living with a partner	472	69.0
Widowed	11	1.6
Did not answer	39	5.7
Relationship to child		
Mother	538	78.7
Father	54	7.9
Both parents (answered together)	10	1.5
Grandparents	25	3.6
Did not answer	57	8.3
Total number of children		
One child	217	31.7
Two children	232	33.9
Three children	130	19.0
Four children	46	6.7
More than five children	24	3.5
Did not answer	35	5.2
Highest level of education		
Less than ninth grade	79	11.5
Some high school, but didn't finish	82	12.0
High school degree	114	16.7
High school + some college or trade schools	194	28.4
4-year college degree	98	14.3
Graduate degree	77	11.3
Did not answer	40	5.8
Family income		
Under \$10,000	123	18.0
Under \$20,000	116	17.0
\$20,000 ~ 30,000	102	14.9
\$31 ~ 40,000	62	9.1

\$41 ~ 60,000	64	9.4
\$61 ~ 80,000	42	6.1
\$81 ~ 100,000	20	2.9
Over \$100,000	22	3.2
Did not answer	133	19.4
Social services received		
Received at least one service	348	50.9
Not received	336	49.1
Ethnicity		
Latino/ Hispanic	326	47.7
White/ Caucasian	185	27.0
African American	58	8.5
Asian/ Pacific Islander	53	7.7
Biracial	35	5.1
Native American	5	0.7
Other	5	0.7
Did not answer	17	2.5
Language		
English	335	49.0
Other	333	48.7
Did not answer	16	2.3
Child care		
No	315	46.0
Part-day	294	43.0
Full-day	49	7.2
Did not answer	26	3.8
Mobile phone I use		
Cell phone	607	88.7
Smartphone use (out of 607)	266	43.8
Computer access		
Computer in home	514	75.1
Internet connection at home (out of 514)	466	90.7

Table 2

*Rankings of Parenting Information Needs (N = 684)*

Rank	Topic	M	SD	Range
1	Find out about inexpensive activities that will help my child learn and develop.	4.52	0.85	1 – 5
2	Learn how to help my child grow up with good mental health.	4.44	0.90	1 – 5
3	Learn fun ways to share books with my children to help them succeed when they get to school.	4.42	0.93	1 – 5
4	Learn tips to keep my child safe and healthy.	4.35	0.95	1 – 5
5	Know what my child should be able to do at his or her age/ Know if my child's development is normal for his or her age.	4.27	1.05	1 – 5
6	Find out what community resources are available for families and how to contact them.	4.26	1.03	1 – 5
7.5 <sup>1</sup>	Learn about good nutrition for my child.	4.25	1.02	1 – 5
	Learn how to choose books and toys that will be educational for my child	4.25	1.02	1 – 5
9	Learn ways to get my child to behave.	4.21	1.15	1 – 5
10	Use family routines to help my child grow and develop.	4.21	1.05	1 – 5
11	Learn how to help my child get along with friends.	4.10	1.07	1 – 5
12	Find out how I can be involved with my child's school.	4.09	1.15	1 – 5
13	Get tips on talking with other important people in my child's life, such as child care providers, teachers and doctors.	4.06	1.14	1 – 5
14	Get tips on selecting good child care programs.	3.91	1.33	1 – 5
15	Cope with my own stress and challenges.	3.89	1.30	1 – 5
16	Connect with other parents to talk about parenting and share information and support.	3.74	1.23	1 – 5
17	Build my own education or skills, such as getting a GED, learning English, getting a college degree.	3.47	1.65	1 – 5

Note: The 17 suggested parenting topics were identified using interviews with agency personnel reported earlier (author citation) and the National Extension Parent Education Model (NEPEM) (Smith et al., 1994)

<sup>1</sup> Two topics were tied, with the same average score.

Table 3

*Parent Interest for Topics by Parent Characteristics (N = 684)*

Topics	Community			Parent education <sup>2</sup>			Family income <sup>3</sup>		
	Urban (n = 638)	Rural (n = 46)	t	Low (n = 468)	High (n = 175)	t	Low (n = 340)	High (n = 210)	t
Inexpensive activities for child	4.5 (0.85)	4.5 (0.81)	.22	4.5 (0.85)	4.5 (0.83)	1.10	4.6 (0.83)	4.5 (0.75)	.74
Social and emotional development	4.4 (0.90)	4.4 (0.88)	.71	4.5 (0.88)	4.3 (0.93)	2.05*	4.5 (0.82)	4.3 (0.93)	2.38*
Reading books and school readiness	4.4 (0.93)	4.4 (0.99)	.48	4.4 (0.93)	4.4 (0.96)	.82	4.4 (0.92)	4.3 (0.97)	1.37
Child's safety and health	4.3 (0.97)	4.6 (0.61)	2.84**	4.4 (0.93)	4.1 (1.05)	2.96**	4.5 (0.90)	4.1 (1.03)	3.59***
Development Milestone	4.3 (1.05)	4.3 (1.06)	.09	4.3 (1.04)	4.2 (1.08)	1.68	4.3 (1.00)	4.1 (1.15)	2.51*
Available community resources	4.3 (1.00)	3.8 (1.27)	2.43*	4.3 (1.05)	4.2 (1.02)	.60	4.3 (1.03)	4.2 (1.06)	1.76
Learning about good nutrition	4.2 (1.04)	4.6 (0.66)	3.25**	4.3 (0.97)	4.0 (1.14)	3.54***	4.4 (0.96)	4.1 (1.07)	3.13**
Choosing books and toys for child	4.2 (1.04)	4.4 (0.88)	.79	4.4 (1.03)	4.4 (1.04)	1.96	4.4 (0.98)	4.0 (1.03)	3.79***
Discipline	4.2 (1.15)	4.0 (1.19)	1.21	4.2 (1.11)	4.1 (1.22)	1.24	4.3 (1.07)	4.1 (1.25)	2.66**
Family routines	4.2 (1.06)	4.2 (1.19)	.06	4.3 (1.01)	4.0 (1.18)	2.59*	4.3 (0.97)	4.0 (1.15)	3.87***
Child getting along with friends	4.1 (1.97)	3.8 (1.09)	1.94	4.1 (1.11)	4.0 (0.99)	1.69	4.2 (1.08)	3.9 (1.06)	3.58***
Parent involvement in school	4.1 (1.13)	3.7 (1.23)	2.49*	4.2 (1.10)	3.9 (1.28)	2.77**	4.2 (1.05)	3.8 (1.30)	4.05***
Talking with child care providers, teachers or doctors	4.1 (1.15)	3.8 (1.04)	1.59	4.1 (1.11)	3.8 (1.23)	2.99**	4.3 (1.01)	3.7 (1.24)	5.78***
Selecting good child care programs	3.9 (1.33)	3.8 (1.27)	.44	4.0 (1.26)	3.6 (1.46)	3.46**	4.2 (1.14)	3.4 (1.48)	6.05***
Handling stress and challenges	3.9 (1.30)	3.5 (1.20)	2.32*	4.0 (1.25)	3.6 (1.41)	3.08**	4.1 (1.16)	3.5 (1.41)	4.99***
Connecting with other parents	3.8 (1.23)	3.4 (1.24)	1.95	3.8 (1.26)	3.6 (1.19)	2.10*	3.8 (1.23)	3.5 (1.24)	3.04**
Building my own education or skills	3.5 (1.67)	3.5 (1.38)	.39	3.8 (1.49)	2.5 (1.71)	8.79***	4.0 (1.37)	2.5 (1.63)	11.52***
Topics	Ethnicity			Language			Child care		
	White (n = 185)	Others (n = 480)	t	English (n = 335)	Other (n = 332)	t	Yes (n = 341)	No (n = 314)	t
Inexpensive activities for child	4.5 (0.80)	4.5 (0.86)	.55	4.5 (0.85)	4.6 (0.83)	1.77	4.5 (0.88)	4.6 (0.80)	1.17
Social and emotional development	4.2 (0.97)	4.5 (0.85)	3.59***	4.3 (0.93)	4.6 (0.82)	4.7***	4.5 (0.91)	4.4 (0.87)	.87
Reading books and school readiness	4.2 (1.03)	4.5 (0.88)	3.17**	4.2 (1.04)	4.6 (0.75)	5.59***	4.4 (0.95)	4.4 (0.92)	.15
Child's safety and health	4.1 (1.03)	4.5 (0.91)	4.36***	4.2 (1.00)	4.5 (0.87)	5.33***	4.4 (0.95)	4.3 (0.97)	.92
Development Milestone	3.9 (1.20)	4.4 (0.97)	4.85***	4.1 (1.16)	4.5 (0.88)	4.98***	4.3 (1.05)	4.2 (1.07)	.69
Available community resources	4.1 (0.98)	4.3 (1.05)	1.89	4.2 (1.04)	4.3 (1.02)	1.80	4.2 (1.07)	4.3 (1.00)	.74
Learning about good nutrition	4.0 (1.04)	4.3 (1.00)	3.36**	4.1 (1.03)	4.4 (0.99)	3.90	4.3 (1.03)	4.2 (1.01)	.23
Choosing books and toys for child	4.0 (1.00)	4.3 (1.04)	3.11**	4.1 (1.08)	4.5 (0.93)	5.25***	4.3 (1.06)	4.2 (1.01)	.45
Discipline	3.9 (1.22)	4.3 (1.10)	3.60***	4.0 (1.23)	4.4 (1.01)	5.49***	4.2 (1.19)	4.2 (1.08)	.49
Family routines	3.9 (1.15)	4.3 (1.00)	4.01***	4.0 (1.12)	4.4 (0.93)	5.39**	4.2 (1.11)	4.2 (1.00)	.76
Child getting along with friends	3.8 (1.04)	4.2 (1.08)	3.94***	3.8 (1.13)	4.4 (0.95)	6.91**	4.1 (1.15)	4.1 (1.00)	.69
Parent involvement in school	3.6 (1.32)	4.2 (1.03)	5.52***	3.8 (1.25)	4.4 (0.95)	6.82***	4.1 (1.14)	4.0 (1.16)	.56
Talking with child care providers, teachers or doctors	3.6 (1.24)	4.2 (1.05)	6.58***	3.7 (1.20)	4.4 (0.96)	7.77***	4.2 (1.16)	3.9 (1.12)	2.57*

<sup>2</sup> Low: High school graduate or below, High: Some college or trade school, college graduate or higher<sup>3</sup> Low: Annual income lower than \$30,000, High: Annual income higher than \$30,000 (Median income: \$20,000-\$30,000)

Selecting good child care programs	3.2 (1.50)	4.2 (1.15)	8.10***	3.5 (1.44)	4.3 (1.07)	8.09	4.1 (1.18)	3.7 (1.44)	3.58***
Handling stress and challenges	3.3 (1.42)	4.1 (1.19)	6.26***	3.6 (1.39)	4.2 (1.11)	6.91***	4.0 (1.24)	3.7 (1.35)	2.97**
Connecting with other parents	3.5 (1.22)	3.8 (1.23)	3.20**	3.6 (1.23)	3.9 (1.20)	3.86***	3.8 (1.26)	3.7 (1.21)	.51
Building my own education or skills	2.4 (1.56)	3.8 (1.51)	10.66***	2.8 (1.30)	4.1 (1.69)	11.42***	3.7 (1.56)	3.1 (1.69)	4.55***
	Social service recipients <sup>4</sup>			Internet			Partner		
	Yes (n = 347)	No (n = 323)	t	Yes (n = 465)	No (n = 110)	t	Yes (n = 470)	No (n = 173)	t
Inexpensive activities for child	4.5 (0.84)	4.5 (0.86)	.91	4.5 (0.81)	4.6 (0.89)	.22	4.55 (0.79)	4.46 (0.97)	1.13
Social and emotional development	4.5 (0.82)	4.3 (0.97)	2.95**	4.4 (0.91)	4.6 (0.79)	2.11*	4.46 (0.87)	4.40 (0.95)	.71
Reading books and school readiness	4.4 (0.93)	4.4 (0.93)	.93	4.4 (0.93)	4.5 (0.92)	.37	4.43 (0.90)	4.35 (1.02)	.95
Child's safety and health	4.4 (0.88)	4.2 (1.03)	2.71**	4.3(1.01)	4.6 (0.75)	3.75***	4.34 (0.96)	4.34 (0.98)	.01
Development Milestone	4.4 (0.93)	4.1 (1.15)	3.67***	4.3(1.10)	4.4 (0.93)	1.44	4.31 (1.03)	4.17 (1.11)	1.44
Available community resources	4.3 (1.07)	4.2 (1.00)	1.05	4.3 (1.04)	4.3 (1.02)	.57	4.24 (1.03)	4.30 (1.07)	.59
Learning about good nutrition	4.4 (0.93)	4.1 (1.09)	3.70***	4.2 (1.07)	4.5 (0.86)	3.31**	4.25 (1.02)	4.22 (1.04)	.30
Choosing books and toys for child	4.3 (0.99)	4.1 (1.06)	2.56*	4.2 (1.05)	4.5 (0.92)	3.10**	4.26 (1.00)	4.19 (1.13)	.72
Discipline	4.3 (1.06)	4.1 (1.23)	2.96**	4.2 (1.17)	4.4 (1.01)	1.65	4.27 (1.09)	4.04 (1.25)	2.13*
Family routines	4.3 (0.99)	4.1 (1.12)	2.06*	4.2 (1.09)	4.3 (0.99)	1.14	4.21 (1.05)	4.14 (1.10)	.66
Child getting along with friends	4.2 (1.05)	4.0 (1.11)	2.39*	4.0 (1.11)	4.4 (0.93)	3.45**	4.14 (1.02)	3.95 (1.23)	1.85
Parent involvement in school	4.2 (1.04)	3.9 (1.24)	3.70***	4.0 (1.22)	4.4 (0.92)	3.60***	4.08 (1.16)	4.05 (1.16)	.29
Talking with child care providers, teachers or doctors	4.3 (1.00)	3.8 (1.23)	5.08***	4.0 (1.19)	4.3 (1.02)	3.21**	4.04 (1.17)	4.10 (1.11)	.63
Selecting good child care programs	4.1 (1.17)	3.6 (1.46)	4.64***	3.8 (1.39)	4.3 (1.12)	3.91***	3.87 (1.36)	3.95 (1.25)	.71
Handling stress and challenges	4.2 (1.15)	3.6 (1.39)	5.77***	3.8 (1.36)	4.1 (1.09)	3.01**	3.86 (1.32)	3.91 (1.26)	.36
Connecting with other parents	3.8 (1.23)	3.6 (1.23)	2.41*	3.7 (1.26)	3.9 (1.22)	2.08*	3.74 (1.23)	3.70 (1.29)	.36
Building my own education or skills	4.0 (1.46)	2.9 (1.68)	8.74***	3.2 (1.71)	4.1 (1.30)	6.53***	3.37 (1.67)	3.62 (1.61)	1.73

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

<sup>4</sup> Yes: Social service recipients (at least one service), No: Non-recipients

Table 4

*Preferred Delivery Methods by Parent Characteristics (N = 684)*

Delivery method	Partner <sup>5</sup>		<i>X</i> <sup>2</sup>	N of children		<i>X</i> <sup>2</sup>	Parent education <sup>6</sup>		<i>X</i> <sup>2</sup>	Family income <sup>7</sup>		<i>X</i> <sup>2</sup>	Social service recipients <sup>8</sup>		<i>X</i> <sup>2</sup>
	Yes	No		One	More than one		Low	High		Low	High		Yes	No	
Mail	63%	69%	2.02	62%	67%	1.48	69%	53%	14.05***	73%	55%	18.55***	70%	59%	9.57**
Email/ Internet	56%	42%	8.91**	61%	48%	10.90**	45%	73%	39.78***	43%	73%	48.71***	43%	61%	22.69***
Brochures/booklet	42%	41%	.08	44%	41%	.78	42%	42%	.004	45%	40%	1.37	43%	40%	.63
Workshops	39%	34%	1.73	34%	39%	1.75	38%	37%	.15	42%	33%	4.47*	42%	34%	4.70*
TV/ DVD	27%	27%	.002	22%	30%	4.73*	28%	22%	2.45	32%	19%	12.27**	32%	22%	8.20**
Smartphone applications	34%	19%	4.96*	27%	31%	.64	25%	39%	6.07*	25%	40%	5.64*	33%	26%	1.75
Radio	10%	10%	.001	6%	12%	5.90**	11%	7%	2.35	13%	6%	6.28*	12%	8%	2.82
Online video	14%	15%	.002	14%	15%	.07	15%	13%	.34	16%	16%	.01	14%	15%	.007
Delivery method	Ethnicity		<i>X</i> <sup>2</sup>	Language		<i>X</i> <sup>2</sup>	Child care		<i>X</i> <sup>2</sup>	Internet		<i>X</i> <sup>2</sup>	Community		<i>X</i> <sup>2</sup>
	White	Other		English	Other		Yes	No		Yes	No		Urban	Rural	
Mail	57%	67%	6.46*	60%	69%	5.73*	69%	60%	5.45*	60%	81%	18.49***	65%	61%	.30
Email/ Internet	73%	43%	46.97***	64%	40%	38.42***	40%	65%	39.22***	64%	21%	66.93***	51%	57%	.52
Brochures/ Booklet	38%	44%	1.92	38%	46%	3.76	43%	40%	1.03	40%	50%	3.74	42%	46%	.29
Workshops	41%	37%	.68	33%	42%	5.56*	37%	39%	.25	35%	45%	3.76	38%	46%	1.17
TV/ DVD	16%	32%	16.04***	18%	37%	31.16***	29%	25%	1.49	23%	42%	15.7***	28%	22%	.73
Smartphone applications	43%	25%	7.97**	32%	27%	.79	21%	38%	10.01**	34%	11%	6.29**	30%	17%	1.49
Radio	5%	13%	8.37**	7%	14%	7.41**	10%	10%	.09	8%	19%	10.4**	11%	2%	3.60
Online video	14%	15%	.18	13%	16%	1.64	15%	14%	.21	16%	12%	1.29	14%	22%	2.06

\**p* < .05. \*\**p* < .01. \*\*\**p* < .001<sup>5</sup> Yes: Married or living with a partner, No: Single and never married, divorced or separated and widowed<sup>6</sup> Low: High school graduate or below, High: Some college or trade school, college graduate or higher<sup>7</sup> Low: Annual income lower than \$30,000, High: Annual income higher than \$30,000<sup>8</sup> Yes: Social service recipients (at least one service), No: Non-recipients

Table 5  
*Best Time for Parenting Education Workshops (N = 527)*

	Number	Percent
Weekday morning	218	49
Weekday afternoon	92	21
Weekday evening	87	20
Weekend morning	61	14
Weekend afternoon	36	8
Weekend evening	33	7

