

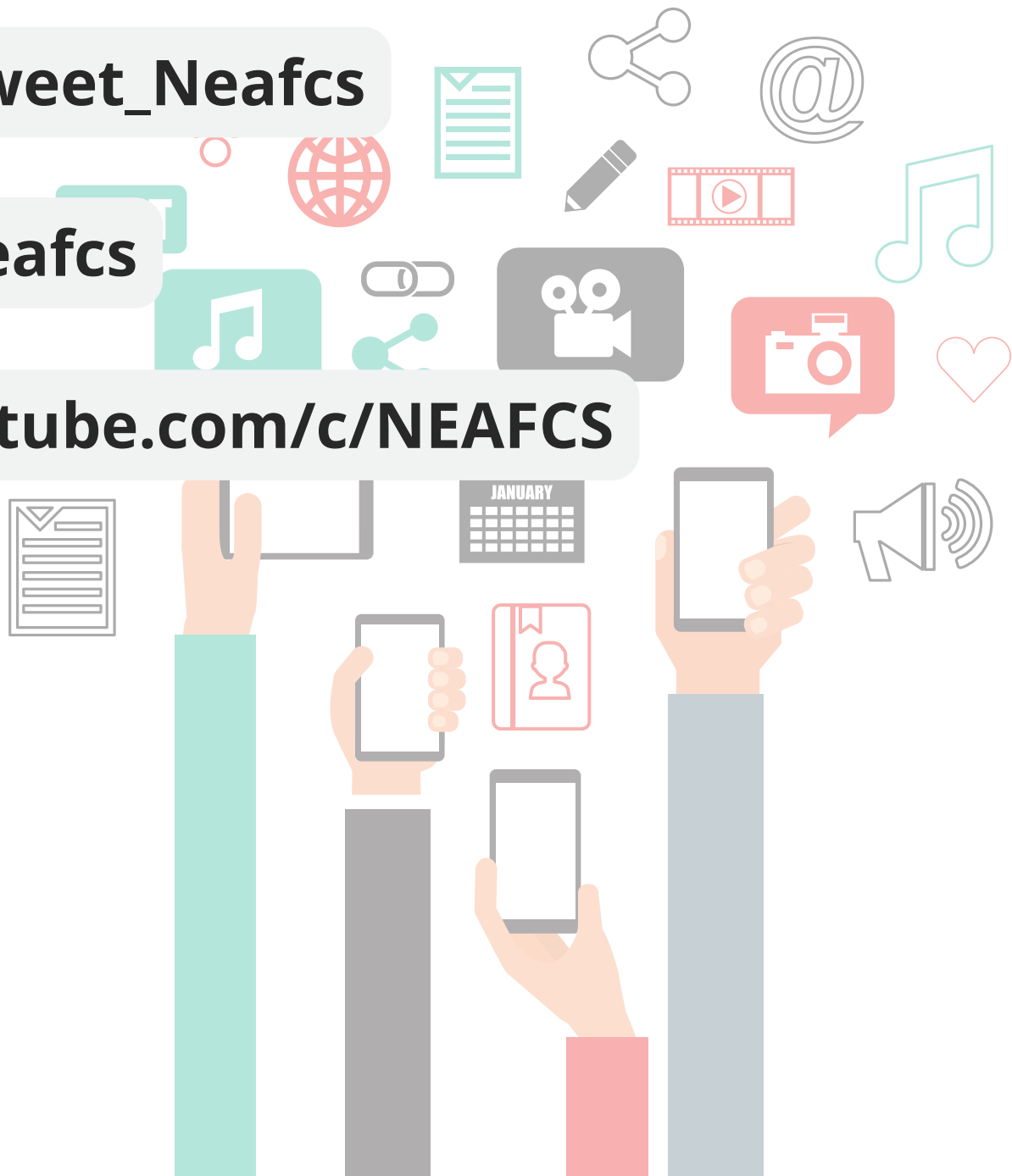


**JNEAFCS**  
2022

# NEAFCS JOURNAL



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# NEAFCS JOURNAL

## President's Message

On behalf of the 2021-22 NEAFCS Executive Board, the editors and the committee of the Journal of the National Extension Association of Family and Consumer Sciences (JNEAFCS), I am pleased to present to you the 2022 JNEAFCS. This peer-reviewed, research-based journal is one of our best member resource and benefit. The JNEAFCS is one way for our members to inform others in the profession of Family and Consumer Sciences about the scholarly work of Family and Consumer Sciences Extension professionals. The JNEAFCS highlights research, best practices, and implications for Extension Family and Consumer Sciences educators, agents, and state specialists. The JNEAFCS serves as a great tool to help you stay current with programming, research, and methodology that is specific to our learning and teaching environments.

As you read the 17th volume of the JNEAFCS, I know you will be impressed with the thought-provoking information found in each article. Consider your own body of work, research, and impacts that could be shared with your colleagues. I encourage you to consider making one of your professional goals to submit an article for a future Journal.

JNEAFCS, an online resource, can be shared as a link with a personal note to your administrators, local and state policymakers, advisory groups, and peers. By sharing the JNEAFCS, you can help connect efforts of Extension Family and Consumer Sciences professionals to the collective impact that Family and Consumer Sciences have across the nation.

Thank you to co-editors Ashley Dixon-Kleiber of University of Arizona Cooperative Extension and Rebecca Hardeman of University of Georgia Cooperative Extension for their dedication and hard work in creating an awesome Journal. I appreciate the members of the Journal committee, peer reviewers, and Vice President for Member Resources, Michelle Wright of Texas A&M AgriLife Extension Service. Because of their commitment to NEAFCS and the Journal, we have a quality, peer-reviewed professional publication that helps preserve our research and resources for the future.

Sincerely,

Susan Routh, President 2020-2021  
National Extension Association of Family and Consumer Sciences



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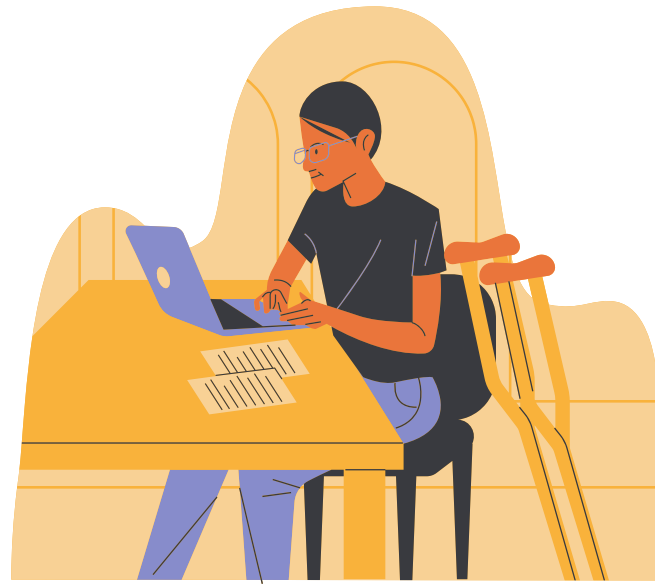
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## From the Editors

The National Extension Association of Family and Consumer Sciences provides many opportunities to learn about our collective impact in our communities around the country. Our journal is an annual compilation of some of the research and programming we complete. From innovative ways of teaching to collaborative projects across our states, the journal gives a glimpse of the incredible work members are doing. For the last four years, the submissions to the journal have increased substantially, and so has the diversity in tracks and topics.

As co-editors, we are thrilled to present the 2022 Journal of the National Extension Association of Family and Consumer Sciences. It is our hope that it serves you in three ways. First, it is a snapshot of the tremendous work being done around the country. Second, we hope it encourages you to think about your own work and submit an article for the 2023 journal. Finally, we hope it shows you just how vital our work is to the citizens we serve in our states. Please enjoy the 2022 Journal of NEAFCS, and we look forward to seeing your submissions for the next journal by April 15, 2023.

Be safe and be well!



Ashley Dixon-Kleiber

Co-Editor



Rebecca Hardeman

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2022

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## VALIDITY OF SELF-RATED DIET QUALITY QUESTION

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Professor

### FUNDING:

This study was supported by the Department of Food Science and Human Nutrition, Institute of Food and Agricultural Sciences, University of Florida.

### ABSTRACT

**E**ffective evaluation of diet quality as an outcome of nutrition education programming requires valid, practical tools. This study assessed the feasibility of online administration of the 25-item Dietary Screening Tool (DST) in adults with chronic disease and the concurrent validity of a self-rated diet quality question as compared to the DST. The results confirm the online feasibility of the DST for a chronic disease population. The self-rated diet quality question adequately identified individuals at nutritional risk according to the DST, and thus may be a useful, rapid tool for identifying those in need of education to improve diet quality.