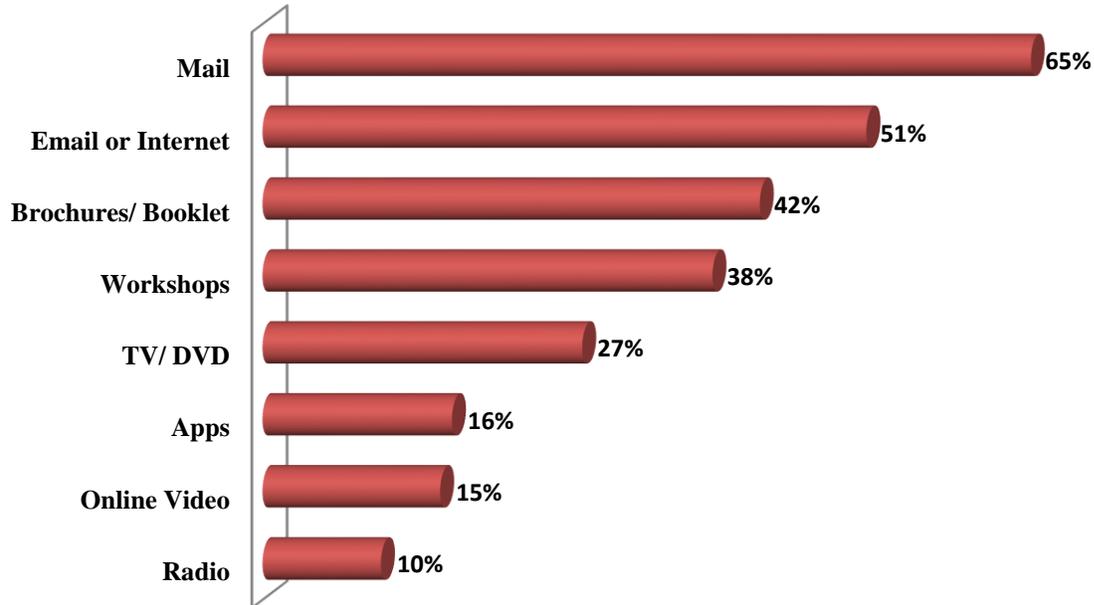


Figure 1. Preferred sources of parenting information

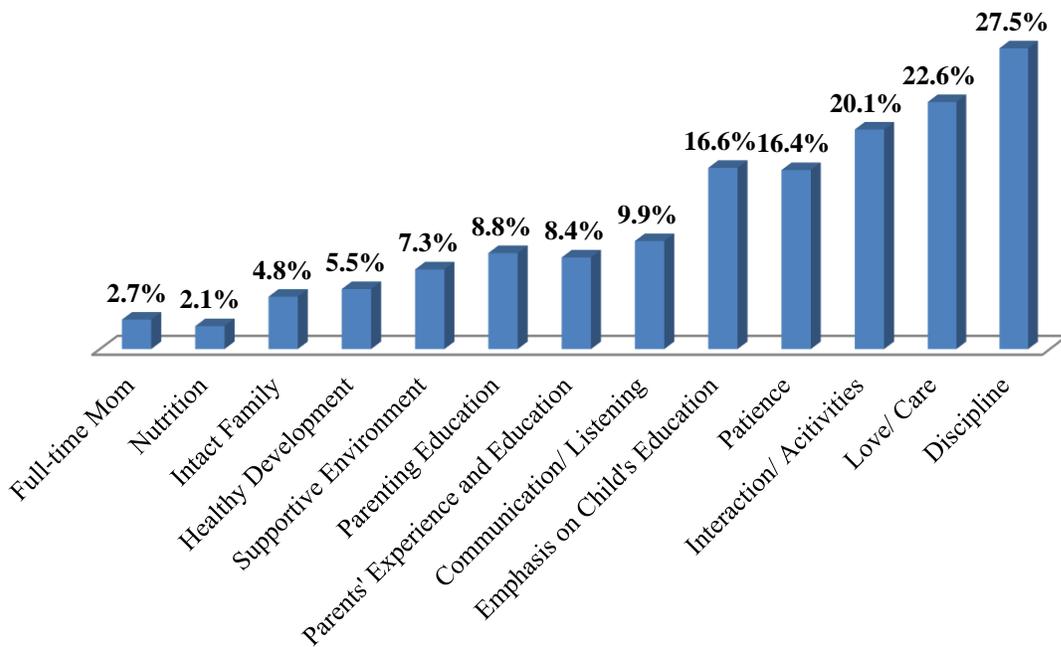


Figure 2. Parents' perception about their strengths as a parent

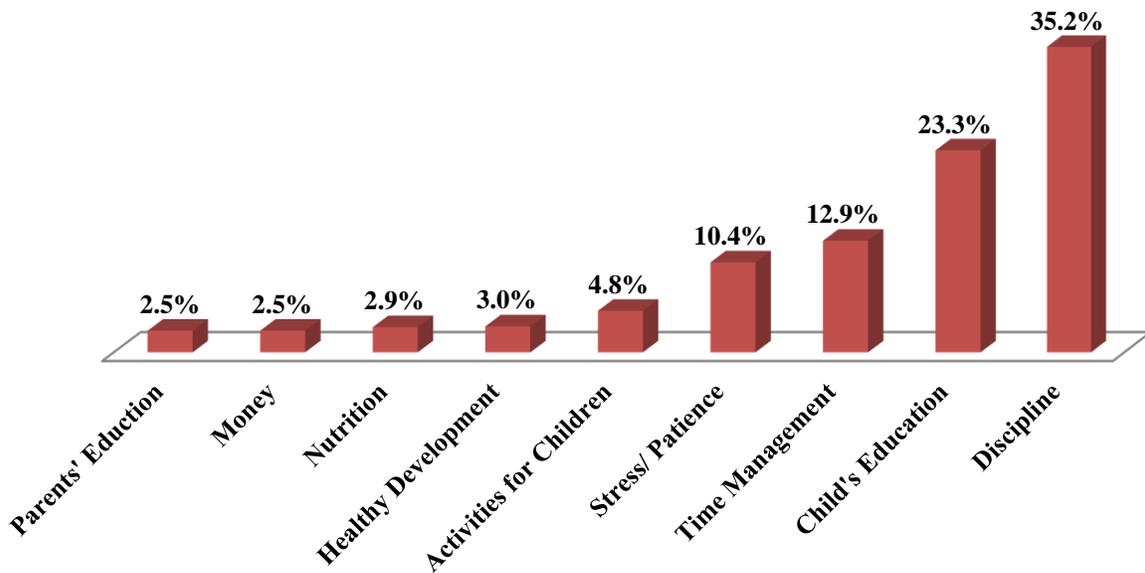


Figure 3. Parents' perception about their challenges as a parent

## Research

### Using Focus Groups to Explore the Health and Personal Finance Information Needs of Older Adults

Martie Gillen

The purpose of this focus group study was to gain an understanding of the health and finance information needs of older adults. Fifteen consumer focus groups were conducted with older Floridians. The questions asked included: (a) What health topics would you like more information about?; (b) What personal finance topics would you like more information about?; and (c) Do you see your health and finances as being related and if yes, how? Results from the focus group data identified 26 information themes. The most significant topics mentioned were Medicare, long-term care planning, decision-making, independent living, aging process, and fixed income.

The growth in the number and proportion of older adults is unprecedented in the history of the United States. According to the U.S. Census Bureau, in 2010, one in eight (12.9 percent) Americans was over age 65 (Vincent & Velkoff, 2010; as cited in Gillen, 2014). By 2030, one in five (20 percent) Americans will be over age 65 (Vincent & Velkoff, 2010; as cited in Gillen, 2014). "This increase in the number and diversity of older adults has monumental implications for healthcare spending and retirement planning and management" (Gillen, 2014, para. 2). The cost of providing health care for an older American is three to five times greater than the cost for someone younger than 65 (Centers for Disease Control and Prevention, 2007). As a result, by 2030, the nation's healthcare spending is projected to increase by 25 percent (Centers for Disease Control and Prevention, 2007). Furthermore, the current model of work and retirement is not working for most Americans. In the 1930s, it made sense to get an education, work until 65 and retire. Now that people are more commonly living into their 80s, 90s or beyond Americans are routinely spending two and three decades in retirement. "As the senior population increases, and seniors are living longer, the demand for information to cope with later-life health and personal finance issues will likely increase" (Gillen, 2014, para. 3).

A 2010 telephone survey of 1,052 baby boomers and older adults who resided in the United States found that they wanted more information on health-related topics, home-based community care services, Medicare, exercise, fall prevention, and geriatric case management (Brossoie, Roberto, Willis-Walton, & Reynolds, 2010). Additionally, the researchers found that respondents were most concerned about maintaining their independence (Brossoie et al. 2010). They noted that while many of the information areas were requested regardless of age; on average, as age increased, interest in receiving aging-related information decreased. Their findings suggest, "both common interests as well as distinct needs for information among

baby boomers and older adults” (Brossoie et al. 2010, p. 18). Williamson (1997) conducted telephone interviews of 202 older adults who resided in Australia finding that health and finance were the topics most frequently reported as information needs.

“Today the elderly carry greater responsibility for their financial and health care matters than ever before” (Gillen, 2014, para. 2). “According to the U.S. Department of Health and Human Services (2012), preventive services are valuable for maintaining the quality of life and wellness of older adults, but are often underused, especially among certain racial and ethnic groups” (as cited in Gillen, 2014, para. 2). Many older adults may be unaware of the value of preventative services and/or that the Patient Protection and Affordable Care Act of 2010 include provisions related to relevant Medicare services. According to the U. S. Department of Health and Human Services (2012) “behaviors including participation in physical activity, self-management of chronic diseases, or use of preventive health services can improve health outcomes of older adults” (as cited in Gillen, 2014, para. 3). Choi and Jun (2009) found that “older adults are likely to experience unfamiliar stressors from not having enough money to live on, loneliness, having to depend on other people, family issues, and caregiving” (as cited in Gillen, 2014, para. 3).

### **Objective**

The purpose of this study was to gain a better understanding of the health and finance information needs of older adults. Consumer focus groups were conducted with older Floridians.

### **Method**

#### **Study population and study design**

Fifteen consumer focus groups (N=93) were conducted June and July 2012 in nine counties across Florida. Focus group participants were recruited at the county level using a variety of methods including posting flyers, newspaper advertisements, radio advertisements, and word of mouth. The focus group sessions were approximately two hours long and were led by the same moderator who was assisted by a note taker. Focus group discussions were recorded using a digital recorder. Participants received a \$20 gift certificate to use at a local supermarket as an incentive to participate and to compensate them for their time.

#### **Focus group questions**

A semi-structured questioning route was used in the focus groups to ensure consistency in questions across groups, yet allow for some flexibility in accordance with topics raised and level of participation within the groups. Questions were aimed at assessing older adults’ health and personal finance information needs. The questions asked included: (a) What health topics would you like more information about?; (b) What personal finance topics would you like more information about?;

and (c) Do you see your health and finances as being related and if yes, how?

## Data analysis

Transcription from the audio recordings of the focus groups was analyzed. The focus groups resulted in over 500 pages of transcription. The responses were inductively coded and categories and themes were identified. A single response may have been coded into multiple categories. All responses were coded by a second coder. The final list of codes, constructed through a consensus of the research team, consisted of a numbered list of themes representative of the health and personal finance information needs of the participants.

## Results

The sample population included 93 Floridians who were 50 years of age and older. Demographic characteristics indicate that the majority of participants were female (77 percent), married (54 percent), white (79 percent), had some college (31 percent) or had graduated college (49 percent), resided in a rural area (47 percent), and had annual income less than \$40,000 (52 percent). Refer to Table 1 for the demographic characteristics.

The analysis of the focus group transcripts resulted in the identification of 26 themes across health and wealth. The themes mentioned most frequently were Medicare, long-term care planning, informed decision-making, independent living, aging process, and fixed income. Other identified themes include nutrition, transportation, estate planning, medication, communication, exercise, reverse mortgages, stress, multigenerational families, raising grandchildren, children returning home and/or need financial assistance, healthcare expenses, advocacy, assistance programs, computer literacy, debt, caregiver resources, social activities, budgeting, investing, and natural remedies. While much information is available regarding the topics of health and personal finance, many older adults struggle when using the information to make informed personal decisions. Below, in italics, are participant quotes that illustrate a few of the themes.

### Medicare

*I just turned 65, so the whole Medicare thing was "oh my gosh." It's complicated! I didn't expect that. I kept putting it off, and finally I had to decide. So I just called someone in their 80's who has had medical procedures, two hip replacements, and had been very satisfied with her coverage, I know, because we've been involved with her care. And she just sort of walked me through what she had, and I was just "Okay, this is what I'm doing!" I needed more information. Wow, there's information out there, but the system itself, actually, is way too complicated. Some of it just needs to be simplified, I think. I think about all these people who don't have very much education and can barely read and stuff, and how are they making these decisions? So anyway, I just think it's very, very complicated.*

## **Long-term care planning**

*How's the best way to go on setting up that type of situation. I mean, someday I may need to go into a nursing home. And I'd like to know.*

## **Aging process**

*Going through the process about aging. Many people don't have elderly people in their homes, grandmothers and grandfathers. Nobody prepares you for the aging process. In terms of what kind of things will be happening to you. What kind of things will be happening to your body.*

## **Fixed income**

*And then not only that, I'm like her, as far as seniors are concerned, some seniors can't eat. Say, for instance, not myself, but I know someone... Some are only getting \$500 Social Security a month. Some may be getting less. By the time they get through paying, say, even if you live in a senior center environment, dwelling, it's based on your income. So if you go in there and you're getting \$500 a month, at least \$250 or whatever is going on your rent. If you get cable, God forbid, you get cable, or telephone, you can forget all that. That's another \$250 gone. And you have to pay your light bill, and your laundry, and stuff like that. And food!*

The majority of the participants voiced a connection between their health and finances. Below, in italics, are participant quotes that illustrate a few of the connections.

*Health and wealth are going to determine the quality of your life. Are you going to have a good retirement, go on cruises or have to eat cat food?*

*If you are financially secure, you feel better mentally and emotionally. Even though your health might, you may not feel as good physically as you used to, but mentally you're not worried about the price of anything going up or down. It doesn't matter because you know that you can handle that. And I think that, so even though your knees may be giving out, you feel good mentally, and emotionally. And you can enjoy and relax and stuff like that. You're not constantly worried about how am I going to pay for a knee surgery or how am I going to pay for a new car. You don't worry about it. I think that's very important. I think even if you're healthy, but you have a shortage of money, you might be in good physical shape, but mentally that's constant worry and constant pressure. I think that can make you sick.*

## **Discussion**

This focus group study indicated that older adults need and want timely and relevant information regarding their health and personal finances. Similar to previous qualitative studies (Brossoie et al. 2010; Williamson, 1997) of the information needs

of older adults, the findings of this current study suggest that while much information is available it is not readily accessible and may not be easily understood. The participants also voiced an interrelationship between their health and finances. Many participants shared that they lacked money to pay for health care expenses such as hearing aids and medication. Lack of money was also identified as a stress related issue, which is commonly known to cause health problems.

The use of focus groups was appropriate for the exploratory nature of this study.. “The goal of focus groups is not to generalize to a larger population but to provide valuable information that the insightful reader may transfer to other contexts” (Israel & Galindo-Gonzalez, 2014, p. 5). While focus groups provide rich, qualitative information this methodology is not without limitations. For example, participants may feel peer pressure to give similar answers to the questions. The phrasing of questions along with the setting may affect participant responses. Additionally, it is recognized that findings cannot be generalized beyond the study sample.

### **Implications for Extension**

The expanded knowledge and information gained from these focus groups can be useful in the development of community education programs for older adults. Based on the findings from these focus groups, Cooperative Extension curriculum was adapted. Cooperative Extension is a partnership between federal, state, and county governments to provide scientific knowledge and expertise to the public. Extension nutrition education programs help people improve their lifestyles in ways that promote health and reduce health care costs. Extension personal finance programs help people improve their economic well-being in ways that promote healthy financial behaviors and increased savings. The Small Steps to Health and Wealth™ (SSHW) program motivates participants to improve their lives through behavior change strategies for both health and financial management. Permission was received to adapt the SSHW program for older adults. A curriculum addressing both the health and financial management needs of older adults did not previously exist (Gillen, 2014). The adapted curriculum was pilot tested in New Jersey and Florida. The Small Steps to Health and Wealth™ for Older Adults curriculum is available to Extension professionals throughout the nation (Gillen, 2014).

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Table 1

*Demographic Characteristics (N=93)*

<b>Variables</b>	<b>percent</b>
Age group	
50 - 59	3.3
60 - 69	45.7
70 - 79	41.3
80 - 89	7.6
90 or older	2.2
Gender	
Female	77.4
Male	22.6
Marital status	
Married	53.3
Divorced/separated	17.4
Widowed	26.1
Never married	3.3
Racial/Ethnic group	
American Indian or Alaskan native	2.2
African American	17.2
Hispanic/Latino	2.2
White	78.5
Area of residence	
Urban	23.9
Suburban	29.4
Rural	46.7
Education level	
Primary school	1.1
High school	16.3
Vocational	3.3
Some college	30.4
Associate's degree	8.7
Bachelor's degree	18.5
Graduate or professional degree	21.7
Income group	
\$20,000 or less	25.7
\$20,001 - \$30,000	13.3
\$30,001 - \$40,000	13.3
\$40,001 - \$50,000	7.8
Greater than \$50,000	38.9

## Research

### **Spillin' the Beans: A Gardening Approach to Nutrition Education for Families**

Julie Garden-Robinson and Leah Whigham

Nutrition education coupled with gardening activities for children and families can have lifelong implications for health. An eight-lesson “Spillin’ the Beans” curriculum including nutrition lessons, gardening activities, and taste testing was piloted in two childcare centers with 43 families and their preschool-age to early-elementary-age children during a summer growing season in the Midwest. Pre and post surveys of parents/caregivers showed significant improvements in knowledge related to nutritional attributes of beans, increased consumption of beans among the families, and trends toward improved attitudes related to gardening. Sensory testing of recipes revealed positive ratings and willingness to try less familiar foods among children.

Introducing children to healthful foods at an early age can promote the consumption of vegetables and other foods with potential lifelong health benefits, however U.S. children and adults are not meeting nutrition goals, especially the consumption of plant-based foods linked to prevention of chronic disease and obesity (Centers for Disease Control and Prevention [CDC], 2013; Newby, 2009). In a random sample of 3,022 U.S. infants and toddlers, researchers found between 18 and 33 percent of infants and toddlers ages 7 months to 24 months consumed no vegetables as separate foods. French fries and other fried potatoes were the vegetables consumed in the highest amount by the age of 24 months (Fox, Pac, Devaney, & Jankowski, 2004).

Researchers and practitioners have explored environmental influences on nutrition practices of young children and their parents/caregivers and have developed strategies to improve the intake of vegetables and other foods for these groups. Results of focus groups with children in grades 4 to 6 and their parents/caregivers revealed the following factors as influences on food choices: availability and accessibility of food, parents, television viewing behavior, and eating out (Cullen, Baranowski, Rittenberry, & Olvera, 2000). In the *Food Dudes* program, which employs taste testing, modeling, and rewards during a three-month period, significant increases in the consumption of fruits and vegetables have been shown among elementary-age children. Among children who consumed no fruits or vegetables at the baseline, combined fruit and vegetable intake increased by 0.53 cups per day (Wengreen, Madden, Aguilar, Smits, & Jones, 2013). Using *The Story of Benny the Traveling Bean* Extension nutrition education program along with taste testing,

researchers studied first grade children's willingness to try snacks containing legumes during a 3-week project. The researchers reported a significant increase in the number of children who took legume-containing snacks and an increase, although not significant, in the children's willingness to taste the legume-containing snacks (Edwards & Hermann, 2011).

Supporting and promoting community and home gardens are among the U.S. strategies to promote the consumption of more fruits and vegetables (CDC, 2011). School-based gardens have shown promise in nutrition education programs that seek to improve knowledge, preferences, and consumption of plant-based foods. Researchers studied whether the experiential addition of gardening coupled with nutrition education influenced knowledge gain and produce consumption in six 2<sup>nd</sup>-grade classrooms, where two of the classrooms served as controls, two classrooms participated in nutrition education (NE), and two classrooms participated in both nutrition education and gardening (ND+G). Children in both the NE and the NE+G groups improved their attitudes toward and liking of green leafy vegetables, with the NE+G group showing the greatest improvement. In addition, children in the NE+G group significantly improved their ability to identify various green vegetables (Parmer, Salisbury-Glennon, Shannon, & Struempfer, 2009).

In the current study, dry edible beans and snap beans were used as "model crops" to introduce children and families to gardening. Dry edible beans are among the foods to increase according to the 2010 Dietary Guidelines for Americans and they are considered unique because they can be counted either as vegetables or as protein foods. Dry edible beans, such as the black, red, pinto, navy, and kidney market classes, are part of the legume family, which also includes lentils, peas, peanuts, and soybeans. Consumption of dry edible beans may play a role in reducing the risk of heart disease, diabetes, cancer, and obesity (Bazzano, Thompson, Tees, Nguyen, & Winham, 2011; Jenkins et al, 2012; Lanza et al, 2006; Newby, 2009).

Snap beans, commonly referred to as green beans or string beans, are closely related to dry edible beans. Snap beans and dry edible beans belong to the same genus or species and together are referred to as "common beans"; however, snap beans are harvested and consumed while immature, before the inner bean in the pod has begun to develop. Snap beans are a low-calorie food that provide a variety of nutrients, such as vitamin A, vitamin C, vitamin K, folate, and potassium. However, snap beans contain less starch, protein, fiber, and folate than dry edible beans (USDA Agricultural Research Service, 2012).

Dry edible beans are harvested upon maturity when the pod is too firm and fibrous to be consumed fresh. Dry edible beans are rich in a variety of essential nutrients including protein, fiber, iron, folate, potassium, magnesium and zinc (USDA Agricultural Research Service, 2012). Beans contain a greater range of nutrients than many other vegetables or protein foods. The U.S. Department of Agriculture recognizes the health benefits beans offer children and requires that students from kindergarten through 12th grade be offered at least ½ cup of legumes, such as dry edible beans and peas, per week as part of school lunch guidelines (USDA Food and Nutrition Service, 2013).

## **Objectives**

The overall purpose of this project was to determine the influence of nutrition education coupled with gardening activities on nutrition practices and desire to try legumes, including dry edible beans and snap beans, among families with young children. The objectives of the “Spillin’ the Beans” curriculum for participating children and parents were:

- 1) to improve knowledge of the bean components linked with health benefits, specifically fiber, protein, antioxidants and folate;
- 2) to improve knowledge of gardening and different types of beans;
- 3) to increase consumption of beans at home;
- 4) to increase the use of beans on the participating childcare centers’ menus; and
- 5) to improve parents’ attitudes and skills related to gardening.

## **Method**

### **Participants**

Participants included 43 families with preschool- to early-elementary-age children who were recruited from two childcare centers in two cities.