### VALIDITY OF A SELF-RATED DIET QUALITY QUESTION

**H**igher diet quality is associated with a reduced risk of cardiovascular disease, type 2 diabetes, and neurodegenerative disease when assessed using the Healthy Eating Index (HEI) and Alternative Healthy Eating Index, and adherence to the Dietary Approaches to Stop Hypertension (DASH) dietary pattern (Morze, Danielewicz, Hoffmann, & Schwingshackl, 2020). These indices assess adherence to healthful dietary patterns as outlined by various national dietary guidelines (Alkerwi, 2014). To apply indexes of diet quality, such as the HEI, detailed dietary assessment by repeated 24-hour recalls or food records are required to quantify current dietary intake (Krebs-Smith et al., 2018). These methods are time and labor-intensive with a high participant burden (Ortega, Pérez-Rodrigo, & López-Sobaler, 2015). Alternatively, to assess dietary patterns, food frequency questionnaires are used, but due to the number of food items queried, completion may be arduous and impractical for some purposes (Pérez Rodrigo, Aranceta, Salvador, & Varela-Moreiras, 2015).



Rapid screening for the healthfulness of dietary patterns may be more appropriate than undertaking comprehensive dietary assessment, particularly for needs assessment and evaluation of nutrition education programming in Extension.



Valid tools are recommended to evaluate food and nutrition programming targeting older adults (Saffel-Shrier, Johnson, & Francis, 2019). The Dietary Screening Tool (DST) was developed to assess diet quality and dietary patterns of older adults (Bailey et al., 2007), and its validity to screen for nutritional risk has been established in older adults (Bailey et al., 2009), middle-aged adults (Ventura Marra, Thuppall, Johnson, & Bailey, 2018), and the very old (Liu et al., 2019). The DST consists of 25 questions targeting the frequency of consumption of foods such as fruits, vegetables, lean protein, whole grains, dairy, and less healthful choices such as processed meats, sweets, added sugars, and added fats (Bailey et al., 2007). The DST score can be used to classify older adults into three nutritional risk categories, "at risk," "possible risk," and "not at risk" (Bailey et al., 2009). The DST can be self-administered or completed by an interview in about 10 minutes and scored in 5 minutes (Bailey et al., 2009), and has been used successfully as an outcome measure for nutrition education programming (Cottell, Dorfman, Straight, Delmonico, & Lofgren, 2011; Francis, MacNab, &

Shelley, 2014). Given that Extension educators may offer nutrition education programs virtually, the feasibility of an online administration of the DST requires testing.

In some instances, there may be a need for rapid diet quality screening. For example, in a clinical environment, health professionals may not have 15 minutes to administer and score a tool such as the DST. However, screening of individuals with chronic diseases is needed for appropriate referral to community nutrition education classes, such as those offered through Cooperative Extension. Previous research has shown that a single-item, self-rated question demonstrated construct validity and may be used as a proxy for assessing diet quality (fruit and vegetable vs. fast food intake; Loftfield et al., 2015). As evaluated by this single, validated self-rated question, perceived diet quality was significantly correlated with diet quality as assessed by the Healthy Eating Index (HEI-2015) in cancer survivors – a population at high risk for developing chronic disease (Farhadfar et al., 2020).



## OBJECTIVES

**T**his study aimed to assess the feasibility of an online administration of the DST in adults with chronic disease and test the concurrent validity of the single item, self-rated question of diet quality, i.e., "How well does the self-rated diet quality question predict nutritional risk as assessed by the DST?"

## METHODS

**R**eceiver operating characteristic (ROC) curve analysis of raw data was plotted (sensitivity vs. 1- specificity), and the area under the curve (AUC) was calculated. Sensitivity was defined as the ability of the self-rated diet quality question to correctly identify those categorized as at risk by DST screening. Specificity was the ability of the self-rated diet quality question to correctly identify those individuals, not at risk. The positive predictive value was defined as the proportion of respondents who had self-rated diet quality of poor or fair and correctly identified as at risk by the DST. The negative predictive value was defined as the proportion of respondents who had self-rated diet quality of very good or excellent and correctly identified as not at risk. Significance was set at  $p < 0.05$ .