### **Study Design and Intervention**

An eight-lesson curriculum was designed for preschool to early-elementary-age children using evidence-based nutrition education practices based on the 2010 Dietary Guidelines for Americans. Targeting young children and their parents/caregivers, the curriculum was reviewed by early childhood educators, horticulture experts and nutrition specialists. The lessons were implemented with children two times per week for four weeks, and an Extension associate taught all of the lessons to the children in both locations. During the second week of the curriculum, the children planted a garden with a wide range of dry edible beans and snap beans as well as other vegetables. Researchers, childcare teaching staff, Extension staff, and parents provided assistance and support during the three-month growing season. Bean seeds provide an easy-to-grow crop, because the seeds are large enough for children to manipulate with their fingers, are available in a variety of colors, shapes and sizes, and sprout/grow fairly quickly.

The first lesson included reading a children’s book related to beans, nutrition concepts from [www.chooseMyPlate.gov](http://www.chooseMyPlate.gov), and a gardening, art, or music activity related to the lesson concepts. During the second lesson of the week, children were invited to taste two to three recipes containing dry edible beans or snap beans. For convenience, canned dry edible beans (kidney, Great Northern, etc.) were used in the recipe testing. Each child was invited to the “taste testing room” separate from play areas to rate the recipes. A trusted adult familiar to the children presented a small serving of each food on a white paper plate at a child-sized table. One food was provided at a time, and each child was asked to rate the recipe using a three-picture scale consisting of cartoon faces (smiling, neutral, and frowning). Each child pointed

to a face coinciding with his or her rating of the recipe, the adult marked the score on a score sheet, and the researchers later converted the “face scale” ratings to numeric ratings (3 = smiling face, 2 = neutral face, and 1 = frowning face). The children also were asked if they would eat the recipe at home. To show the parents the recipe ratings, stickers were placed on a classroom chart showing the children’s ratings (“like,” “ok,” “dislike,” “didn’t try”) for each of the recipes.

Parents were provided with a “Bean Bulletin” newsletter each week, which summarized the weekly lesson activities and provided the recipes the children had tasted. The newsletter included key concepts about the nutritional attributes of beans, ways to incorporate them in menus, and information about gardening. In addition, cans of beans (kidney, Great Northern, etc.) corresponding to the recipes included with the newsletter were provided for the families to encourage use of the recipes. The recipes included instructions about draining and rinsing canned beans to reduce the sodium content by up to 40 percent, and instruction about how to sort, soak and cook beans from the dry state also was provided (Duyff, Mount, & Jones, 2011; Garden-Robinson, McNeal, Wang, Langfus, & Kjera, 2013). Besides canned beans, parents received kitchen utensils, a cutting board, and a bean cookbook as tokens of appreciation for their continued participation in the project.

An evaluation protocol reviewed and approved by the university’s Institutional Review Board (IRB) was followed throughout the study. Parents who agreed to the study protocol provided signed consent for their children to participate in the lesson activities and sensory analysis procedures, and the parents agreed to participate in the pre- and post-surveys. Parents were asked to list their child’s food allergies (if applicable) on the consent. The children with relevant allergies were excluded from participation in tasting that recipe.

## **Data Analysis**

SAS V9.3 (SAS Institute, Inc., Cary, NC) was used for the analysis. McNemar’s test was used to test for agreement in responses between the pre- and post-surveys.

## **Findings**

Tables 1 and 3 show the results of pre- and post-surveys with parents and Table 2 shows the results of the children’s taste tests. On the post-survey, participating families indicated consumption of a wide range of dry edible beans, including string or green beans (95.5 percent), black beans (86.4 percent), kidney beans (72.7 percent), pinto beans (68.2 percent), soybeans or edamame (54.6 percent), garbanzo beans (52.3 percent), Great Northern beans (45.5 percent), navy beans (34.1 percent), and lima beans (31.8 percent). Of the different market classes of beans, parents significantly increased their use of black beans and Great Northern beans at home ( $p < .05$ ). Families significantly increased their use of canned beans, with 97.7 percent of parents/caregivers reporting on the post-survey that they serve them at home ( $p < .05$ ).

On the post-survey, 70.5 percent of parents reported serving beans one to two

times per week, and 76.8 percent indicated that their child liked beans. Parents served beans in a variety of ways on their home menus: as a side dish (90.9 percent), main dish (65.9 percent), in salads (47.7 percent), as snacks/appetizers (31.8 percent), and in desserts (11.4 percent). Although pre-survey results showed that none of the families served beans as part of desserts, children gave Black Bean Brownies sampled during the lessons the highest rating. The children's ratings of recipes ranged from 2.0 to 2.9 on a 3-point scale. With the exception of the seasoned green bean fries, the majority (50 percent or more) of children indicated they would eat the foods at home. At the study's conclusion, all of the recipes were provided to the preschool centers, and at least five of the top-rated recipes have been used.

Parents provided feedback about the newsletter, assessed their children's reactions to the project, and rated their own attitudes toward gardening. According to post-survey results, 86.4 percent of the parents read the "Bean Bulletin" newsletter at home, and they significantly increased their knowledge of the link between bean consumption and blood glucose control for diabetics and their knowledge of beans as a source of fiber and folate ( $p < .05$ ). All (100 percent) the parents agreed with the statement, "beans are affordable." Parents reported that their children talked about taste-testing the recipes (88.6 percent), described the activities they tried at the childcare center (81.8 percent), told them about gardening (68.2 percent), and talked about the stories read to them about beans and gardening (40.9 percent). Some families (18.6 percent) tried the supplementary bean activities at home.

As shown in Table 3, parents' self-ratings of attitudes and skills related to gardening showed trends toward improvement. On the post-survey, parents indicated that gardening provides a healthier alternative to buying food (97.7 percent) and is economical (86.1 percent), fun (83.3 percent) and relaxing (76.7 percent). Written comments were solicited from parents on the post-survey, and they included: 1) *"I think it was/is extremely beneficial for the kids to see how food is grown, how much effort it takes, and that not all food is processed and packaged in stores";* 2) *"My child really enjoyed this project! When it started, he was very averse to beans, but now he is more willing to try them and says that while he doesn't love them, they are OK";* 3) *"My child talked a lot about beans – especially about the nutritional benefits and that they are high in protein and belong to two food groups on MyPlate. She liked taste testing a lot";* 4) *"Thank you so much for your hard work on the project. I'm a single mom who does most of the cooking and it can be a huge struggle to get the kids to eat healthy after a long day. It was nice for them to hear from someone else that eating healthy and trying new foods really does have rewards";* 5) *"I couldn't believe my children were asking for beans at home. What an awesome way to promote healthy eating!";* and 6) *"My child was very excited to share what he knew with others and especially liked the taste testing at school and trying out recipes at home."*

## Summary

The "Spillin' the Beans" nutrition education curriculum highlighted the benefits of bean consumption and gardening and was piloted with 43 families in two Midwestern cities. The curriculum featured hands-on activities, including children's literature about beans and gardening, art activities, and taste testing. According to

pre- and post-surveys, parents/caregivers significantly increased their knowledge of beans as a source of fiber and folate. The use of canned beans significantly increased among families, specifically the use of black beans and Great Northern beans. The majority of parents read the newsletter and reported that their child talked about various aspects of the project at home. This study provides further evidence that a multifaceted, interactive approach to nutrition education that involves the family can promote the consumption of a variety of foods, including beans.

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**Table 1:** Results of Pre- and Post-surveys with Parents/Caregivers ( $n = 43$ )

Question/statement (correct answer, if applicable)	Pre-survey Percent response ("yes" or correct response)	Post-survey Percent response ("yes" or correct response)
Canned beans are served in our home.(yes)	84.1 <sup>a</sup>	97.7 <sup>b</sup>
Beans are a good source of protein. (true)	97.8	97.8
Beans are a source of fiber. (true)	79.6 <sup>a</sup>	93.2 <sup>b</sup>
Beans are low in fat. (true)	79.6	93.2
Beans are a source of trans fat. (false)	95.5	100.0
Beans are high in cholesterol. (false)	90.9	95.5
Beans are a source of the B vitamin folate. (true)	29.6 <sup>a</sup>	59.1 <sup>b</sup>
Beans are a source of natural antioxidants. (true)	31.8	45.5
Beans are associated with heart health. (true)	86.4	93.2
Beans are associated with blood sugar control. (true)	38.6 <sup>a</sup>	70.5 <sup>b</sup>
Beans are associated with weight management. (true)	70.5	81.8

Results in rows with different letters are significantly different ( $p < .05$ )

**Table 2.** Results of Sensory Analysis of Bean-containing Recipes Among Children

Recipe name	Rating*	Would you eat this recipe at home? (Percent “yes”)
Black Bean Brownies	2.9	97.9
Cowboy Beans	2.7	87.1
Pinto Bean Beef Tacos	2.7	87.5
Apple Cinnamon White Bean Muffins	2.7	94.6
Chocolate Chip Bean Muffins	2.6	96.0
3-Bean Chili	2.5	75.6
White-bean Hummus	2.5	72.7
Black Bean Fruit Salsa	2.3	61.9
Seasoned Green Bean Fries	2.2	46.2
Black Bean Sandwich Spread	2.0	50.0

\*Children rated the recipes on a picture-based scale, which was converted to 3-point numeric scale; 3.0 = highest score

**Table 3.** Parents' Ratings of Attitude and Skills Related to Gardening ( $n = 43$ )

Statement	Pre-survey percent agreement*	Post-survey percent agreement*
Gardening is too time consuming.	46.5	41.9
Gardening is relaxing.	72.1	76.7
I don't know how to garden.	45.2	26.2
Gardening is fun.	81.0	83.3
Growing food is a healthier alternative to buying it.	93.0	97.7
Gardening is economical.	81.4	86.1
Gardening is hard work.	74.4	72.1
I enjoy gardening with my child/ren.	79.5	82.1

\*The category of agreement was collapsed to include "strongly agree," "agree", and "somewhat agree."

## Appendix A

Additional resources for educators:

- The “Spillin’ the Beans” curriculum is available for purchase from the North Dakota State University (NDSU) Ag Communication Marketplace at [www.ag.ndsu.edu/food](http://www.ag.ndsu.edu/food)
- The “Spillin’ the Beans” cookbook developed by the NDSU Extension Service includes a variety of recipes and information about snap beans and dry edible beans. It is available online at [www.ag.ndsu.edu/pubs/yf/foods/fn1646\\_full.pdf](http://www.ag.ndsu.edu/pubs/yf/foods/fn1646_full.pdf)
- “All About Beans,” a publication by the NDSU Extension Service, provides a wide range of reference material about dry edible beans. It is available at [www.ag.ndsu.edu/pubs/yf/foods/fn1643.pdf](http://www.ag.ndsu.edu/pubs/yf/foods/fn1643.pdf)

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## Research

### Identifying Learning Needs of WIC Participants Regarding Dry Beans

Allyson Radford and Wendy Joanne Dahl

This study assessed the knowledge, attitudes, behaviors and perceived skills of WIC participants regarding the preparation and consumption of dry beans. A survey of WIC participants (n=131) in North Central Florida indicated that their knowledge was high regarding the nutritional and health benefits of beans, and they were confident in their ability to prepare beans. However, most respondents did not consider beans an alternative to meat, rarely chose low sodium canned beans, and expressed a need for bean-based recipes. The findings of this study suggest a need for recipes featuring beans and other low cost ingredients, and education promoting beans as an alternative to meat.

The Women, Infants and Children (WIC) Special Supplemental Nutrition Program serves millions of women and children in the United States through federal grants to states to provide for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk (USDA, 2012). Understanding the current knowledge and beliefs about the health and nutritional benefits of WIC supplemental foods is needed to ensure the development of appropriate and targeted educational programming for WIC participants.

According to the Dietary Guidelines for Americans, beans are recommended due to their protein (7-8 g per half-cup serving), fiber (>3 g per half-cup serving), vitamin, mineral and antioxidant contents, as well as having no cholesterol and being low in fat (USDA, 2010). The USDA's MyPlate recommendation is that beans, such as pinto, black, navy or kidney, are a unique food that can be included in the vegetable or protein group, and thus, beans are a valuable component of the WIC food package (USDA, 2011). The consumption of beans may have health benefits in preventing chronic diseases, such as cardiovascular disease, cancer, and diabetes (Mitchell, Lawrence, Hartman, & Curran, 2009; Hutchins, Winham, & Thompson, 2012).

Limited research has explored the knowledge, attitudes and beliefs of WIC participants related to food and nutrition. Specifically, Adedze et al assessed the knowledge, attitudes, and beliefs of WIC participants about nutrition and health risks related to childhood overweight ([Adedze, Chapman-Novakofski, Witz, Orr, & Donovan, 2011](#)). The study participants were found to be knowledgeable about causes of childhood overweight and the associated health risks. Marquart et al found that the beliefs of WIC participants about whole-grain foods were similar but less developed

than those of the food and nutrition professionals surveyed (Marquart, Pham, Lautenschlager, Croy, & Sobal, 2006). Alternatively, Pawlak et al explored the beliefs, attitudes and knowledge of WIC participants about peanuts and tree nuts (Pawlak, Colby, & Herring, 2009). These researchers found a lack of knowledge related to the nutritional and health benefits of peanuts and tree nuts, and that their beliefs were not consistent with current research evidence. Further research is needed to understand the knowledge, attitudes and beliefs of WIC participants regarding other foods, particularly those provided as supplemental foods.

In December 2007, the WIC regulations Code of Federal Regulations 7 C.F.R. Part 246 published by the Federal Register were amended to include canned beans (e.g. chickpeas, kidney beans, black-eyed peas canned in water and salt), as it had been determined that many WIC participants did not have the knowledge, skills and cooking equipment necessary to prepare beans from dry (IOM, 2005). Black et al found WIC participants reported that “although fresh fruit and vegetables were preferred for taste, many WIC participants ‘endorsed’ canned and frozen for convenience and cost” (Black, Hurley, Oberlander, Hager, McGill, White, & Quigg, 2009). This suggests that canned beans would be acceptable to WIC participants.

It is not known if WIC participants have knowledge of the health benefits of beans or the skills to prepare meals or recipes from canned beans. The goal of the inclusion of the canned bean option into the WIC food supplement program was to increase variety, convenience and general health benefits of the diets of WIC participants. However, this will only occur if WIC participants procure the canned beans and successfully incorporate canned beans into meals acceptable to their families.

## **Purpose**

The purpose of this study was to determine the knowledge, attitudes, behaviors and perceived skills of WIC participants in North Central Florida regarding the nutritional content, health benefits and the preparation and consumption of dried and canned beans. The authors hypothesized that the bean component of the WIC supplemental food package is underused due to lack of knowledge, meal planning, accessible recipes and food preparation skills.

## **Method**

A questionnaire to assess the knowledge, attitudes, behaviors and perceived skills of WIC participants, regarding the preparation and consumption of dried and canned beans, was developed and pilot tested by the authors. Participants were recruited from the Dixie County WIC program. The survey consisted of eight knowledge statements, four skill statements, eleven attitude statements, and twelve behavior statements. For each statement, participants answered using a rating scale format between 1 (strongly disagree) and 5 (strongly agree). Demographic information including ethnicity, race, age, number of people in household, and preferred language was also obtained. Ethics approval for the study was sought and approved by the Institutional Review Board at the University of Florida. Participants were approached in

the waiting room of the WIC office by research staff and asked if they would be interested in completing a survey on beans. If the participant agreed to take the survey, they were given an informed consent to read and sign. A small monetary compensation was provided for completing the survey.

## Results

A total of 131 completed surveys were obtained. This sample represented the Dixie County WIC clientele, as the majority of those that met the inclusion criteria participated in the study. Demographic characteristics of the survey respondents are given in Table 1.

Aggregate scores of the survey responses are shown in Table 2. Results indicated that general knowledge was high regarding the nutritional content of beans and that beans are an important part of a healthy diet. WIC participants were quite confident that eating more beans would make them healthier. There was a high “liking” of beans and a low ranking for avoidance of beans due to symptoms following the consumption of beans or difficulty in preparation, suggesting that these are not issues for this population. There was confidence in recipe and meal preparation with beans, with a positive ranking of “I would like to try new recipes with beans”. Respondents reported that they use beans as a vegetable or starchy food versus a meat replacement, and there was little evidence that bean use is associated with financial limitations to purchasing meat. Respondents reported that they cook many of their meals, and beans are often a part of those meals. Respondents reported that the inclusion of canned beans in the WIC package may have increased their consumption of beans. The need for bean recipes was highlighted with the positive ranking of “If I had good recipes that included beans, I would eat more beans”. Respondents also indicated that low sodium canned beans are not often selected.

## Discussion

The results of this study suggest that WIC participants are knowledgeable and confident in their ability to prepare beans, have positive attitudes towards beans and are successfully incorporating canned beans into their meals. However, there is an opportunity to increase the use of beans as a meat substitute, as well as to increase the awareness and use of low sodium beans. A nutrition education initiative focused on low cost recipes may be the optimal method to achieve these goals.

Previous research supports the efficacy of nutrition education in increasing the consumption of healthy foods by WIC participants. In California, a coordinated statewide nutrition education initiative on Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) family behavior regarding fruits and vegetables, whole grains, and lower-fat milk resulted in an increased consumption of fruits and whole grains, and replacement of whole milk with lower-fat milk by families ([Ritchie, Whaley, Spector, Gomez, & Crawford, 2010](#)). This positive finding is supported by Gerstein et al, who conducted group classes that focused on the value, importance and relevance of fruit and vegetable information to the adoption of new fruit and vegetable practices ([Gerstein, Martin, Crocker, Reed, Elfant, & Crawford, 2010](#)). The

positive outcomes of these initiatives suggest that education targeting bean consumption may be effective in the WIC population and potentially lead to improved diet quality and health of this population.

Increasing canned bean consumption, however, may pose a potential nutritional issue for the WIC population. Research has shown that higher pulse (bean, pea and lentil) consumption is correlated with higher sodium intakes ([Mudryj](#), [Yu](#), [Hartman](#), [Mitchell](#), [Lawrence](#), & [Aukema](#), 2012). These researchers suggested that the higher sodium intake may be due to canned pulse intake but may also be due to higher consumption of commercially produced, pulse-based foods such as hummus. A nutritional education intervention that results in an increased sodium intake would be of concern given that the current average sodium intake of Americans is much higher than recommendations, contributing to disease risk, such as hypertension (USDA, 2010). Thus, a nutrition initiative encouraging recipes incorporating low sodium canned beans is needed, as well as education related to the health benefits of decreasing sodium intake. In contrast, encouraging beans as an alternate to meat will help WIC participants meet Dietary Guideline recommendations and may promote improved health.

In conclusion, the findings of the present study suggest that the WIC participants in North Central Florida are knowledgeable about the nutritional and health importance of bean consumption. As the WIC participants were open to increasing their family's bean consumption, an opportunity exists for nutrition educators to facilitate this increase bean consumption through the promotion of beans as a meat alternate and the provision of low cost recipes incorporating low sodium canned beans.

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Table 1. Demographics of survey respondents (n=131)

Characteristic	mean $\pm$ SD
Age (year)	29 $\pm$ 11
Number of people in household	4 $\pm$ 2
Number of children in household	2 $\pm$ 1
	Percentage
English as preferred language	98%
Race	
White	88%
African-American	9%
Other/mixed	3%
Ethnicity	16%
Hispanic	16%
Non-Hispanic	84%

Table 2: Responses to survey statements regarding knowledge, attitudes, behavior and perceived skills regarding beans (Scoring: 1-Strongly disagree; 2-Disagree; 3-Neutral; 4-Agree; 5-Strongly Agree).