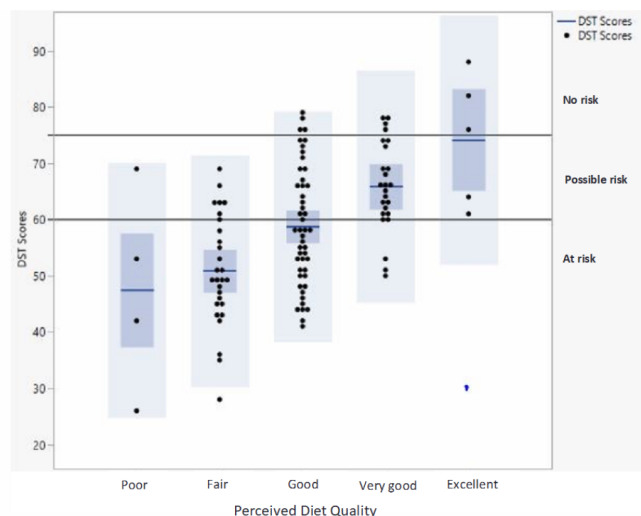
## RESULTS

**O**ne hundred and fifteen participants with one or more of the targeted chronic diseases responded to the survey and 109 completed it. The outcome measures of the feasibility of the DST's online administration were time to complete the DST and ease of completion using a 5-point rating scale from very easy to very difficult. The mean time to complete the survey was 8 minutes (range: 2 – 50 minutes), including the responses to the questions on diet quality and ease of completion. Of the 109 respondents who completed the survey, 95% reported the online DST was easy or very easy to complete. The mean DST score for the sample was  $58.7 \pm 12.0$ , with 49% at nutritional risk, 41% at possible risk, and 10% at no risk. Most participants perceived their diet quality as poor (4%), fair (26%), or good (44%).

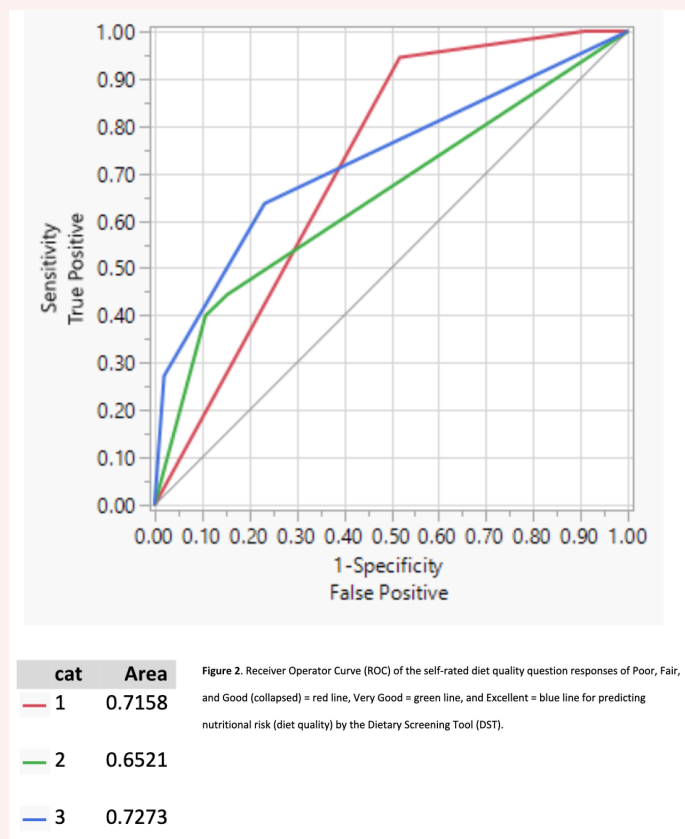
The responses to the self-rated diet quality question, "In general, how healthy is your overall diet?" (poor, fair, good, very good, and excellent) were compared to the total DST scores and the nutritional risk categories (at risk,  $< 60$ ; possible risk, 60–75; and not at risk,  $> 75$  total points). The comparison of the self-rated diet quality question responses to the DST scores resulted in a correlation coefficient of  $r = 0.45$ .