<b>Knowledge</b>	<b>Mean ± SD</b>
Beans are an important part of a healthy diet.	4.04 ± 0.9
It is important to eat at least 3 cups of beans per week.	3.55 ± 0.8
Eating more beans would make me healthier.	3.41 ± 0.8
Beans are a good source of protein.	4.19 ± 0.7
Beans are a good source of fiber.	3.93 ± 0.8
Beans are a good source of iron.	3.93 ± 0.7
There is a variety of beans available.	4.17 ± 0.7
<b>Attitudes</b>	
Eating beans is a sign that I can't afford meat.	1.76 ± 0.9
I could eat more beans, peas, and lentils	3.40 ± 1.0
I would eat more beans if I could prepare them in different ways.	2.93 ± 1.0
I would like to try new recipes that include beans.	3.65 ± 0.9
Cooking with beans takes too much time.	2.25 ± 0.8
Eating beans causes gas.	3.12 ± 1.0
I like the taste of beans.	3.95 ± 1.0
I will not try cooking new recipes because I am afraid they will not turn out.	1.80 ± 0.8
Everyone in my household likes beans (not including infants).	3.84 ± 1.0
I prefer to use canned beans instead of dry beans.	2.84 ± 0.9
I limit my intake of beans because I am afraid I will have flatulence (gas).	2.14 ± 1.0
<b>Behaviors</b>	
I will eat beans, but only as a last resort.	1.92 ± 1.0
Given the choice, I would choose other vegetables over beans	2.80 ± 1.1
I become frustrated when cooking something for the first time.	2.51 ± 1.1
I eat more beans now that canned beans are part of the WIC package.	3.10 ± 1.0
We cook many of the meals we eat.	4.39 ± 0.7
Many of the meals prepared for my family include beans.	3.50 ± 1.0
If I had good recipes that included beans, I would eat more beans.	3.33 ± 1.0
I sometimes serve beans in place of vegetables.	3.07 ± 1.0
I sometimes serve beans in place of rice, pasta or potatoes.	3.19 ± 1.1
I sometimes serve beans in place of meats.	2.32 ± 1.0
When I purchase beans, I choose the low sodium beans.	2.60 ± 0.8
<b>Skills</b>	
I know how to prepare beans.	4.03 ± 0.9
I am able to cook dry beans.	3.95 ± 1.0
I am able to include canned beans into meals.	4.03 ± 0.7
I am able to prepare beans in a variety of ways.	3.69 ± 1.0

## Research

### **An Extension Program Model to Sustain School Wellness Partnerships**

Michelle F. Brill, Alexandra Greci, Sherri M. Cirignano, Luanne J. Hughes, Daryl Minch, Kathleen Morgan, and Melissa A. Helfrich

Parent involvement in school wellness efforts helps promote student academic achievement and health. Cooperative Extension, a credible and trusted source of research-based information and services, can provide schools with training and effective strategies to engage parents in the health-related needs of students. This paper describes Grow Healthy Team Nutrition, an Extension-developed school wellness program model incorporating school/parent collaboration. Findings from Extension-created parent outreach tools including focus groups and a survey are presented. Parents and schools benefited from improved communication and participation in wellness councils, policy and program development, and overall enhancement to the wellness environment in a systematic, reliable fashion.

School wellness and coordinated school health are “buzzwords” in the school health and nutrition fields. School wellness refers to the environment, policies and programs that collectively impact the health of students, school staff, and the broader school community. The framework for school wellness mirrors the eight components of the Centers for Disease Control and Prevention’s (CDC) Coordinated School Health Program Model. The model includes school food services, nutrition education, physical education and physical activity opportunities, health education, health services, counseling and social services for students, as well as wellness promotion for faculty/staff and engagement of families and community members (U.S. Centers, Components of Coordinated School Health, 2013).

The Child Nutrition and WIC Reauthorization Act of 2004 (P.L.108-265, §204) required all schools enrolled in federal child nutrition programs to have a local school wellness policy in effect by the start of the 2006-2007 school year. The policy was required to contain goals for nutrition education, physical activity, and other school-based activities to promote student wellness; nutrition guidelines for all foods available on the school campus; and a plan for measuring policy implementation and the involvement of stakeholders (school foodservice representatives, parents, students, administrators, school board and community members). Wellness policy requirements were expanded by the Healthy, Hunger-Free Kids Act of 2010 (P.L.111-296, §204) and must now include goals for nutrition promotion, reporting on policy compliance and

implementation, and an expansion of the responsibilities and representation of the wellness policy body.

Schools have a unique opportunity to form partnerships with community stakeholders, including parents, in order to promote child health and to create a healthier school environment (Molaison, Carr & Federico, 2008). Preliminary work suggests that family and community involvement contributes to the success of school health programs (Carylon, Carylon, & McCarthy, 1998). Parent support is particularly crucial in promoting the food services component of a school wellness policy to encourage student understanding of, and participation in, a quality school meal program. Lack of parental support has led to less healthy eating behaviors and practices by students (Cho & Nadow, 2004).

Recent literature reveals a range of reported family/community participation rates in school wellness activities. A survey of Mississippi school principals reported that 43.5% of parents had knowledge of the wellness policy and that the family/community involvement component of their wellness policy was fully implemented in 51.5% of public schools, an increase from an earlier survey (Molaison et al., 2011). A Michigan study found that 77.1% of schools reporting included parents on their school health advisory boards (Serrano et al., 2007). The 2012 SHPPS study (U.S. Centers, SHPPS, 2012) found that 65.4% of districts had one or more school health councils, defined as groups that offer guidance on the development of policies or coordinated health-related activities. Among these districts, 79.1% had representation from students' parents or families. This represents a small increase from 76.3%, reported in an earlier study (U.S. Centers, SHPPS, 2006).

Molaison, et al. (2008) surveyed school wellness stakeholders on their perceived barriers to implementing a local wellness policy. The top barriers cited included lack of support of school administration, teachers and parents/families; and lack of training of school personnel on strategies to implement the school wellness policy. Specifically, school faculty need professional development training to learn how to develop strong partnerships with families (Michael, Dittus, & Epstein, 2007). Extension educators, as local community partners, are well positioned to help bridge the divide between schools and families by bringing to the table their knowledge of evidence-based best practices in partnership building, program development and evaluation, research, leadership and communication (Belansky et al., 2013; Torppa, 2010; Goard, 2010).

## **Cooperative Extension's Role in School Wellness**

The Cooperative Extension system is a credible and trusted resource for community problem solving (Warner, Hinrichs, Schneyer & Joyce, 1998). It offers school districts a wealth of research-based resources, such as help in identifying the change agents, providing health surveillance data, capacity building, disseminating information, and providing ongoing support at little or no expense (McDonald & Whitmer, 2007). Resources, such as Extension-developed toolkits, reports, fact sheets, websites, social media, research, curricula, and teaching materials are readily available to the public. Extension professionals serve on school wellness councils, provide grant writing expertise and, in some cases, award grants to schools (Goard, 2010; Torppa, 2010; Serrano, et al., 2007; Lambert, Monroe, & Wolff, 2010). For example, research by

Michigan State Extension Service identified the barriers faced by schools in successfully providing a healthful nutrition and physical activity environment (Hammerschmidt, Tackett, P. Golzynski, & Golzynski, 2011). In New Jersey, Cooperative Extension educators from the Department of Family and Community Health Sciences partnered with schools to implement a garden-based nutrition education and school wellness initiative (Cirignano et al., 2013).

## **Purpose**

This paper describes an Extension program model for collaboration between parents and schools on school wellness initiatives. Findings from Extension-created focus groups and surveys are presented and discussed. For purposes of this article, the term “parent” refers to the parent, guardian, or other adult in the household with the primary parenting responsibility.

### **An Extension Program Model to Foster and Sustain School Wellness Partnerships**

Schools can actively solicit parents and engage community resources and services to respond more effectively to the health-related needs of students (U.S. Centers, Parent Engagement: Strategies 2012). Extension is positioned to provide evidence-based school nutrition education and wellness promotion programs (Hermann, Parker, Phelps, & Brown, 2011) at a time when school communities are in need of additional training and resources. Recent changes to the Dietary Guidelines for Americans (U.S. Department of Agriculture & U.S. Department of Health and Human Services, 2010), and new regulations impacting school meals and wellness policies mandated by the Healthy, Hunger-Free Kids Act (2010), have opened up training opportunities on local wellness policy development and implementation, and promotion of good nutrition through farm to school initiatives such as school gardens. To respond to these needs, Cooperative Extension Family and Community Health Sciences (FCHS) educators partnered with the New Jersey Department of Agriculture to apply for a USDA Team Nutrition (TN) grant. The grant was awarded in September 2010 and the program, Grow Healthy New Jersey – Team Nutrition (Grow Healthy) was introduced in nine NJ elementary schools. Grow Healthy is a garden-enhanced school wellness initiative. It engages the entire school community, including students, teachers, nurses, foodservice personnel, administrators and parents. Grow Healthy’s educational objectives are to provide:

- Training for school foodservice personnel;
- Interactive nutrition education incorporating school gardens as hands-on learning tools;

and

- Technical assistance and support to create and maintain a healthier school environment through effective wellness policies and wellness councils.

The literature speaks to the importance of collecting local level data and making these data available to the community (Benjamins & Whitman, 2010). FCHS educators developed and implemented a multi-faceted process to assist schools with exploring strategies for effective, community-specific parent outreach. In the first phase of this process, trained FCHS educators designed and facilitated nine parent focus groups to investigate parental knowledge, attitudes, and behaviors pertaining to family nutrition and physical activity, and knowledge of/ involvement in school wellness programs and policies. In the second phase, FCHS educators developed and administered a parent survey to further identify attitudes and behaviors on key school wellness issues. Lastly, FCHS educators trained school-recruited parent wellness volunteers in classroom nutrition education, school wellness council service and the promotion of wellness events. This paper will focus mainly on the focus groups and parent survey described above. Details of the parent wellness volunteer activities will be described in a future report. This study was approved by the Rutgers University Institutional Review Board.

### **Parent Outreach Tools: Focus Groups and Parent Survey**

Grow Healthy project staff were trained in focus group design and facilitation techniques by an expert consultant. A series of 17 questions on key school wellness issues found in the literature were developed, with follow-up questions as needed. Topics included family eating and physical activity behaviors, parent knowledge of and views on school wellness policies and issues, and family information needs and practices.

FCHS educators convened focus groups in the spring of 2011 at each of the nine participating Grow Healthy elementary schools. Parent participants were recruited by the schools to obtain a cross sectional representation of their school community. Incentives such as light snacks, free child care, and small thank you gifts were provided in some cases to encourage attendance. Participants signed informed consents prior to attending the sessions.

Each focus group session lasted approximately two hours. As the FCHS educator guided the group discussion, a scribe recorded responses to each question on a flip chart. Each session was also voice recorded. The data were qualitatively analyzed by reviewing the written notes and recordings, and identifying common themes expressed by focus group participants. Two FCHS educators reviewed each set of notes and recordings for content validity and inter-rater reliability. Final summaries of the discussions were prepared for each school.

### **Focus Group Findings**

A total of 129 parents participated in the focus groups. Sessions ranged in size from 7 to 23 participants, with an average group size of 15. The participants were predominantly female, with a total of 115 female and 14 male participants.

The results of the Grow Healthy parent focus groups (Table 1) highlight opportunities for Extension educators to assist schools and parents in family and school wellness. The top barrier to healthy lifestyles cited by the focus group participants,

namely lack of sufficient time due to competing work/home/school schedules, is consistent with other research findings (Agron et al., 2008). Parents expressed a need to achieve a better life balance, and more information in key areas of nutrition and school wellness. Reports of the focus group findings were prepared for each project school and shared with the school's Grow Healthy team or school wellness council. The results provided a basis for parent engagement strategies for current and future school wellness activities. The strategies and opportunities developed and offered by schools take into account the conditions and needs of the families as expressed in the focus groups.

The Grow Healthy focus group "script" provided a foundation for the development of a parent survey to validate focus group findings and to obtain additional information from a larger sample of parents. The Grow Healthy project team, led by FCHS educators, developed a 24-question parent survey using earlier research survey models. The parent survey, administered in the first quarter of 2012, asked a series of questions clustered into four core areas: school wellness policy and programs; family nutrition and physical activity behaviors; farm to school concepts; and communication preferences. Paper and electronic surveys (using the online service SurveyMonkey) were made available in both English and Spanish languages.

A total of 966 surveys were completed, about half on paper and half online, representing an estimated family response rate of 30%. Paper survey data were subsequently entered manually into the SurveyMonkey template, in order to combine all data for analysis.

## **Parent Survey Demographics and Findings**

Survey respondents self-reported their demographic information. Eighty-four percent (84%) of respondents were female and 78% were between 31-45 years of age. Seventy-eight percent (78%) were college or post-college educated. Sixty-one percent (61%) identified themselves as White Non-Hispanic, 18% as Asian, 14% as Hispanic, 7% as Black Non-Hispanic and 1% as Pacific Islander/American Indian/Alaskan Native.

*School wellness policy and programs.* For the purposes of this paper, the results presented focus on parents' responses to several questions pertaining to their school's wellness policy and programs. Results (Table 2) supplement and support the findings from the focus group regarding the need to better engage parents in school wellness areas, and to provide information to assist with home-school-work balance.

Findings from both the focus groups and parent survey provided a wealth of information and served as a launching platform for dialog with parents and future work in school wellness activities (Table 3). Based on the findings, particular attention must be paid to familiarizing parents with the school wellness policy and exploring the best ways to communicate and involve them given the challenges of competing schedules.

## **Program Feedback**

At the completion of the 2011-2012 school years, school representatives of the Grow Healthy teams were surveyed for feedback on the process of working with the trained parent volunteer wellness champions. Eighty percent (80%) "strongly agreed" or

“agreed” that the volunteers made it easier to include nutrition lessons in the classroom. All respondents provided positive feedback on the experience of working with the parent volunteer wellness champions.

### **Limitations of Study**

Focus groups reflect a small sample of the population at large. Since participants were recruited by the schools, they were likely to be the most involved parents. Although efforts were made to recruit parents who were representative of the socioeconomic demographics of each participating school, there is no guarantee that that was achieved. Participants were mostly White Non-Hispanic and had high levels of education, possibly not reflective of the total school populations. Parents of high income and social class tend to be more involved at school (Henderson & Mapp, 2002). Low-income and minority parents face barriers to school involvement that may be different from other population groups, such as cultural factors, transportation, safety, child care issues, limited education and discomfort in an advocacy role and may have been under-represented (Garcia-Dominic et al., 2010; Peña, 2000).

### **Implications for Extension Educators**

Extension’s mission to bring local experience and research-based solutions together for the public benefit was illustrated through the Grow Healthy Team Nutrition school wellness collaboration. In addition to traditional roles as direct educators, Extension educators bring skills such as focus group facilitation and survey design/implementation to obtain necessary information to promote change. Parents and schools benefited from being better informed and more involved in examining wellness policies and programs in a systematic fashion. Anecdotal evidence from the final program evaluation indicates that the benefits extended beyond the school environment and into the home setting, specifically with regard to family nutrition behaviors. The positive and trusting relationships that have developed between Extension educators, school personnel, and parents/families lay the groundwork for future collaborations as the regulations and climate in school wellness continue to change. Extension educators can provide the tools and resources that schools will need to meet these challenges.

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**Table 1: Summary of Key Findings of Parent Focus Groups at Grow Healthy Schools**

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**Parents’/Families’ Eating and Physical Activity Behaviors at Home:**

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Parents understand the importance of family meals and eating adequate amounts of fruits and vegetables, but cite time management as the greatest barrier to healthy family eating.

Parents’ fruit and vegetable intake varied widely, between 1-5 cups of fruits and vegetables per day on average.

Frequency of family meals varied widely, between 1-7 meals per week eaten together as a family.

Parents do not allow their children to play outdoors without supervision, leading to a reliance on organized physical activity programs in school and in the community. Cost and transportation/distance can be access issues.

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**Parents’ Knowledge, Attitudes, and Beliefs about Key School Wellness Issues:**

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Parents want healthier school meals, a la carte food options, classroom celebrations, and fundraisers.

Parents need more detailed nutrition information about school meals and expressed a need for healthy recipes and convenient, affordable cooking tips for home.

Parents acknowledged the importance of and need to be involved in school wellness, but need more information.

Parents indicated a willingness to be involved in school wellness.

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**Parents’ Preferences for Nutrition Information Exchange:**

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Parents preferred a mix of communication modalities, including email, paper and the school website since not all parents have access/time for email and some districts are paperless.

**Table 2: Parents’ knowledge, beliefs, and behaviors related to school and family wellness issues**

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**Wellness Policy**

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- 66.2% of parents indicated they were “aware” of their school’s wellness policy
  - 31.1% of parents indicated they were “familiar” or “very familiar” with their school’s wellness policy
  - 75.6% of parents felt that it was “important” or “very important” for parents to have a role in wellness policy and programs
  - 68.1% of parents indicated they were “not at all involved” or “slightly involved” with their school’s wellness policy and programs
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**Healthy Eating and Physical Activity Role Modeling**

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- 76.2% of parents indicated that they “frequently” or “always” model healthy eating
  - 60.6% parents indicated that they “frequently” or “always” model being physically active
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**Family Meals**

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- 93.7% of parents indicated that it was “important” or “very important” to eat meals together as a family
  - 81.8% of parents cited “competing family schedules/over-scheduling” as a primary barrier to eating together as a family
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**Farm to School**

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- 69.4% of parents felt it was “important” or “very important” for schools to use locally grown fruits and vegetables in the cafeteria and in other food related activities
  - 48% of parents were “aware” or “very aware” of the use of school gardens as a way to promote healthy eating and physical activity in children
- 

**Preferred Methods of Communication**

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- 61.7% of parents would like to receive information about family nutrition and physical activity
- Preferred methods of receiving information included email/electronic newsletters (59.1%), school website (51.8%) and print materials sent home (45.1%)

**Table 3: Overview of Outcomes of Grow Healthy Parent Engagement Initiatives**

School Wellness Focus Area	Examples of Parent Engagement Activities
<b>School Wellness Councils</b>	Schools convened meetings of their school wellness councils, with parents included as representatives.
<b>School Garden Clubs</b>	Parents served as leaders and volunteers on garden committees during the school year. Families volunteered to maintain the school gardens when schools were not in session, including weeding and harvesting of produce.
<b>School-wide Wellness Events</b>	Parents organized and participated in school-wide wellness events, such as health/wellness fairs, culinary demonstrations, and family fitness events.
<b>Communication with School Foodservice</b>	Parents participated in additional school-initiated surveys and discussions about improving nutritional content and promotion of foods served at school.
<b>In-school Nutrition Education</b>	Trained parent volunteers (FCHS Wellness Champions) taught and assisted FCHS educators with garden-based nutrition lessons in school.

## Research

### Assessing Community Food Insecurity

Ellen Serfustini, Christine Jensen, and Debra Proctor

The incidence of food insecurity has risen significantly in the United States. The purpose of this study was to determine the prevalence of food insecurity and hunger within three rural counties in Utah by using the USDA Food Security Assessment Toolkit. Focus group data and responses were compiled to recognize trends, similarities, and areas of need. Results indicated community and Extension programs were deficient in teaching food preparation skills and basic financial skills to benefit-reliant audiences. This helped key personnel in developing plans to increase food security while addressing community needs.

In 2008 the nation witnessed the highest proportion of food insecure households on record since food insecurity statistics were calculated—almost 50 million Americans lived in food insecure households (Coleman-Jensen, Nord, Andrews, & Carlson, 2011). Nationally, the prevalence of food insecurity has been essentially unchanged since 2008 (Coleman-Jensen, Nord & Singh, 2013). However, in recent years the incidence of food insecurity in Utah has risen significantly.

Food security is defined as access by all people at all times to enough food for an active, healthy life. It includes the ready availability of nutritionally adequate and safe foods, and an assured ability to acquire acceptable foods in socially acceptable ways (Anderson, 1990).

Every state in the nation is experiencing food insecurity among its population. This problem does not stop with the poor, disadvantaged or the disabled. It covers all segments of the population and does not depend on race, economic advantages or disadvantages, or marital status. It is most affecting those who have limited access to enough food due to lack of money or other resources such as transportation (Coleman-Jensen, Nord & Singh, 2013; Diller, 2013; Alaimo, 2005; Ziliak & Gunderson, 2011). The affordability and availability of quality food has been documented as a factor influencing people's diets. A rural food desert is generally defined as a county where residents must drive more than 10 miles to the nearest supermarket chain or supercenter (Morland, Wing & Roux, 2002). Measuring the severity of these conditions in a community can help service providers and public officials address needs for assistance and programming (Bickel, Nord, Price, Hamilton & Cook, 2000).

The United States Department of Agriculture Economic Research Service has made a Community Food Security Assessment Toolkit accessible for communities to assess food security. This Toolkit provides step-by-step instructions for conducting focus group interviews about food security at the county level. The complete toolkit can

be found online at the URL provided in the reference section (Cohen, 2002).

### **Objective**

The objective of this study was to use the USDA Toolkit to determine the prevalence of food insecurity and hunger within three rural counties in Utah and how existing community and Extension programs were addressing this issue.

### **Methods**

Emery County was selected because the average monthly wage ranked first in the state, but the poverty rate was greater than the state average. Carbon County had the largest population of the three counties but the highest percentage of persons living below the poverty level. Wasatch County was chosen because its profile was very different from the previous counties mentioned. The percent of persons living below poverty was only 5.2% but the population was growing rapidly and the per capita income was greater than the state as a whole.

A series of three focus groups were conducted: Key Informant, Household Food Security, and Food Shopping Patterns. In Wasatch County, a total of six focus groups were held, three in Spanish via a translator and three in English. Because there is not a significant Latino population in Carbon and Emery Counties, only English speaking focus groups were held.

The research team consisted of Extension faculty from each of the three counties. One person acted as moderator while one recorded dialogue on a flip chart pad and one took handwritten notes. The 90 minute focus groups were also digitally recorded. Household Food Security focus groups and Food Shopping Patterns focus groups consisted of 10-15 people who were at risk due to income level based on screener questions found in the toolkit. All participants in these two groups qualified for Supplemental Nutrition Assistance Program (SNAP-Ed) benefits. Each participant received a \$20 compensation.

The Key Informant Focus Groups helped identify areas of concern within a community and to understand community food security issues from the perspective of community representatives (Cohen, 2002). Participants included the following county agency officials: food bank directors, religious leaders, Department of Workforce Services staff, Head Start directors, SNAP-Ed nutrition assistants, Women, Infants and Children (WIC) personnel, and other emergency food providers.

The second focus group, Household Food Security, was given a 16 question survey asking how often they ran out of food, how they made available food stretch further, and what coping mechanisms they used when there wasn't enough to eat.

The Food Shopping Patterns focus group participants were asked about the types of stores available to them and why they shopped where they did. Questions also included what obstacles were encountered when shopping, how often they shopped, and what other food sources were available in their community.

Focus group results were compiled and comparisons and similarities were noted by the research team. When similar comments occurred in the focus groups,

problem issues were identified.

### Findings

Nearly all participants reported that they ran out or worried about running out of food during the past year. When asked if there were certain reasons for running out of food, they reported job loss, seasonal employment, high utility and fuel costs, no summer feeding program at local schools, and increased food prices. Other factors included holiday and school expenses, medical bills, and unexpected guests.

Participants reported making food last longer by watering down or leaving out ingredients, using half the meat in a recipe, cutting portion sizes, serving one item meals, and skipping meals. To stretch food dollars they reported using generic brands, stocking up when on sale, using more beans, pasta and potatoes, shopping bargain bins, and cooking from scratch.

Table 1. Significant findings from survey participants

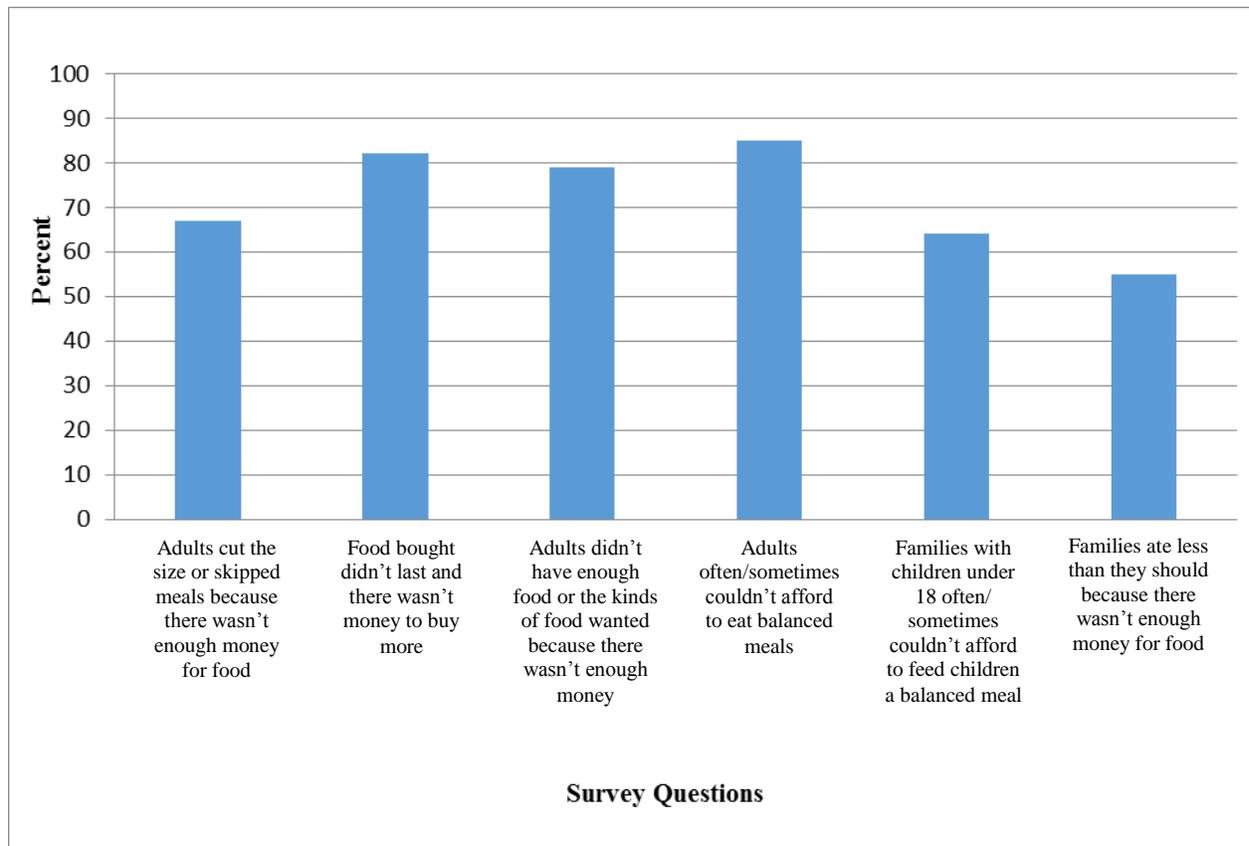


Table 1 illustrates the most significant findings from the USDA Toolkit Survey questions given to all participants.

Creativity was apparent when participants in the Household Food Security focus group were asked about places they acquired food when running short of money. Some admitted to dumpster diving, others frequented grocery stores for samples. Sadly, a few reported begging for food or taking free catsup packages to make tomato soup. Many participants were embarrassed to ask their family for help but would use community programs and churches first. Others indicated that these behaviors to acquire food produced social stigmas and they would rather go hungry.

Alternative food sources such as hunting, fishing, gardens, and farmer's markets, were discussed but it was found that few used these resources primarily because of the expense or lack of space to garden and no availability of benefit cards. Some communities would share food more freely with neighbors. In one county excess food from home gardens was placed at the post office for anyone to use. Some in the focus group reported using this as an alternate food source.

Different coping methods were used to help when food was scarce. Some of these included crying, praying, talking with others in the same situation, counting blessings, keeping busy, doing service, and working. This study indicated that food insecurity problems are similar among all participants, regardless of age, race, or marital status. This is consistent with studies from Ziliak & Gundersen, (2011).

The findings also indicated participants had low literacy levels, lack of food preparation skills, and many lack motivation to prepare balanced meals from scratch. Food insecurity is not just based on lack of income but relates to priorities, poor financial habits, and changes in circumstances. Similar findings have been reported in Bickel et al. (2000).

## **Discussion**

Factors that affect food insecurity include high gas prices, job loss, seasonal employment, lack of job opportunities and job skills, lack of food preparation skills, and low literacy issues. In addition, high transportation costs and no public transportation presented difficulties for many because they had to walk and carry groceries home. Some had to wait for rides with friends or borrow cars in order to shop. Some reported travelling a distance of up to forty miles to a larger store in order to get lower prices and more variety. These transportation findings are consistent with Edwards, Torgerson, & Sattem (2009).

While family and consumer science classes have been updated to encourage higher enrollment numbers with career-focused education such as culinary arts or hotel management, they still do not teach the skills needed for basic household management, i.e, cooking skills and nutrition. New focus on these important life skills and longer class times are needed (Lichtenstein & Ludwig, 2010; Cyr, 2013).

## **Implications for Extension**

Using the USDA Toolkit helped Extension faculty determine community needs and provide educational opportunities to those experiencing food insecurity.

As a result of this study, Extension faculty from the three rural counties have implemented monthly cooking classes to teach food pantry clientele basic cooking skills. These skills enable clientele to better use the commodities received each month. After presenting findings to local policymakers, one Extension faculty was instrumental in acquiring a new, larger food pantry with a teaching kitchen in the rural community.

More basic budgeting and financial classes targeting benefit-reliant families are being taught in the counties. These classes emphasize priority spending and slashing expenses to free up more food dollars.

Extension faculty from these counties also looked at current state curricula for junior and senior high schools and found them lacking in substantial food preparation skill activities. To address this issue, research findings were presented to Family and Consumer Sciences educators at a statewide conference. They were encouraged to increase the teaching of basic cooking skills in their classes.

### **Conclusion**

While these food insecurity findings reflect one small geographic area, the data collected was found to be similar in many ways with research conducted throughout the country. The information derived from this study could be useful to Extension personnel in other states who would like to conduct an assessment and provide educational opportunities addressing findings in their communities. The Women, Infants and Children (WIC) Special Supplemental Nutrition Program serves millions of women and children in the United States through federal grants to states to provide for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk (USDA, 2012). Understanding the current knowledge and beliefs about the health and nutritional benefits of WIC supplemental foods is needed to ensure the development of appropriate and targeted educational programming for WIC participants.

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## Implications for Extension

### **Smart Choice: A Solution for a More Health Insurance and Financial Literate America**

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and  
Maria Pippidis

The Patient Protection and Affordable Care Act of 2010 requires many consumers to make health insurance selections and decisions for the first time. However, research shows that selecting health insurance is not an easy task for many consumers. This article explores the unique and unbiased Smart Choice Health Insurance© curriculum, grounded in theory and research, which provides the opportunity for both consumers and educators to increase capacity and confidence when making health insurance decisions.

The Patient Protection and Affordable Care Act of 2010 (ACA) provides new health insurance protections and benefits for all Americans. The ACA will impact the currently insured as well as provide an opportunity for over 31 million consumers, nationwide, to obtain health insurance through the marketplace, private employer insurance, or Medicaid expansion (APHA, 2012). This law will require many consumers to make health insurance selections and decisions for the first time (APHA, 2012; KFF, 2012). Selecting health insurance is not an easy task for many consumers; they are challenged with making health insurance decisions, choosing appropriate levels of coverage, evaluating needs or examining personal financial situations (Consumer Reports, 2012; Kim, Braun & Williams, 2013; Quincy, 2012). Moreover, some consumers do not understand important terms, features, or how to shop and compare (APHA, 2012; Kim et al., 2013; KFF, 2012; Loewenstein, Friedman, McGill, Ahmad, Linck, Sinkula, Beshears, Choi, Kolstad, Laibson, Madrian, List, & Volpp, 2013; Quincy, 2012).

In 2011, Consumers Union, American Institutes for Research, and University of Maryland Extension hosted a roundtable discussion with financial literacy, health literacy, and health insurance experts to begin tackling the issue of health insurance literacy. This roundtable produced a working definition of health insurance literacy: the degree to which individuals have the knowledge, ability and confidence to: a) find and evaluate information about health plans, b) select the best plan for his or her family's financial and health circumstances; and c) use the plan once enrolled (Quincy, 2012). After participating in the roundtable, an interdisciplinary Health Insurance Literacy Initiative (HILI) team of Maryland and Delaware Extension

Educators began to explore the current state of health insurance literacy, knowledge, and efforts to determine the need for consumer education. The team conducted an environmental scan and literature review and subsequently found there was a need for an unbiased and comprehensive educational program to help Americans approach one of the toughest annual decisions they make, purchasing health insurance (Kim et al., 2013; Loewenstein et al., 2013; Sinaiko & Hirth, 2011). The purpose of this article is to share the development of the Smart Choice Health Insurance© curriculum designed to help consumers make informed health insurance decisions.

### **Literature Review Findings**

Kim et al (2013) assert that consumers' exhibit limited health insurance literacy. The literature suggests that consumers want attainable and comprehensible information; to know plan costs, benefit specifics, and flexibility with regard to choosing doctors, specialists and coverage areas (Consumer Reports, 2012; Lako, Rosenau & Daw, 2011). Additionally, when given an easy yet effective tool to compare health insurance plans, consumers tend to fare better (Kim et al, 2013; Hibbard, Slovic, Peters & Finucane, 2002).

Theory is an important consideration because it provides a scientific approach to guide interventions and modifications that can encourage behavior change as well as a way to understand and explain the findings. The extant literature and theoretical frameworks guided the development of this research-based curriculum. Four consumer behavior and learning theories were used: social cognitive theory addresses self-efficacy; empowerment theory focuses on self-confidence and control over problems; stages of change or readiness addresses the transition from contemplation to action through new behaviors; and adult education theory emphasizes solving and managing problems through active involvement and multiple styles of learning.

Based on the review of literature and analysis of applicable theories, the HILI team decided to create a new curriculum. This new curriculum incorporates multiple theoretical frameworks that help consumers obtain and understand the information to select health insurance plans and give them the critical thinking skills to make a smart choice with ease and effectiveness. Careful application of the key theoretical concepts increases the likelihood that the level of health insurance literacy of consumers will improve. The resulting curriculum was named Smart Choice Health Insurance©.

### **Curriculum Overarching Goals**

Smart Choice Health Insurance© is designed to provide a balanced, unbiased view of the topic with special attention to key benefit provisions of the ACA and sensitivity to its political considerations. The curriculum provides clear, measurable learning and behavioral objectives explicitly linked to learning theory, evaluation questions linked to learning objectives, and opportunities for active engagement of learners. The curriculum addresses multiple populations by incorporating respect for

diversity with regard to ideas, principles and language. It also was tailored to enhance consumers' strengths and assets as well as address consumers' needs and interests.

### **Smart Choice Health Insurance Hypothesis**

The team created this guiding hypothesis: As a result of participation in the workshop, consumers will reduce confusion (RC), increase capability (IC) and increase confidence (IC), which will help them make a smart choice (SC). Embracing this hypothesis led to the development of questions that addressed why, what, and how, and which framed the curriculum development.

The hypothesis is expressed as:

Reduced Confusion + Increased Confidence and Capability = Smart Choice.

### **Our Guiding Framework**

Although many educators teach consumer decision making and financial literacy, research suggests that teaching health insurance is not emphasized and purchasing is a skill that many consumers have not mastered (Kim et al, 2013). Effective education programs and simple tools could improve consumers' health insurance literacy and decision making (Kim et al., 2013; Loewenstein et al., 2013; Sinaiko & Hirth, 2011). To that end, the curriculum embraced the following questions as a learning framework:

1. Why do I need health insurance? Why is it important? Consumers need to understand why health insurance is important. These reasons include peace of mind, financial protection, value-added health and wellness services, and overall better health outcomes. We expressed importance from a risk reduction perspective. Overall, the curriculum focuses on the benefits of having health insurance.
2. What do I need and want? What are my choices? Addressing needs and wants is an ever-essential skill for consumers. In this regard, the curriculum focuses on helping consumers determine their family needs and available choices. This discussion focused on frequency of doctors' visits, types of doctors/specialists visited, medications, and current/pending medical conditions or changes. Introduction of insurance choices include: sources of insurance providers, understanding the difference in types of insurance options offered, and understanding the health insurance marketplace as a source of insurance.
3. How much will it cost? How much can I afford? Considering a consumer's current spending plan/budget, consumers are asked to calculate the costs of three available health insurance plans and determine the option that best meets their needs.

The HILI team believes that answers to these simple questions will help

consumers make a smart choice health insurance decision.

## **Curriculum Development**

The purpose of this curriculum is to guide consumers in making health insurance selection. Hibbard, Slovic, Peters & Finucane (2002) found that consumers perform well when given a tool that presents information in a simple format that allows them to compare plan aspects without viewing unneeded or cluttered information. In addition to tools used to apply knowledge and skills effectively, consumers need education to enhance health insurance literacy (Kim et al., 2013; Loewenstein et al., 2013). Using the framework questions and hypothesis, an educational workshop was developed in the winter of 2012-13, pilot tested in spring of 2013, and revised during the summer of 2013. Revisions were based on results of the curriculum and material review as well as evaluation feedback from pilot program educators and consumers. The program was officially launched in the fall of 2013 after five trainings were conducted to certify 89 Extension Educators across the country. Throughout the year, additional updates have been made to the curriculum content due to the changing nature of ACA implementation.

Curriculum resources include a PowerPoint presentation with speakers' notes, a case study, sample insurance plans and summary of benefits, the Smart Choice Health Insurance© workbook, pre- and post-evaluation tools, and relevant factsheets. The creation of the case study was necessary to provide consumers the opportunity to practice newly learned and developed skills (Russell, Little, & Pippidis, 2014). In addition to information about health insurance terms, types and providers is presented along with information about the ACA, a major component of the educational workshop enables consumers to practice working through the process of making a health insurance decision based on case study specifics which include family needs and budget, sample insurance plans and the Smart Choice Health Insurance© workbook.

Use of standardized and tested evaluation items created by American Institutes of Research strengthened the impact assessment of Smart Choice Health Insurance© and provides data necessary for educators to develop and tailor curricula to meet local needs. National use of standardized measures will help researchers collect baseline and impact data over time as well as aggregate data on the health insurance literacy of America. Local educators can use the results for their own purposes. Results from a curriculum that is research-based and evaluated will provide evidence that consumers are meeting the challenge of making confident health insurance purchase decisions. Confident, informed decisions are a key step toward improving the health and well-being of consumers and families.

## **Workshop Content**

The consumer education workshops are the foundational learning experience and have the following learning objectives: consumers will (1) analyze personal and family health care needs, wants, and health care spending; (2) compare health insurance plans to determine the best choice for you and your family; and (3) apply

the knowledge and information gained to make a Smart Choice health insurance decision.

Consumers learn the importance of health insurance, explore ways to access health insurance, and review information needed to make a health insurance decision. They also have the opportunity to practice using the Smart Choice Health Insurance© workbook and related tools to evaluate and make a health insurance decision, using a case study (Russell, Little & Pippidis, 2014). Through the use of the tools, consumers are able to determine which health insurance plan is best, based on needs, wants, costs, and coverage.

Consumers practice decision-making with the guidance of a trained Extension Educator. During the workshop, consumers are encouraged to work together, in small groups, which helps create a realistic team or family scenario. Consumers soon realize that the conversations in the workshop are similar to the conversations around the dinner table with family members. In addition, consumers leave the workshop with a Smart Choice Health Insurance© workbook for later use at home or to share with others.

### **Workshop Outcomes**

Through the use of the workbook, consumers can compare up to three health insurance plans and determine which plan is best, in terms of needs, wants, costs, and coverage. Findings from the pre-test in the spring of 2013 found that consumers increased confidence (Braun, McCoy & Little, 2013). A full-scale test of the consumer education workshops and the workbook began in the fall of 2013. By June 2014, 108 educators in 28 states were certified to teach the curriculum. Findings will be used to modify the curriculum in the spring of 2014 for use beginning in late summer. With these findings, the team will have preliminary evidence to accept the hypothesis of Reduced Confusion + Increased Confidence and Capability = Smart Choice. Additional evidence will be needed to determine if they were able to make a smart choice after the workshop at the time of health insurance purchase. Outcomes for consumers who participate in a workshop using a curriculum based in learning theory and evaluated for effectiveness, provide evidence of the extent to which consumers can make informed health insurance purchase decisions when participating in a well-designed workshop.

### **Future Initiatives**

Both through the creation of the curriculum and in teaching other Extension Educators to use the curriculum, we learned that this curriculum can be used as personal and professional development for educators. Educators are consumers too, and find themselves faced with the same decisions our clientele and communities face. Educators also show increased confidence to teach workshops after participating in a consumer workshop.

We also learned that we can address the ACA in a non-biased manner by explaining the changes in health insurance that benefit all consumers. They need to know and understand these changes to make more accurate cost estimates and

determine which health insurance plans best fit their needs, wants, and financial situations. The ACA has been the driving force to bring health insurance literacy to the forefront of both public and educator attention. This is, as Kim et al (2013) suggested, providing a teachable moment for both consumers and educators.

Smart Choice Health Insurance© is unique in its theoretical framework and research base and has provided the opportunity for educators to develop both personally and professionally. This curriculum has increased personal capacity and confidence of consumers and educators, alike, without political bias. Use of the Smart Choice Health Insurance© curriculum across the nation, provides an avenue for Cooperative Extension to mobilize, demonstrate nationally aggregated data, and to document behavior change (Braun, 2012). The use of this standardized evaluation tool will show the impact Cooperative Extension can make at national, state and local levels. The data will be shared with partner states and national decision makers. Smart Choice Health Insurance© is robust enough to potentially touch every American.

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## Best Practices

### **Best Practices for Parent Education with Head Start Families: Lessons Learned From a Parent and Sleep Education Program**

Cassandra L. Kirkland, Lori Elmore-Staton, Elizabeth Thorne, Karen Crow,  
and Kirsten Ferrell

Improving children's academic readiness is a central goal of Head Start programs. Extension can prove to be an effective partner in assisting Head Start with this endeavor. Extension has the capacity to provide research-based training to Head Start parents that is focused on improving children's cognitive and emotional functioning. However, most parenting programs are unilateral in their focus on general parenting topics and may not incorporate parent training in areas that directly impact children's academic achievement. Therefore, comprehensive parent education programs that focus on parenting as well as child outcomes are highly needed. The current paper details an innovative approach to parent education that integrates parent and sleep education in an effort to improve Head Start children's academic readiness. The methodological design of the program determined sustained program effects: one-year follow-up surveys as well as traditional pre/post assessments and evaluation tools were utilized. Scales measuring parenting, emotion regulation, marital conflict, and sleep quality were administered. Best practices for parent education with Head Start families are discussed.