Figure 1 shows the scatter plot of DST scores vs. the responses to the self-rated diet quality question. For those respondents reporting poor or fair diet quality, 75% were classified at risk by the DST (positive predictive value). When the poor, fair, and good categories were collapsed, 64% were correctly classified at risk (Kappa = 0.37; misclassification rate of 0.35). The AUC of the ROC curve analysis was 0.72 for the collapsed category (poor, fair, and good) compared to at-risk by DST. For identifying individuals as at risk by the DST, the self-rated diet quality question responses of

responses of poor, fair, and good demonstrated a sensitivity of 95% and a specificity of 52% (See Figure 2). For those respondents reporting an excellent diet, 100% were correctly classified as not at risk. For those reporting a very good diet, 88% were correctly classified as not at risk, with an overall negative predictive value of 90%.



**Figure 1.** A plot of DST (Dietary Screening Tool) scores versus the responses to the self-rated question of diet quality. Blue line = mean DST score; Black dots = individual DST scores. DST risk categories: No risk = > 75; Possible risk 60-75; At-risk < 60.



**Figure 2.** Receiver Operator Curve (ROC) of the self-rated diet quality question responses of Poor, Fair, and Good (collapsed) = red line, Very Good = green line, and Excellent = blue line for predicting nutritional risk (diet quality) by the Dietary Screening Tool (DST).

## DISCUSSION

Diet quality is an essential and modifiable lifestyle factor for the prevention of chronic disease and improved chronic disease management, and it is a logical outcome measure for nutrition education programs targeting at-risk populations. Best practices in nutrition education support the use of validated tools to evaluate food and nutrition programming (Saffel-Shrier et al., 2019). The results of this study confirm that the validated DST is a practical tool to use in an online format, in addition to in-person and interview administration (Bailey et al., 2009). The majority of adults with chronic diseases who responded to the survey found it easy or very easy to complete. The ease of DST completion is in contrast to the challenges of completing food records (Ortega et al., 2015) and food frequency questionnaires (Pérez Rodrigo et al., 2015) to



assess diet quality. Additionally, the DST's paper scoring takes 5 minutes per person (Bailey et al., 2009) but the online survey scoring, downloaded as an Excel file, was accomplished by a simple formula – facilitating its use in an online format. The results of this study support the use of an online DST for the evaluation of nutrition education programs targeting middle-aged and older adults with chronic diseases. However, further validation for specific target groups may be warranted.

For the group as a whole, the self-rated diet quality question was effective at predicting the average DST scores within each of the five response categories and overall, was moderately correlated. Additionally, the self-rated diet quality question adequately predicted individuals who were at risk or not at risk by the DST. Individuals who rated their diet as poor and fair perceived their diet quality correctly and were in need of improvement. Similarly, respondents who rated their diet as very good or excellent were consuming a healthful diet and were not at risk as assessed by the DST. However, individuals who rated their diet as good, had DST scores falling into the at-risk, possible-risk, and not-at-risk categories, suggesting that the "good" response was not consistently interpreted. The choice of "good" may be due to it being viewed as a neutral or socially acceptable response, and thus the high response to this choice may have biased the results. Removing the middle option of "good" may improve the validity of the self-rated diet quality question as this would force respondents to choose a positive or negative response. A cross-sectional study of adults with self-reported chronic disease (hypertension, diabetes, and chronic kidney disease) was conducted. Potential participants (> 18 years of age) were recruited through ResearchMatch.org over two months in Fall 2020. A brief description of the study was posted on ResearchMatch.org, and through the website procedures, registered volunteers meeting the inclusion criteria were contacted regarding their interest in participating. Contact information, including email addresses, for interested volunteers, was made available to the principal investigator. A recruitment email was sent to the interested ResearchMatch volunteers (n = 310; 91% middle-aged and older adults, defined as ≥ 45 years) containing a Qualtrics online survey link to the informed consent language, the self-rated question assessing diet quality, and the DST questions. The study was approved by the University of Florida's Institutional Review Board 2, and all respondents provided online informed consent by agreeing to participate.