Contemporary American families face diverse challenges that warrant a holistic approach to programming from Extension practitioners. In consideration of working with Head Start families, a prime target population for Extension, it is imperative that programs consider not only the potential for improving parenting outcomes, but also the possibility for improving multiple areas of child well-being and adjustment. Previous research indicates that educational efforts focused on improving relational outcomes between parents/co-parents may also indirectly improve children's socio-emotional functioning (Grych & Fincham, 2001; Kirkland, et al., 2011). The Sleep Hygiene and Parental Engagement: Children's Academic Readiness Enhancement (SHAPE-CARE) program was created in response to the need for more comprehensive parent education programs for Head Start families that aim to improve basic parenting skills and multiple child outcomes (socio-emotional, physical, and cognitive). What differentiates SHAPE-CARE from other parenting programs is its programmatic design that is specifically tailored to impact parenting and child outcomes, namely children's academic readiness. The current paper highlights an innovative approach to parent education that addresses

challenges faced by Head Start families and lessons learned during program implementation that may prove to be helpful for Extension programming.

## **Background of the Program**

SHAPE-CARE is an interdisciplinary and comprehensive approach to parent education that integrates biophysiological (sleep and emotion regulation) and relational concepts into a parenting intervention aimed at improving children's academic readiness. Three general predictors are the focus of this interventive effort: conflict management in the context of the individual, inter-parental, and parent-child domains; sleep hygiene for children and adults; and the implications of parental engagement on children's academic achievement. The specific topics that were covered to serve as a proxy for these focal predictors were: improving co-parenting and/or intimate relationship quality, family conflict management, emotion regulation, sleep and sleep hygiene, and parental engagement in children's education. Promoting conflict management skills in the parental and/or co-parenting relationship was the foundation of the program due to substantial evidence which indicates that inter-parental conflict permeates parenting behaviors, and this conflict, particularly within the vulnerable Head Start population, amplifies the threat to children's emotional, social, and cognitive well-being (Grych & Fincham, 2001; Zimet & Jacob, 2001). Furthermore, chronic exposure to inter-parental conflict disrupts sleep (El-sheikh, Buckhalt, Keller, Cummings, & Acebo, 2007), which compromises the prefrontal cortex's ability to coordinate attention, impulse control, and emotion regulation (Dahl, 1996). Importantly, the prevalence of sleep problems are higher among African American children, which has been posited as a partial explanation of the achievement gap between African American and European Americans (Buckhalt, El-sheikh, & Keller, 2007; Buckhalt & Staton, 2011). Therefore, programmatic efforts that improve children's sleep may be especially salient for participants in the SHAPE-CARE program considering how the vast majority of potential participants are African American. For example, over 90% of families served at partnering Head Start Centers are African American. Taken together, this evidence indicates a strong need for interventions aimed at improving family functioning and biophysiological processes that influence children's school readiness.

Program participation consisted of attendance in six (2-hour) parent education classes offered at the Head Start Center. An adapted version of the research-based curriculum, "Together We Can" (TWC; Michigan State Extension, 2009), was utilized for the conflict management portion of SHAPE-CARE. TWC provides skills training in communication strategies (e.g., conflict management skills), intimacy-building, expanding support networks, and financial, stress, and anger management. The primary goal of TWC is strengthening co-parenting relationships in an effort to promote children's well-being. This program was designed for implementation with lower literacy populations and single parents, but it can be used with both married and nonmarried individuals/couples.

To broaden the programmatic scope of TWC and focus on factors that tend to be excluded from parent education, the program was adapted to include techniques for

coping with conflict – which may disrupt biophysiological processes – and engaging parents in their children’s education. For example, parents were provided with relaxation and breathing techniques that assist with emotion regulation, as well as ways to promote optimal sleep, which can help reduce stress and/or conflict. More specifically, the SHAPE-CARE consisted of the following modules: Module 1) Introduction to the program – Setting Future Goals for Family; Module 2) Conflict Management, Positive Communication, and Stress Management; Module 3) Understanding the implications of poor sleep on family functioning, children’s cognitive functioning, and emotion regulation; Module 4) Strategies for Promoting Better Sleep; Module 5) Parenting Strategies for Becoming More Engaged in Children’s Education; and Module 6) Summary Session and Devising a Plan of Action.

### **Partnering with a Regional Head Start Organization**

When initiating a partnership with a local Head Start organization, one of the most helpful strategies is gaining approval from a regional or state administrative body that has direct oversight over the local Head Start organization an Extension practitioner may want to serve. Clearly delineating the goals of the program and how they support the goals of Head Start elicits strong support from administrators – research briefs and formal presentations can assist in this process. Highlighting the research-based nature of your program and the elements that differentiates it from others can also assist in gaining consent. After verbal consent or approval is given, agents may consider acquiring a letter of support for IRB compliance and/or a memorandum of understanding for accountability purposes. The success of Extension programming in this population hinges upon the ability to establish a strong partnership with the local and regional Head Start administrative staff. It is imperative that administrators have a comprehensive understanding of your project and a belief that it is beneficial for the families they serve.

### **Recruiting Parents**

In the recruitment process, teachers at the local Head Start program are the best advocates and most important recruiters due to their trusted relationship with parents. Evidence from community-based participatory research indicates that individuals are more likely to participate in educational programs when they are endorsed by trusted leaders (Christopher, Watts, McCormick, & Young, 2008). To promote teacher endorsement and support, providing a clear understanding of your program and how it may enhance the skills teachers are developing inside the classroom is a method that resonates well with educators. This goal can be achieved by conducting in-service trainings that detail the supporting research of your program and how it may enhance/support the work of teachers inside the classroom. Special consideration should be given to ensure that trainings do not impede upon time designated for teacher planning or other administrative responsibilities. An optimal time to conduct in-service training for teachers is during their professional development training that occurs the week before the start of a new academic year.

In reference to making direct contact with parents, at least three tools for recruitment should be utilized. At minimum, one method should be an in-person contact with potential participants, and the Head Start parent orientation at the beginning of the school year is an optimal opportunity to make this contact. For print materials, use creative language and images that illustrate the fun nature of the program – make sure to use strength-based and empowering language. Avoid using jargon that may give an impression of participating in a mental health program. It has been noted in the literature that low-income individuals are less likely to utilize mental health services for a variety of reasons that include high cost, health care issues, possible stigma, cultural insensitivity in delivery of the services, and transportation difficulties (Harrison, McKay, & Bannon, 2004; Mojtabai, 2007). Practitioners may want to emphasize the connection between participating in the educational program and fulfilling requirements for parent training that are required for all Head Start parents. And lastly, it may be helpful to conduct a pre-assessment that will determine the best time and day for the majority of parents.

### **Program Implementation**

To encourage consistent program participation, SHAPE-CARE participants received reminders via phone and text messages. Furthermore, program content was tailored to meet the needs of each individual class by allowing for ongoing feedback on program content needs and interests. In addition, all perceived barriers to program participation were removed by providing child care or conducting sessions during the operation hours of Head Start. Pre-assessment tools assisted in finding a day and time that worked well for the majority of participants. The second iteration of the pilot program was recently completed and one cohort of parents participated after the Head Start school day, and the other cohort of parents participated during the school day in a “lunch and learn” format. Light meals were provided at each session, and participants received compensation for program participation and completing surveys and sleep diaries.

### **Methods/Evaluation**

To gather a comprehensive understanding of program impact, both basic and evaluation assessment tools were utilized. Parents completed an extensive inventory of over 15 instruments that covered conflict, couple relations, child health and behavior, child sleep, and parent sleep. Typical pre/post design was used, and in addition to the surveys, parents also completed sleep diaries in which investigators contacted parents four nights prior to and following program participation to obtain information on bedtime routines, sleep patterns, and child mood. To gain an understanding of the role of the home sleep environment, the newly developed *Home Observation: Uncovering the Sleep Environment* (HOUSE) survey (Staton, Buckhalt, El-Sheik, & Kirkland) was piloted. Additionally, Head Start teachers completed assessments of children’s sleepiness inside the classroom. A one-year follow-up was conducted with parents to determine sustained program effects. The following research methods will be utilized in

future analyses: structural equation modeling, t-tests, and general linear modeling such as multivariate analysis of variance.

One of the major assessment benefits of working with Head Start was access to academic readiness data. After obtaining parental consent, SHAPE-CARE obtained access to academic readiness data that was collected by Head Start. More specifically, the instruments utilized to assess academic readiness were the 3<sup>rd</sup> Edition of the Learning Accomplishment Profile (LAP-3), which is a criterion-referenced assessment that examines children's development in the following outcomes: 1) language development, 2) literacy, 3) mathematics, 4) science, 5) creative arts, 6) social and emotional development, 7) approaches to learning, and 8) physical health and development; and the Kaufman Survey of Early Academic and Language Skills (K-Seals), which assesses children's expressive/receptive language skills, pre-academic skills, and verbal articulation.

To gather feedback from the participants, focus groups were conducted after program participation, which enabled parents to discuss the most and least helpful components of the program. They also had an opportunity to make suggestions for improving the program. A collaborative and strengths-based approach afforded participants the opportunity to indicate additional topics they would like to cover during the duration of the program. Responses from the participants were compiled and their suggestions incorporated in later iterations of the program. Moving beyond establishing basic correlational relations between family functioning and child outcomes, the evaluation procedures of the current project aimed to identify specific protective mechanisms and processes in these relations within a Head Start population.

The evaluation and assessment design of SHAPE-CARE is considerably extensive; however, coordination with a specialist and acquiring university supports such as graduate students may assist in meeting the rigorous demands of this evaluation design. As Extension practitioners are faced with questions about the validity of Extension programs, concrete evidence generated from extensive evaluation efforts may provide unquestionable documentation of the meaningful impact of Extension programs.

## **Limitations**

One of the major limitations of the current research/evaluation design was the lack of a comparison/control group; therefore, being unable to confirm that changes post program are not due to general developmental changes in children over time. Furthermore, this also brings into question the improvements parents may experience post program, which could be potentially due to the passage of time. Additionally, it would be important to replicate the program in various settings outside of Head Start to determine if results and implications from this program design may differ based on the target population.

## **Implications for Children, Families, and Extension**

Results from this approach to parent education with Head Start parents may indeed have important implications for reducing the education gap between lower SES children and their peers from higher SES backgrounds. Furthermore, results may also highlight the important role of sleep in promoting children's academic readiness and health. Expected program effects may also demonstrate the efficacy of comprehensive approaches to parent education that focus on integrating bio-physiological concepts into traditional parent education models.

In reference to Extension, Head Start provides an optimal setting for delivering Extension programs focused on parent education. One of the major challenges faced by many practitioners is sustained program involvement from participants. Due to the required hours for parent training that Head Start parents must complete, this population may serve as not only a captive audience, but an audience that may highly appreciate the expertise and attention to diversity in which Extension specializes.

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## **Best Practices**

### **Times of Change: A Proactive Response from Extension for Improving SNAP-Ed Management**

Carol Chandler, Elizabeth Smith, Cheryl Spires

The Supplemental Nutrition Assistance Program Education (SNAP-Ed) management structure for Ohio State University Extension experienced many changes over the past few years. To maintain the fidelity of the grant-funded program and to help ease the efforts to remain fiscally sound, a regional approach was implemented. Regional Program Specialists were introduced as the liaison between state SNAP-Ed leaders and county program assistants. The findings indicate that while overall the regional structure has improved communication, consistency and fiscal management, these positions have not eliminated the need for a county Family and Consumer Sciences Educator to monitor and support the local program assistants.

Ohio is made up of 88 counties which are organized into three regions for Ohio State University Extension (OSUE) supervision purposes. Supplemental Nutrition Assistance Program Education (SNAP-Ed) is present in approximately 65 Ohio counties. The original supervisory model established in 1994, when the SNAP-Ed program began in Ohio, was for a Family and Consumer Sciences (FCS) Educator to provide programmatic and fiscal oversight to the county's program, as well as state/county matching dollars for the SNAP-Ed grant.

SNAP-Ed is a nationally implemented and federally funded nutrition education program designed to increase the likelihood that individuals eligible for SNAP benefits (formerly known as food stamps) would make healthy food choices. In 2010, the Healthy Hunger-Free Kids Act was signed and set for implementation in 2011. This act changed SNAP-Ed from a general nutrition and food safety focus to a nutrition education and obesity prevention grant program while also encouraging states to create a competitive grant process. The legislation also removed the federal match component and capped funding based on a formula.

In 2010, local and state budget cuts as well as a large number of retirements led to a significant decrease in the number of FCS Educators. Thirty-two county-based FCS Educator positions were never filled; therefore a decrease in supervision for SNAP-Ed was visible. FCS and SNAP-Ed Administrative leaders recognized that a new level of supervision was needed. Consequently, following a one year pilot, the SNAP-Ed Regional Program Specialist structure was implemented in Ohio for

Fiscal Year 2013. This article seeks to report the results, advantages and challenges experienced by the Ohio SNAP-Ed team to restructure the management process.

### **Objectives**

1. Present the advantages of establishing the Regional Program Specialist Positions for the Ohio SNAP-Ed program.
2. Share the challenges related to the new structure.
3. Identify solutions for overcoming challenges.
4. Assist Extension SNAP-Ed program professionals in utilizing and adapting this structure for management of their programs.

### **Method**

The North East region of Ohio was particularly affected by the loss of FCS Educators. Thus, the FCS Program Leader in conjunction with the SNAP-Ed Administrative Team launched a trial year hiring a SNAP-Ed Regional Program Specialist. During the one year pilot, the process was well documented and assessments were done periodically. The SNAP-Ed Regional Program Specialist and the SNAP-Ed Administrative Team met weekly via conference calls. In addition, face to face meetings were conducted as often as monthly. At the end of the pilot year and after evaluating its effectiveness the decision to transition to a structure with three SNAP-Ed Regional Program Specialists was made. Job postings included position objectives and tasks generated from the results of the pilot. These included:

1. Providing technical, programmatic and fiscal support for the region's SNAP-Ed Program Assistants (PAs)
2. Hiring, training, and coaching new SNAP-Ed Program Assistants in the region
3. Developing, monitoring, and managing the region's SNAP-Ed needs assessment, plan of work, and budget
4. Serving as a liaison for Ohio SNAP-Ed among county, region, and state Extension professionals and collaborating agencies
5. Working closely with the FCS Program Leader to implement and promote FCS programming. In order to facilitate the final objective the FCS administrative budget paid for a .1 to a .2 full time equivalent (FTE) supplementing SNAP-Ed funding and allowing the Regional Program Specialists the flexibility to work outside the scope of SNAP-Ed for a small percentage of their time.

Following the hiring of three SNAP-Ed Regional Program Specialists (all of whom had served as county FCS Educators and supervised a SNAP-Ed PA in their previous positions), the SNAP-Ed Regional Program Specialists met with OSUE's Community Nutrition Leader and Ohio State University Extension's SNAP-Ed

Director to plan the direction of SNAP-Ed and seek to accomplish the identified goals. The SNAP-Ed Regional Program Specialists, along with state leaders, created a document that identified specific guidelines for PAs to better clarify procedures for requesting permission to make purchases and to complete monthly fiscal paperwork. Timelines were provided for the activities. In addition, the SNAP-Ed PA Performance Standards were outlined in greater detail to standardize program implementation and to assist PAs in better understanding the criteria used for the annual performance appraisals. Both of those efforts helped bring more consistency to the way the program is implemented across the state and the job expectations of program assistants.

In order to facilitate the distribution of these documents and give PAs an opportunity to ask questions and have discussion, each Regional Program Specialist held a meeting for the SNAP-Ed PAs and the FCS professionals in their region. OSUE SNAP-Ed Administration also attended these regional meetings to contribute to the discussion. SNAP-Ed program staff continues to meet regionally twice a year for training and reinforcement of programming direction, policies and procedures.

When PA vacancies occurred, the Ohio Community Nutrition Leader, Ohio SNAP-Ed Director and the Regional Program Specialist worked collaboratively with the local county staff and OSUE Human Resources to fill the position. The SNAP-Ed Regional Program Specialist took responsibility for many of the details of this process, relieving the County Extension Director and the FCS Educator (if present) from those duties. Once a new PA was hired, the SNAP-Ed Regional Program Specialist ensured that plans were in place for the new hire's training and dedicated large amounts of time to teach, guide, and support the new PA.

The SNAP-Ed Regional Program Specialists were essential in assuring consistent oversight for the FY14 SNAP-Ed grant proposal development. SNAP-Ed Regional Program Specialists strengthened each county's SNAP-Ed needs assessment and plan of work by assisting the county in the use of the grant preparation tools provided and reviewing those sections of the proposal before the final submission. The county's needs assessment demonstrated the need to adjust the target audience. As a result SNAP-Ed in Ohio changed its focus from serving a large number of older adults to developing a more determined youth focus. The Regional Program Specialist ensured that PAs understood the need for programming change and creating more targeted proposals that showed an alignment to the SNAP-Ed guidance. In counties where there was no county FCS Educator, the SNAP-Ed Regional Program Specialist took the lead in writing the county's proposal and worked with the County Extension Director and the local PA to guarantee the proposal reflected the needs of that county. Lastly, SNAP-Ed Regional Program Specialists attend a variety of Ohio State University Extension FCS related meetings, serving as an advocate for FCS and a liaison for SNAP-Ed.

## **Results**

It has become apparent that communication between the SNAP-Ed Regional Program Specialists and the State SNAP-Ed Administrative Team as well as the county FCS teams is crucial. Weekly conference calls with the state team and quarterly face to face meetings have been instituted to maintain regular contact and consistent interaction. In addition, the SNAP-Ed Regional Program Specialists meet monthly to work on specific assignments in order to assure consistent communication with the program assistants and the FCS Educators in the counties.

The SNAP-Ed Regional structure has lightened the number of projects and budgets throughout the state; instead of managing 65 county budgets (one per county), there are now three regional budgets and a state budget. The Ohio State University (OSU) Office of Sponsored Programs and OSU Extension Business Office both report that this has minimized errors and reduced the amount of time needed to administer the grant. PAs are responsible for tracking their budget line items by being asked to report the amount remaining when they request permission to make purchases. This serves as a more immediate check and balance system as the SNAP-Ed Regional Program Specialist is also tracking those amounts. Before this regional structure, errors might not have been evident until much later and when fiscal reports were submitted.

When PAs submit a purchase request to their Regional Program Specialist, they not only report what is remaining in their budget, but also the lesson they will be teaching, the source of the recipe they will be demonstrating, and to what audience the program will be presented. Following the purchase, PAs report the exact amount spent. All of these details have helped keep the SNAP-Ed Regional Program Specialist informed of the PA's day-to-day activities and helped the PA's maintain both a "big picture" of their efforts as well as the details needed to maintain the program. This led to tighter control over what is purchased.

Because SNAP-Ed Regional Program Specialists check every section of each county's grant proposal and use them to establish a regional budget, the composition of the county's plan for programming is identified more clearly. This is one of the factors that can be examined when helping each county program assistant make changes to strengthen their plans, future program goals and collaborative efforts. By looking at the diverse characteristics of each county and their needs, while maintaining the integrity of the grant, the goal of creating the greatest impact and behavior changes within the target audience can be accomplished and sustained. Using that information, SNAP-Ed Regional Program Specialists have been able to provide more effective coaching for PAs as they have been intimately involved in the development of the plan and budget.

Regional Program Specialists attend county SNAP-Ed biannual advisory committee meetings to provide input and support for establishing additional collaborative efforts with local agencies and organizations. This support has resulted in new partnerships and opportunities for programming with the target

audience. SNAP-Ed PAs who do not have the support of a local FCS Educator highly values the involvement of the Regional Program Specialist in these meetings.

The SNAP-Ed Regional Program Specialist has been effective in helping county decision makers not only understand the impact that the SNAP-Ed program has in their county, but can also effectively explain the broader scope of programming that an FCS Educator could provide in counties where there has not recently been funding for that position. Since the Regional Program Specialists can focus almost exclusively on the SNAP-Ed program, they are able to keep other Extension professionals who have a more varied program area abreast of changes in SNAP-Ed.

The Food and Nutrition Service's Management Evaluation (ME) which took place in the summer of 2013 was completed with good results. The changes in the audience focus, increase in programs offered as a series, and consistent use of lesson plans was well received. The SNAP-Ed Regional Program Specialists participated in the ME and were able to see firsthand the suggestions for improving the program. As Ohio continues to implement this management model, additional data is being collected and assessed to determine the fiscal benefits and impact on SNAP-Ed participants.

One significant challenge that was identified by OSUE and the SNAP-Ed Administrative Team was the continued need for an FCS Educator in the counties in order to see the greatest impact of SNAP-Ed programming. While the SNAP-Ed Regional Program Specialist can offer support to PAs, they cannot be with the PA on a daily or even weekly basis. In addition the SNAP-Ed Regional Program Specialist is not as integrated in the local community as a FCS Educator. It was found that the Best Practice for the SNAP-Ed structure in Ohio was to have a PA supported by a FCS Educator, County Director, SNAP-Ed Regional Program Specialist, and the SNAP-Ed Administrative Team. Counties without the FCS Educator can perform well, but there is a piece missing in those counties that is most often apparent in the building of community partnerships.

### **Summary**

As the economic outlook of the SNAP-Ed program and other Extension programs is in question, this format using Regional Program Specialists may provide ideas and guidelines for similar structures. The importance of clear objectives for the positions while allowing for flexibility as unexpected obstacles and barriers occur is critical. Working as a team to deliver consistent messages both orally and in writing is extremely important to the success of such positions. The benefits of the improved consistency in program delivery and implementation are shown in both evaluation data and comments of those employed in the program.

In the past year, the program has gone through a name change, new leadership, a new audience focus, grant preparation changes, a new budget format

and budget cuts. Many times over the year, PAs have experienced the stress of the unknown. The SNAP-Ed Regional Program Specialists have created relationships with the PAs that have helped calm the fears and kept the programming moving forward. Although the SNAP-Ed program has experienced a difficult funding year and PAs have needed to find new and creative ways to continue presenting effective programs, having the guidance and encouragement of the SNAP-Ed Regional Program Specialists has enabled OSUE to retain most of the PAs and maintain high quality programming. Program Assistants have been empowered to make decisions and create partnerships and collaborative efforts, following the grant guidelines, to achieve the greatest impacts and behavior changes with all participants of the program.

The planning and forethought of the FCS Program Leader and SNAP-Ed Administrative Team to include a small percentage of the SNAP-Ed Regional Program Specialists' position as FCS time has been a benefit that has been discussed many times. This small amount of flexible time has paid off in connections and relationship building in the field. Due to the finding that FCS Educators have such a necessary role in the local counties supporting SNAP-Ed programming, new PA positions are only placed in counties that have an FCS Educator in place. This has been a limitation to the Ohio SNAP-Ed program overall as some of the more urban counties or counties with high populations receiving SNAP benefits are without an FCS Educator. Ohio State University Extension and Ohio SNAP-Ed leaders continue to discuss options for filling positions and building programming across the state.

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## **Best Practices**

### **Extension Educators Creating an Effective Evidence-Based Best Practices Guide to Engage Community Capacity Building**

Monica R. Kimbrell, Andrea Swenson, and Peggy S. Meszaros

The purpose of this paper is to describe the creation of an evidence-based best practices guide designed for Family and Consumer Sciences (FCS) Extension Educators. The importance of best practices has been established but the process of identifying and disseminating recommendations remains difficult. This paper provides an illustrative example of a guide developed by FCS educators for the Appalachian Information Technology Extension Services (AITES) project. The AITES project, the method used to identify best practices, and the creation of the guide are described. FCS professionals can use the methods presented to identify best practices in other projects.

In today's society the call for programs that are effective is well known among Extension professionals (Dunifon, Duttweiler, Pillemer, Tobia, & Trochim, 2004). The link between evidence and practice is easily transferable for Extension professionals who are authoritative voices in connecting research and practice. The Appalachian Information Technology Extension Services (AITES) project was built on research by Family and Consumer Sciences (FCS) scholars (Creamer, Lee, & Meszaros, 2007; Meszaros, Lee & Laughlin, 2007) to respond to a workforce problem in the U.S: the lack of females in information technology (IT) jobs (Ashcraft & Blithe, 2010). The AITES project utilized the partnership of the Cooperative Extension Service (CES) and the faculty of a land grant university to carry out the tradition of conducting research, translating findings, and dissemination. The dissemination of the research created the opportunity to respond to the call to connect effectiveness and practice.

Documenting effectiveness of large-scale research programs as well as sharing processes that worked requires an evidence-based approach. Although evidence-based practice is a term receiving greater attention in the social sciences, it was developed in the health disciplines and the interpretation of the term remains debatable. For instance, in healthcare the concept evidence-based includes research, clinical experience, patients, clients, and the local context and environment (Rycroft-Malone et al., 2003). Evidence-based practice for social sciences requires a large volume of theory-based scientific research that has been tested and reliably applied in appropriate contexts.

## Purpose

The purpose of this paper is to describe the development and usefulness of an evidence-based best practices guide, using the aforementioned AITES project as an illustrative example. The aim of this evidence-based best practices guide was two-fold: 1) to document the implementation and evaluation of the AITES project and define best practices in the context of an Extension based model; 2) to create a resource for FCS Extension educators to use in implementing a similar project in other communities and transfer that knowledge to others.

The AITES project is a cutting-edge program that recognizes FCS Extension educators as leaders and agents of change to improve the quality of life for individuals, families, and communities. AITES utilizes the CES infrastructure and a train-the-trainer (TTT) model of instruction. The project aimed to build community capacity for support of girls in their choice of jobs in IT by educating their parents, teachers, and counselors about gender stereotypes, IT as a non-traditional career option for females, and the availability of local IT jobs.

Currently only 25% of the IT workforce nationwide is composed of females, decreasing from 36% in 1991 (Ashcraft & Blithe, 2010). This creates a talent crisis in the US IT workforce and makes this an important problem that involves building community capacity. FCS scholars recognized this problem but found that girls were as interested in IT careers as boys. The common difference in boys and girls was the lack of positive encouragement and support girls received to pursue IT careers (Creamer et al., 2007; Meszaros et al., 2007). Thus, the design of AITES as an innovative approach to address the IT talent crisis was supported through a \$2.5 million dollar grant award (GSE/EXT 0832913) from the National Science Foundation (NSF). The project offered communities in five states (Virginia, Kentucky, Tennessee, North Carolina and West Virginia) the opportunity for workforce, economic, and human development among youth, families, and their communities through the CES model developed by AITES.

The AITES infrastructure (Appendix A) is comprised of six key personnel, a national board, state boards, and community cohort teams (CCTs). Key personnel include the Principal Investigator (PI) a Certified Family and Consumer Sciences (CFCS) professional; Co-PI; Content Specialists (Parent Education, Gender Equity, Learning Partnership Model, and IT jobs); Trainer/Consultants; External Evaluators; and Project Manager. The National Pioneer Partners Board provides overall direction for the project and is comprised of representatives from Apple, Microsoft, and Cisco; female-owned IT businesses; NSF-funded Extension Service projects; the 4-H National Board STEM program; and individuals involved in IT at the state and national levels. Each of the five states involved has a State Partners Board who reviews and supports plans for implementing AITES at the state level, as well as reviews evaluation data and provides recommendations for sustainability. State's Partner Boards consist of key leaders in the communities, representatives from secondary and post-secondary educational institutions, Extension professionals,

and IT industry representatives. Four of the State Partners Boards are chaired by individuals who are FCS Extension Educators. Community Cohort Teams are the individuals within the project that carry out the goals of AITES within their communities. AITES works with superintendents and Extension supervisors to identify two middle and high school counselors, two middle and high school teachers, and FCS Cooperative Extension agents in two counties of each of five Appalachian states. CCTs write mini-grants to deliver the new information to their peers, parents, and community leaders in each of the local communities where they reside.

Throughout the project, over 2,000 individuals attended activities hosted by CCTs and those individuals reached over 35,000 others with the message of AITES. It is important to document the success and lessons learned in this large project to ensure sustainability and future success in other communities. Extension educators can use the evidence-based best practices guide to implement the project in similar communities or to adapt for community needs. The success of the project and the interest in developing evidence-based CES programs prompted the need to create a standardized method of assessing evidence-based practices. The most widely accepted definition of evidence-based practice is in the medical field: “the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients” (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996, p. 71). This medical-based definition is not suitable to the assessment of the unique model and multi-level infrastructure of AITES and CES-related projects. The increased interest in evidence-based practices calls for more guidelines in the social sciences to more accurately reflect the true nature of the process. Thus, this paper presents just one approach to developing an evidence-based best practices method applicable to CES, using a large project (AITES) as an example.

## **Method**

Assessment of medical evidence-based guidelines included research, clinical expertise, and the preferences of patients when defining evidence-based practice. The same is true in the social sciences; however, research in the social sciences does not typically include clinical trials, the main difference in medical and social science definitions of evidence-based practices. However, the AITES project conducted activities and workshops over five years in five states and used evaluation results and expert advice from researchers and community leaders to continually improve and modify the AITES model. This evaluation design is common in the social sciences and is one approach that may meet the rigor of clinical trials commonly accepted in medical research.

To gain an understanding of what other social scientists define as evidence-based best practices, the research team conducted an electronic search to find exemplary examples of best practice guides. Through reviewing and evaluating the examples, it became necessary to articulate a purpose statement, identify

objectives, and create a protocol that would capture all aspects of the project as well as the multiple layers of individuals within the project. The research team identified the purpose statement of the guide to present what individuals in three roles (Trainer/Consultants, CCTs, and SPB) viewed as the best practices in AITES and lessons learned throughout the course of the project by the leadership team. The objectives of the guide included reaching a wide and varied audience and providing an example of a social science best practice. The overall protocol developed recognized that each project group (Appendix B) should be assessed qualitatively, either through an interview or a focus group. Separate interview/focus group protocols were developed for each of the different roles identified in the protocol to capture the uniqueness of each role (Appendix B). All protocols were approved by an Institutional Review Board. Confidentiality was ensured through the use of pseudonyms.

## **Results**

In order to be consistent with the definition of evidence-based, this qualitative research approach captured best practices through the voices of the participants in the project as valid sources of evidence. Participants were asked to describe strategies that worked for them to create community capacity and where they encountered resistance.

In the example of the AITES, semi-structured interviews were designed and conducted for three different roles within the project (leadership team, state partner board chairs, and trainer/consultants), for a total of 21 interviews. These interviews targeted specific aspects of the project and the roles. Individuals were encouraged to speak freely about both successes of the project as well as difficulties they experienced. Due to the potential for individuals to withhold difficulties experienced, an outside interviewer as well as external reviewers conducted the interviews.

Due to the large number of participants in two other roles (community cohort teams and state partner boards), a series of 10 focus groups were conducted. The decision to include a large number of participants in the analysis of best practices centered on the unique contribution of each role to the overall success of the project. Due to the implementation of AITES in 10 Appalachian counties, two in each state, the research team also wanted to include the diversity of each community's experience in the best practices guide, leading to two focus groups per state. Similar to the structure of the interviews, focus group protocols addressed successes as well as difficulties experienced within the project as a whole and their specific role within the project. Also assessed were areas in which they felt the project improved over the years. An example of a focus group protocol is provided in appendix C.

The interviews and transcripts were recorded and transcribed. Analysis used a directed content analysis approach that utilized open, axial, and thematic coding processes (Hsieh & Shannon, 2005). This process permitted the research team to

code the transcripts for successes and difficulties and explore the relationship between them and the project. The qualitative data analysis software package, NVivo (2010), was used to manage the analysis process. In this project, using data analysis software helped support the creation of a framework that allowed the emergence of categories and themes across a large amount of data (Humble, 2012), but the actual analysis process was completed by researchers. The process included selecting segments of text and organizing into labels or codes that derived meaning. This occurred through many readings by multiple researchers to refine the codes and identify themes that emerged.

During the coding process an outline of the best practices guide formed. The outline changed throughout the development process to accurately capture the best practices as well as the lessons learned identified by participants. For instance, after an Overview and Introduction detailing the AITES project, each focus group's synthesis of lessons learned is shared. The views of the researchers are captured as leadership lessons learned. The Guide also contains case studies in each section to be illustrative of how the best practices identified operated within the project. A Resource Compendium was presented in the guide and included what participants articulated as the most effective resources used throughout the project.

The target audience was an important element that contributed to the style and tone of the Guide. The target audience for dissemination includes family researchers and FCS practitioners who may want to replicate the project in their community. Given the need to increase the number of females in IT jobs throughout the United States, this guide will also make a strong contribution to workforce development while it reinforces the value of FCS professionals in the national conversation about human capital and community capacity. The guide is offered in electronic as well as hard copy formats (<http://itpathways.org>) and is designed to be accessible to FCS professionals as well as the general public.

#### Implications for Extension

By proposing a standard conceptualization of evidence-based best practices in the social sciences, FCS professionals can more effectively evaluate and implement programs. Future work should encourage the development of creative means to get at evidence-based best practices in projects in hard-to-reach populations and targets. More specifically, developing processes that capture the effectiveness of programs that are aimed to improve the life quality for individuals, families, and communities are important in obtaining and sustaining funding, policy development, and accountability.

FCS educators are well aware of the need to situate programs in the communities they serve. Acknowledging that all programs will not work equally in all contexts is a major consideration when developing guides as evidence for program implementation. FCS educators must use their knowledge of the communities they serve as a basis when reviewing effectiveness of programs and when creating guides for programs they implement. The responsibility to provide effective

programs extends the mission of land grant institutions reaching people and communities with new knowledge and improved quality of life.

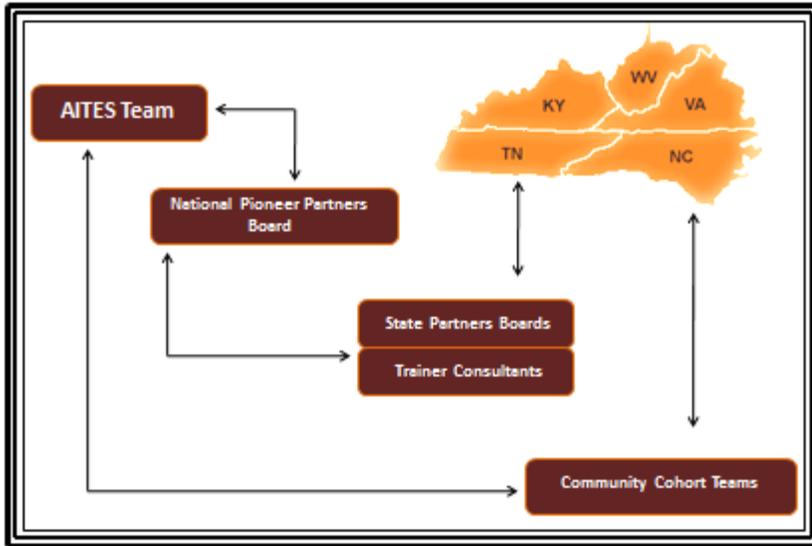
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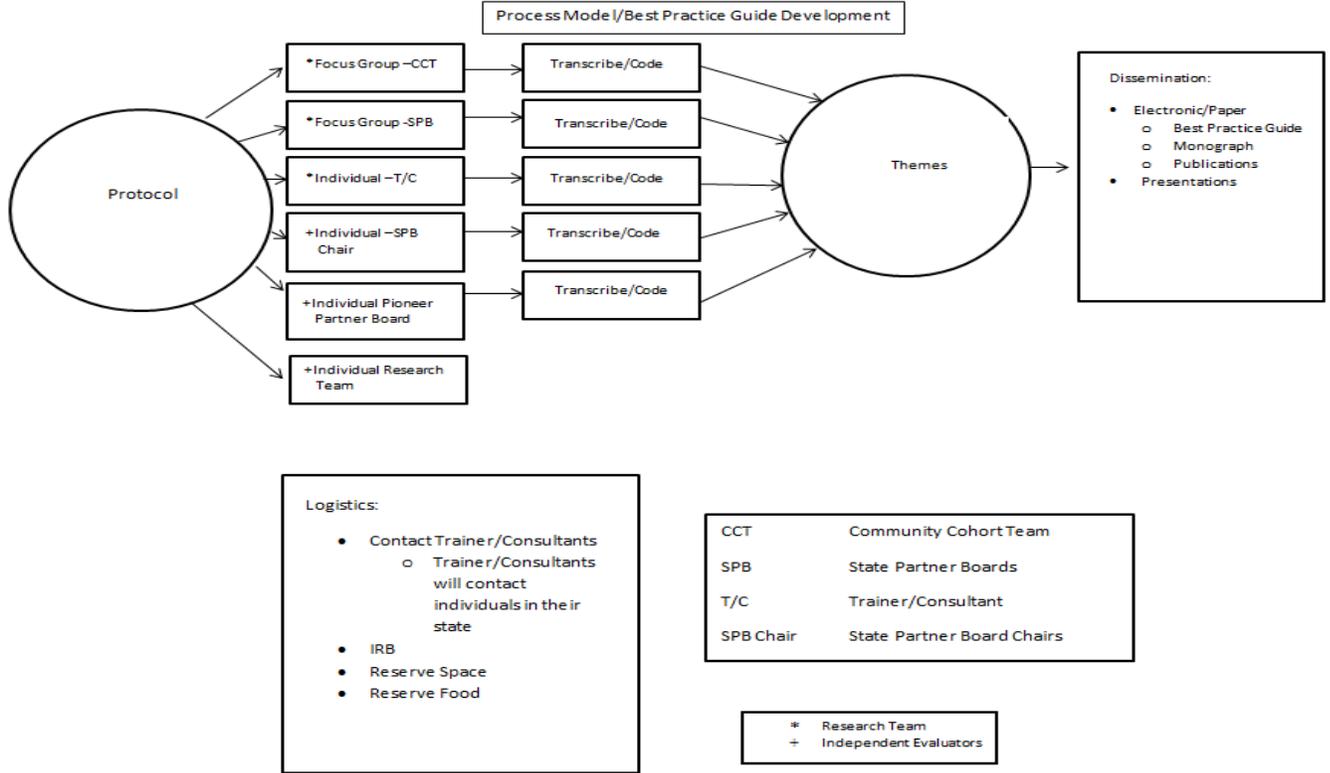
# Appendix A

## AITES Infrastructure



## Appendix B

### AITES Evidence-Based Best Practices Model



## Appendix C

### Protocol for Focus Group with Community Cohort Teams

1. Let's start with thinking back to when you were contacted by your school or Extension Office to let you know you had been nominated to work with the AITES grant as a Community Cohort Team member (CCT).

How was this information given to you?

How did you feel about this nomination?

Did you have enough details about what you would be doing?

How did you get interested in this program (why did you agree to be a board member)?

2. Fast forward now to the present and your role as a CCT member.

Have there been any changes in how you are viewed in your school or Extension office?

Describe any support you have received from your supervisors to do this job?

How essential is the Trainer/Consultant to your functioning as a CCT?

What did you like/dislike about working with the state advisory board?

3. Let's move on to any reflections you might have about the Train-the Trainer AITES workshops you have attended.

Consider all the workshops and the variety of content you received.

What aspects of the workshops were the most helpful?

What aspects of the workshops were the least helpful?

What did you learn?

What could have made the workshops more helpful to you?

4. Part of your role in the project is to bring the message of AITES into your respective communities. To do this, you proposed and implemented mini-grants. How did you write your first mini-grant? How has that changed?

What resources from the resource repository have been most helpful to you in carrying out your mini-grants?

How did you decide on your target audiences and incentives?

What strategies did you use to recruit your participants for the workshops you conducted?

What worked? What did not work?

Think about the role of financial resources in carrying out your mini-grants. Was the \$300 or \$500 payment per individual CCT sufficient?

Could you have carried out the mini-grant without these resources?

5. Describe the mini-grant activity you implemented that you feel was most successful. What determined your success?
6. Did the evaluation reports given at the Train-the-Trainer workshops inform your decisions and choices about future mini-grant activities?

How did you handle evaluations at the mini-grant activities you implemented?

What worked?

What have you observed when you ask participants to become stokers?

7. If you were offering advice to other teachers or Extension agents about implementing the AITES project, what would you say?
8. What role, if any, did the products provided for the mini-grant activities such as the bookmarks, brochures, poster, placemat, networking card, and stoker button etc. play in getting the AITES message across?
9. How did you use the portal?

What do you like about the portal?

What do you dislike about the portal?

10. Tell me how you perceive the future of the AITES message in your community?

What will be your role?

11. Is there any area that you feel was successful or unsuccessful that was not mentioned? Do you have anything else that you would like to say?

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## Best Practices

### **“Pinning” for Success: Using Pinterest as the Hub of Simple and Successful Food-Related Social Media Campaigns**

Lisa Franzen-Castle and Alice Henneman

The purpose of this article is to show best practices related to using the social media platform Pinterest, a virtual bulletin board where you can organize and share images, videos, and content, and how this medium can increase and help maintain engagement on food-related topics with diverse clientele. This article also provides insight into pinning, creating group boards, content curation, and connecting other social media to Pinterest. Pinterest was the leading source of referrals from social networks to the authors' Extension Food website during the past year, and led to a total of 4,679 views on 270 web pages.

The number of people using social media continues to rise. Confining outreach to traditional forms of media reduces the ability to reach additional clientele. Seventy-two percent of online adults use social networking sites according to the Pew Research Center's Internet & American Life Project (Brenner & Smith, 2013). While younger adults continue as the most likely social media users, the growth among older Internet users has been increasing remarkable in recent years. Individuals ages 65 and older have increased their presence on social networking sites in the last four years, from 13 percent in the spring of 2009 to 43 percent in the spring of 2013 (Brenner & Smith, 2013).