The responses to the DST questions were scored with various weightings for a maximum point score of 100 with + 5 points for dietary supplement use as previously described (Bailey et al., 2009). For example, "How often do you usually eat fruit as a snack?" included the responses of "never" (0 points), "less than once a week" (2 points), "1 or 2 times a week" (4 points) and "3 or more times a week" (5 points). Participants were classified into three risk categories by total points: "at-risk" (< 60 points), "possible risk" (60 – 75 points), and "not at risk" (> 75 points). The self-rated diet quality question, "In general, how healthy is your overall diet?", was rated on a 5-point scale including "excellent," "very good," "good," "fair," and "poor," as previously validated (Lofftfield et al., 2015). The survey closed with a question on the ease of completing the survey using a 5-point Likert rating from "very easy" to "very difficult." The time to complete the survey was recorded in the Qualtrics data file.

**D**escriptive analysis (means and standard deviations) was used to describe the DST scores of the three risk categories. The responses to the self-rated diet quality question were compared to the DST scores using a Pearson correlation. The three nutritional risk categories of the DST (at risk, possible risk, and not at risk) were compared to the five responses to the self-rated diet quality question using the chi-square test. Additionally, the three risk categories of the DST were compared to the responses to the self-rated diet quality question, i.e., excellent, very good, and a third category, which collapsed the poor, fair and good responses, using chi-square.

**A**dding definitions to the five responses may help with the interpretation and improve the sensitivity or specificity of the self-rated diet quality question. However, adding definitions would increase the complexity, reduce the readability, and lengthen the time needed to answer the question. Adding definitions may preclude an oral question and response, the potentially favored approach to screening individuals in a time-constrained environment, and instead necessitate written administration. If the self-rated diet quality question is used for identifying individuals in need of nutrition education to improve diet quality, including the "good" response will decrease the specificity of the tool and result in individuals being referred to nutrition education who may not be at nutritional risk. In circumstances of scarce resources or high program demand, a referral could be limited to only those individuals choosing the poor or fair responses. Still, some individuals at nutritional risk would be missed.

## LIMITATIONS

**T**his study had limitations. The population sampled in this study is not representative of a chronic disease population as respondents had time and interest to be ResearchMatch volunteers, requiring a computer or smart device and internet access. Many middle-aged and older adults with chronic diseases, particularly those in rural areas and with low socioeconomic status, may not have access to these technologies. Additionally, 9% of the sampled population with chronic disease were not middle-aged or older adults, and some of these individuals may have responded to the survey. As the validity of the DST in adult populations less than 45 years of age has not yet been examined, caution should be exercised regarding the prevalence of nutrition risk by DST in the individuals with chronic disease reported in this study. However, the purpose of the study was not to assess the diet quality of the respondents for purposes of generalization to the larger population with chronic diseases. Few respondents reported having very good or excellent diet quality or "no risk" by the DST, but instead, the data was skewed towards respondents reporting a poor, fair, or good diet. The lack of respondents reporting an excellent diet is not surprising, given the low diet quality consumed by U.S. adults in general (U.S. Department of Agriculture and U.S. Department of Health and Human Services, 2020), but may have impacted the sensitivity and specificity of the self-rated diet quality question. The negative predictive value should be interpreted with caution.

## CONCLUSION

In conclusion, the validated DST is feasible for online use and may be an appropriate outcome measure for nutrition education programs aiming to improve diet quality in middle-aged and older adults with chronic disease. Additionally, the self-rated diet quality question may serve as a rapid tool to identify individuals with chronic diseases at nutritional risk due to low diet quality, and therefore in need of nutrition education.



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# IS IT ENOUGH TO SAY YOU'RE BILINGUAL?

## Vetting Language Proficiency in Extension

Aurora Calvillo Buffington,  
University of Nevada Reno Extension

### ABSTRACT

Language concordance occurs when the speaker and the receiver speak and understand the same language. Research shows that language concordance improves communication between patients and medical providers and is associated with improved adherence to doctor-recommended health behaviors and patient outcomes, which may also be applicable to health and nutrition education. Extension provides nutrition education through some of the largest federal nutrition programs serving low-income audiences, many of who are not native English speakers and have limited English proficiency (LEP). In order to better serve the community and ensure fair and meaningful access to federally funded education and resources, Extension should ensure its bilingual workforce is proficient in delivering information in languages other than English. This article seeks to raise awareness about the need to formally assess the foreign language proficiency of nutrition educators who teach in a foreign language.