At the same time, the percent of Americans who read print newspapers has dramatically decreased over the past decade (Pew Research Center for the People & the Press, 2012). The percentage of Americans saying they saw or read news articles or news headlines the previous day on a social networking site has doubled from 9 percent to 19 percent from 2010 to 2012. The methods Cooperative Extension markets research-based information, such as writing a regular column in a print newspaper, may no longer be enough to reach out to current and new audiences. Repurposing information written for print media to use for online media becomes increasingly important to maintain current clientele and reach out to new demographics (Franzen-Castle, Henneman, & Ostdiek, 2013). Noted hockey player Wayne Gretzky is quoted as saying, "A good hockey player plays where the puck is. A great hockey player plays where the puck is going to be." For greatness in the 21<sup>st</sup> century, it is important to put oneself in a position of where people are going to be.

## **Purpose**

The purpose of this article is to show best practices related to using the social media platform Pinterest and how this medium can increase and help maintain engagement with diverse clientele. Pinterest is a free virtual bulletin board where one can organize and share images, videos, and content. Any webpage (unless the website owner has restricted pinning) that has a photo can have that photo “pinned” to a board with a link back to the webpage. Others can follow boards and learn when someone has pinned new items. Also, they can repin them to their own boards. This article provides insights into pinning, creating group boards, content curation, and connecting other social media to Pinterest.

After experimenting with various social media in our state that both clientele and staff could easily use in the area of food, nutrition, and food safety, Pinterest emerged as the most effective “hub” for social media campaigns. Pinterest has the potential to reach a significant number of people and thus is a good starting point for using social media in the area of food, nutrition, and food safety for a variety of reasons.

### **Why Choose Pinterest as the Hub of Food-Related Social Media Campaigns?**

A review of the research surrounding Pinterest indicates why it is well suited to promote food, nutrition, and food safety. In a study of leading brands on Pinterest, results indicated that the categories with the most repins were home (2 million), recipes (1.7 million), food (695 thousand), wedding (458 thousand), and fashion (392 thousand) (Unmetric Pindustry Report, 2013).

### **Pinterest is a popular and rising form of social media.**

According to data obtained through Microsoft’s Bing search engine (Amin, 2013), the five most searched social networks in 2013 (in order from highest to lowest) were 1) Facebook; 2) Pinterest, 3) Twitter, 4) LinkedIn and 5) Instagram. Pinterest, a new entry on several of Bing’s most searched lists, jumped to number two in the United States in 2013.

### **Women tend to be more engaged with food-related social media than men.**

Research by Edelman (2013), the world’s largest public relations firm, suggests that dads place as much value on food choices for their families as moms. At present, however, mothers are generally more engaged with food-related social media than fathers (Pinterest: 45 percent vs. 16 percent; reading food blogs: 35 percent vs. 15 percent; and following food personalities on social media: 17 percent vs. 14 percent, respectively). Additionally, Pew Research Center’s Internet & American Life Statistics (Rainie, Brenner, & Purcell, 2012) indicate the popularity of Pinterest among women with nearly a fifth of online women (19 percent) using Pinterest.

### **It is easy to create a Pinterest account.**

Many clientele and staff are already familiar with how to use Pinterest and have accounts. Setting up a Pinterest account is as easy as visiting <http://pinterest.com> and following the directions. A click on the “Visit Help Center” link will take the user to further information. There is no need to get clientele to “like” a Facebook page, shorten comments to a 140 character or less tweet, or take a photo.

### **Pinterest is a highly engaging visual form of social media.**

Social media interactions are moving from text toward images because images produce more of an immediate emotional reaction. The Pew Research Internet Project (Duggan, 2013) found that photos and videos have become a fundamental part of the online social experience, with approximately half of adult Internet users posting or sharing photos or videos online. A study by HubSpot (Corliss, 2012), a marketing software company, examined 8,000 Facebook posts from companies to other companies and clientele and found that posts with photos received 53 percent more “Likes” than the average post.

### **The task of adding to a Pinterest board can be shared among staff.**

It is possible to create “shared” Pinterest boards so several staff can pin to the board. Again, check in the “Visit Help Center” section for directions on sharing boards.

### **Sharing to other social media platforms is easy through Pinterest.**

Pinterest offers several options for quickly and easily sharing content through other social media platforms to help reach new demographics. The “pin” can be sent to others through other friends through their email address and by finding friends on Facebook, Google+, Gmail, and Yahoo. Pinterest content can also be shared directly to Twitter and Facebook.

## **Method**

Three areas were chosen in our state for using Pinterest to promote safe and healthy eating in the area of food and nutrition this past year:

- home food preservation preparation and (canning and freezing);
- Thanksgiving food safety; and
- healthy eating during the winter holidays.

These topics were selected as starting points because Extension is a recognized and credible source of information in these areas. The steps for creating and promoting these boards are as follows:

1. A leader was chosen for each board. This person created the original board and invited interested individuals to also pin to the board.
2. “Pins” were limited to materials that were either from Extension, US Department of Agriculture websites, or other nationally recognized related organizations. To

avoid any appearance of “selling” products, pins to commercial entities were not used. In addition to web images, Pinterest supports pinning videos from YouTube and Vimeo and slide shows (PowerPoint programs) from SlideShare.

3. In setting up each board, a description identifying it as coming from our state’s Extension was given. For example, the Thanksgiving Pinterest board was described as: *Answers to common questions about preparing and serving food for Thanksgiving meals from (name of our university Extension).*
4. Pinterest asks for a description when pinning an item. Staff posting to Pinterest were asked to keep their descriptions short, as much as possible, so tweets could be made directly from Pinterest and stay under Twitter’s 140 character limit (Twitter “characters” include the spaces between letters). This included allowing for at least 20 free characters so tweets could be easily retweeted and for the web address that was provided by Pinterest when sending a tweet from Pinterest. A description of about 50 to 60 characters (including spaces and hashtags) worked in most situations. Hash tags (a word or phrase without spaces preceded by the # symbol) related to the topic were also encouraged as part of the character count. Using a hashtag lets people search on a particular topic that contains that hashtag. Here is how a sample tweet from Pinterest looked:  
*How to roast a #Thanksgiving #turkey the day before serving it.*  
*<http://www.pinterest.com/pin/250020216787011655/> via @pinterest*
5. An email was periodically sent to the Extension listserv for food, nutrition, and food safety staff reminding personnel to 1) check the Pinterest boards and repin items to county and other boards, 2) promote pins through Facebook, 3) tweet pins on Twitter, and 4) share pins in their newsletters and on their websites.
6. The boards were not only promoted to clientele, but also to other educators through various listservs. Other educators were encouraged to repin any items of interest to their clientele and start their own boards.
7. In developing content for our website, staff were encouraged to include images on webpages to make them pinnable (something that can be pinned on Pinterest). Images in Portable Document Format (PDF) articles are not pinnable. However, there is an alternative way to pin PDF articles: 1) Create a webpage that briefly described the PDF article, 2) Include a photo/image on the webpage, and 3) Offer a link to the complete PDF article on the webpage.

Individuals wanting the latest and more specific information on using Pinterest, and such features as “Pin It buttons, using Pinterest on mobile devices, and other information”, are encouraged to visit the Pinterest Help Center after creating a Pinterest account and begin by reading the “Pinterest Basics Guide.”

## Findings

There are a few ways to identify whether or not the Pinterest social media campaign was successful, such as looking at how many followers were gained and or how many repins were achieved. Each Pinterest board lists the number of followers at the top. At the bottom of each item “pinned” is a number representing how many times an item is “repinned.” The person who first pinned an item is the original pinner and gets

credit for the number of repins. Additionally, when you click on an individual “pin,” you will see this number next to the red “Pin it” button at the top of the image. When you click on this number, you also can discover who all has pinned it. Currently, Pinterest does not offer data on how often a Pinterest item has been tweeted or posted to Facebook. The number of people following the boards and/or repinning from them indicates they are being used (Table 1). The number of followers and repins for the Happy Healthy Holidays Pinterest board may be more limited than for the others because, to date, this board has had less time for exposure.

Google Analytics can provide information on how many people are visiting your website as a result of Pinterest. Check with your webmaster if you are not familiar with Google Analytics. The basic service is free of charge and provides statistics about a website’s traffic and traffic sources, including referrals from social media. Specific information could not be obtained for the Pinterest boards cited in this article, but rather showed the total views as a result of Pinterest. According to Google Analytics, Pinterest was the leading source of referrals from social networks to our Extension Food website during the past year, and led to a total of 4,679 views on 270 web pages.

## Discussion

Using Pinterest as a starting point in a food-related social media campaign proved to be a simple and effective beginning. It also provided helpful additional data. By seeing where items were pinned, possible additional avenues of promotion were discovered. Also, examining which “pins” were most popular gave an indication of clientele’s interest in topics and provided feedback for which areas might be best to target in the future.

Based on the success of our initial group Pinterest venture, next steps are to bring all the boards together into an overall Pinterest site, continue to add to and promote them, and to pursue new Pinterest Boards connected with our program of work.

Individuals involved with programs that are not food-related should also explore the possibility of using Pinterest as the hub of their social media campaign. New types of subjects for Pinterest boards are being created all the time.

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Table 1

Table 1				
<i>Effectiveness of Food-Related Pinterest Boards Since Inception</i>				
<u>Board</u>	<u>Pins</u>	<u>Followers</u>	<u>Repins</u>	<u>Time Period (Days   Dates)</u>
Canning and Freezing	81	417	782	148 days   7/19/2013 to 12/15/2013
Thanksgiving Food Q & A	49	506	668	39 days   11/5/2013 to 12/15/2013
Happy Healthy Holidays	84	447	267	13 days   12/3/2013 to 12/15/2013

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## Best Practices

### Promoting Social-Emotional Practices in Early Childhood Classrooms

Teresa A. Byington

The Pyramid Model has emerged as an evidence-based practice for promoting social and emotional development in young children (Hemmeter & Fox, 2009). The Pyramid Model, a strength-based tiered approach, provides a framework for implementing program-wide behavior supports within early childhood settings (Fox, Carta, Dunlap, Strain, & Hemmeter, 2010; Fox, Dunlap, Hemmeter, Joseph, & Strain, 2003; Hemmeter & Fox, 2009; Hemmeter, Ostrosky, & Fox, 2006). The foundation of the Pyramid Model is an effective workforce capable of using and sustaining best practices. The three main tiers of the pyramid include Universal Supports, Prevention Practices, and Individualized Interventions. The Universal Supports tier focuses on the development of nurturing and responsive relationships among children and adults within high quality supportive environments (Fox et al., 2003). The Prevention Practices tier consists of targeted prevention strategies designed to teach specific social-emotional skills to children at-risk for challenging behavior (Fox et al., 2003). The top tier or Individualized Interventions is designed to provide intensive interventions for a small percentage of children with persistent behavior challenges (Fox et al., 2003).

Important elements of the model include administrative and staff support, completing Pyramid Model training, classroom assessments, coaching, identifying program-wide expectations, establishing a behavior support team, and developing strategies for teaching children social and emotional skills. Classrooms implementing the Pyramid Model have demonstrated statistically significant differences in children's social skills and decreases in challenging behavior (Hemmeter, Snyder, Fox, & Algina, 2011). The Pyramid Model is a best practice for promoting the social and emotional development of young children (See Center on the Social and Emotional Foundations for Early Learning (CSEFEL) website, <http://csefel.vanderbilt.edu/> and Technical Assistance Center on Social Emotional Intervention for Young Children (TACSEI) website, <http://www.challengingbehavior.org/>).

#### The Pyramid Model

##### Universal Supports

All children benefit from universal practices designed to support their social-emotional development (Hemmeter et al., 2006). Secure relationships are a primary component of young children's social and emotional competence (National Research Council, 2001). Universal practices promote children's engagement in pro-social behaviors with adults and peers (Joseph & Strain, 2002). As teachers,

children, and families engage in responsive and nurturing relationships, they make relationship deposits (similar to making money deposits in a piggy bank; Joseph & Strain, 2002). Deposits are made as teachers greet children, acknowledge efforts, and give physical affection. Teachers focus on telling children 'what to do' and then check for understanding. Children learn behavior expectations such as "Be Helpful, Be Kind, and Be Safe." Teachers review behavior expectations frequently.

Children participate in a balanced daily schedule that includes both child-directed and teacher-directed activities. Transitions between activities are developmentally appropriate. The environment contains adequate materials, defined play areas, a visual schedule, and activities that promote child engagement. For about 80 percent of children, the practices at the Universal Supports tier sufficiently support their social and emotional development (Fox, et al., 2003).

### **Prevention Strategies**

The next tier of the Pyramid Model focuses on prevention by teaching children social-emotional strategies. About 15 percent of children are at-risk for challenging behavior and require extra help in learning specific social skills and emotional competencies (Fox, et al., 2003). Children learn pro-social behaviors such as friendship skills, ways to appropriately express strong emotions, and how to problem-solve. Social-emotional skills grow when teachers intentionally set up opportunities for children to cooperate together, discuss emotions, and solve problems. Teachers instruct children needing extra support on how to maintain a social interaction or what to do when they feel strong emotions such as anger or disappointment. Teachers learn how to use class discussions, role play, and modeling to promote social and emotional competencies in the classroom.

### **Individualized Interventions**

The top tier of the Pyramid Model provides behavior support to children (about 5 percent) requiring individualized interventions (Hemmeter et al., 2006). In collaboration with the special education teacher, parents, and administration, individualized behavior support plans are developed, implemented, and monitored.

### **Implementing the Pyramid Model**

Nevada, one of four states selected to form a TACSEI Pyramid Model Partnership with CSEFEL, received technical assistance through a grant from the U.S. Department of Education, Office of Special Education Programs. The technical assistance built the state's capacity to implement and sustain the evidence-based practices of the Pyramid Model throughout the state. The partnership included enhancing caregivers' (parents and teachers) knowledge and skills in meeting the social-emotional needs of young children through training and information dissemination. Several selected early childhood programs participated as model demonstration sites and completed a comprehensive program of training

and coaching. Based on Pyramid Model assessment results, coaching was designed to help the sites implement Pyramid Model practices with fidelity. Faculty and staff at University of Nevada Cooperative Extension were involved in providing training, assessments, and coaching to a model demonstration site.

## **Training**

Training was an important component of the Pyramid Model. Members of CSEFEL developed a number of training modules targeting caregivers of preschoolers, infant/toddlers, and parents of young children. The training modules, available on the CSEFEL website, included PowerPoints, activities, handouts, and video clips. Additional resources on the Pyramid Model could be found on the **TACSEI** website.

The first training module focused on Universal Supports designed to build positive relationships and provide children with high quality supportive environments. During the training, teachers examined classroom schedules, routines, transitions, and program expectations. They learned a variety of ways to use positive feedback to promote children's social-emotional development.

The second module focused on prevention or social-emotional strategies. Teachers were given ideas on how to promote friendship skills, help children problem-solve and enhance emotional literacy skills through activities such as playing the Feeling Wheel game or reading books targeting social-emotional development (Joseph & Strain, 2003). Some of the resources used from the CSEFEL website were the Book Nook activity guides. Classroom activity ideas were given that corresponded with books such as "On Monday When It Rained" by Cherryl Kachenmeister which described the different emotions a young boys feels throughout a week. During the training, teachers learned the importance of expanding children's emotional vocabulary by teaching feeling words such as affectionate, gloomy, clumsy, embarrassed, lonely, and overwhelmed (Joseph & Strain, 2003).

Social narratives were introduced as a way to teach social skills. The social story "Tucker the Turtle" taught children how to handle strong emotions (e.g., anger or disappointment). Children learned to first stop, pretend to tuck their head into their shells, take three deep breathes, and then think of a solution to their problem (Joseph & Strain, 2002). Another teaching tool was the Solution Kit which was designed to help children identify possible solutions to problems. Picture card solutions include "Take Turns, Share, Ask a Teacher for Help, Find Something Else to Do, or Use a Timer." Children reviewed the solution cards and then selected a card or came up with their own solution to the problem.

The third module covered individualized interventions and the development of behavior support plans. The process for implementing positive behavior supports (Fox & Clarke, 2006) included bringing a team together (parents and professionals) and conducting functional assessments. Then the team developed a behavior support plan, implemented the plan, then monitored and evaluated the plan. The behavior support plan included prevention strategies such as visual schedules, social narratives, and first/then boards designed to prevent

challenging behaviors (Fox & Clarke, 2006). The plan outlined strategies for teaching children replacement skills (e.g., learning how to ask for a break instead of throwing a temper tantrum). Finally, the plan described ways to respond to challenging behavior after it occurs (Fox & Clarke, 2006). The Pyramid Model emphasized the benefits of using a team of people to create, implement, and monitor, and evaluate the plan.

The training modules set the foundation for teaching the main principles of the Pyramid Model. Coaching, based on the results of specific assessments, facilitated implementation of the knowledge gained during training into teaching practices that support children's social-emotional development.

## **Assessments**

Two main assessments, developed by members of CSEFEL/TACSEI, measured how effectively teachers were implementing the Pyramid Model practices in their classrooms. For classrooms with children from birth to two years, the TPITOS (The Pyramid Infant Toddler Observation Scale) assessment tool is used (Hemmeter, 2009). The TPOT (Teaching Pyramid Observation Tool for Preschool Classrooms, Research Edition) was used to evaluate classrooms with children from two to five years (Fox, Hemmeter & Synder, 2013). Trained assessors conducted a 2-hour classroom observation and assessed specific practices. The TPOT also included a 15 to 20 minute interview with the lead teacher following the observation. The assessor asked the teacher questions related to practices that were not evident during the observation (e.g., communicating with families).

The TPITOS (Hemmeter, 2009) assessed the environment and adult behaviors related to social and emotional development within infant and toddler child care settings. Assessors observed teachers of infant and toddlers during free play, feeding/mealtimes, physical care routines, and structure small group activities. During the observation, specific items in the categories of General Environment and Interactions, Play Dimensions, Quality of Routines, Transitions, and potential red flags items (e.g., children who are distressed are left unattended) received a mark of "Yes" or "No."

The TPOT (Fox, Hemmeter & Synder, 2013) contains 132 individual items grouped into categories such as Friendship Skills and Problem Solving. Some of the items (e.g., Transitions between Activities, Teaching Behavior Expectations) received scores based on the classroom observation. Other items were scored based on the observation and teacher interview or only the teacher interview. The assessor indicated "Yes" if the item was present or "No" if the item was absent or not seen. A few items offer the option of scoring N/O (no opportunity to observe). The assessor also indicated whether any challenging behavior was observed and the type of strategies teachers' used to respond to the behavior. Following the assessment, the percentage of Pyramid Model practices observed or described by the teacher were calculated.

The results from the TPITOS and TPOT assessments guide coaches as they work directly with classroom teachers and directors on implementing the Pyramid

Model to fidelity. Fidelity is generally achieved when programs are implementing over 80 percent of the practices assessed.

## **Coaching**

Coaching is designed to guide teachers in strengthening their abilities to implement Pyramid Model practices. TACSEI coaches assisted teachers in creating and meeting collaborative goals. Coaches met with teachers two to four times a month to review assessment results and develop action plans related to promoting social-emotional development in the classroom. Coaches partnered with teachers in trying new strategies and building their skills and competencies. They also guided teachers in implementing behavior support plans, if needed. Coaching is an important component of implementing classroom social-emotional practices (Fox, Hemmeter, Snyder, Binder, & Clarke, 2011).

Coaches helped teachers implement the three stages of learning social-emotional skills as described by Fox and Lentini (2006). These stages include skill acquisition, fluency, and skill maintenance and generalization. First, teachers introduced a new skill by demonstrating it and providing positive feedback as the child learns the skill. Second, the child received opportunities to practice the skill until they reached fluency. Third, teachers continued to promote skill maintenance and generalization as the skill was applied to other settings (Fox & Lentini, 2006).

The author of this article has been a TACSEI coach for the past two years. Results of the pre-post assessments demonstrated significant improvements in teacher's implementation of social-emotional practices in their classroom. One of the teachers from a preschool classroom participating in the first year of coaching stated that challenging behavior in her classroom had decreased as she implemented the Pyramid Model practices. She was pleased with the way children exhibited empathy for other class members and indicated many children demonstrated an increased ability to solve problems and express emotions appropriately.

## **Summary**

The development of social and emotional skills is essential to a child's early learning and growth. The Pyramid Model is an evidence-based best practice that promotes social-emotional development in young children. Programs implementing the model have noticed a sharp decrease in challenging behaviors and an increase in pro-social behaviors. The TIPTOS and TPOT assessment tools provide coaches and teachers with data on current social-emotional practices in early childhood classrooms. Coaches play an important role in supporting teachers in implementing the Pyramid Model. Resources from CSEFEL and TACSEI are free and available for Extension personnel and families to use to enhance the social and emotional development of young children. Extension personnel are encouraged to become familiar with the Pyramid Model and share resources from the CSEFEL and TACSEI website with parents and teachers of young children. Spreading the

implementation of the Pyramid Model promises to set the stage for positive social-emotional outcomes of young children in early childhood classrooms.

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