### IS IT ENOUGH TO SAY YOU'RE BILINGUAL? VETTING LANGUAGE PROFICIENCY RESPONSIBLY IN EXTENSION

When hiring bilingual staff to provide concordant language education is justified, how are their abilities to speak a second language vetted? Is it enough for a prospective employee to say they are a native speaker of a foreign language? Being bilingual in English and a native foreign language in its own right does not guarantee that a person can skillfully interpret the spoken word or translate written educational materials. However, it does mean that the person knows two languages almost equally well, having learned at least the native language from birth.

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The U.S. Office of Management and Budget defines "Hispanic or Latino" as a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race (United States Census Bureau, 2021). Many people use the terms Hispanic and Latino interchangeably. However, they are different in that Hispanic refers to a person that speaks Spanish or is a descendant of a Spanish speaker. Latino refers to a person from a Latin American country (Cole, 2019). As this article focuses on language proficiency, the term Hispanic will be used to refer to Spanish speakers.

## BACKGROUND

According to the Oxford dictionary, the term Limited English Proficiency (LEP) is used to describe an individual who does not speak English very well. In the United States, LEP populations have poverty rates nearly twice that of English-proficient (Zong & Batalova, 2015). Many low-income families and individuals receiving Extension provided nutrition education are from diverse populations with an increasing amount coming from refugee and immigrant populations. For example, 72% of those reached in 2021 by the Expanded Food and Nutrition Education Program (EFNEP) were people of color (United States Department of Agriculture, 2022). The EFNEP is a federal nutrition education program that operates through Extension. The American Community Survey (ACS) defines limited English-speaking households as those in which all members 14 years old and over have at least some difficulty with English. The 2021 ACS estimates that 22.4% of U.S. households speak a primary language other than English, and 4.2% of the nation's households are classified as limited English speaking (United

**Table 1**

*Limited English Speaking Households, 2021 American Community Survey Estimates*

	United States		Limited English Speaking	
	Total	Percent	Total	Percent
All Households	127,544,730		5,312,317	4.2
Households speaking --				
Spanish	16,323,914	12.8%	3,125,459	19.1%
Other Indo-European	5,787,131	4.5%	828,614	14.3%
Asian and Pacific Island	4,876,358	3.8%	1,119,070	22.9%
Other	1,675,278	1.3%	239,174	14.3%

*Note.* Data from United States Census Bureau (2021). *S1602: Limited English Speaking Households.*

American Community Survey.

States Census Bureau, 2021). As shown in Table 1, the majority of households across the United States described as having limited English proficiency are from Spanish-speaking households. The concentration of limited English speaking households can vary depending on location within the United States.

Language concordance occurs when the speaker and the receiver speak the same language and understand each other. In contrast, language discordance occurs when there is limited proficiency in the same language used between the speaker and receiver (Hsueh et al., 2019).

Several research articles have demonstrated that language concordance improves patient compliance, quality of care, interpersonal processes of care, and health outcomes (Hsueh et al., 2019). Conversely, a systematic review of 15 research studies comparing provider and patient language concordant care with discordant care showed that patients fared worse health outcomes such as diabetes care and control when language discordance existed between patient and provider (Cano-Ibáñez et al., 2021).

Patient-provider language concordance helps improve communication and patient health outcomes, but it is important to assess the language skills or proficiency of those providers. Among providers of nutrition education, the Special Supplemental Program for Women, Infants, and Children, commonly referred to as WIC, is a federal nutrition program that provides many services, including information on healthy eating. A study of the Texas WIC program assessed educator-client concordance and other factors to determine how best to work with their LEP clients. Researchers found that 40% of educators who taught LEP clients were “somewhat” or “not comfortable” providing services in another language. Although 72% of the directors at local agencies stated that Spanish language skills were preferred in new hires, only 7% used testing to certify their proficiency. Instead, they relied on self-report or an existing Spanish-speaking employee to screen the language abilities of prospective hires. The authors concluded that nutrition education needed to be delivered in a culturally and linguistically competent fashion and cited the need for leadership to update how it manages and trains its workforce to meet the needs of its LEP clients (Greenberg et al., 2015). This study showed how relying on self-report of foreign language proficiency can have a potential negative effect on the delivery of nutrition education.

## PURPOSE

This article aims to increase awareness of the need to ensure Extension nutrition educators are proficient in Spanish to help increase concordance with limited English proficiency Spanish speakers. This article primarily refers to Spanish speakers, but its call to action may be more broadly applied to help improve communication with limited English proficiency populations of other cultures.

## ISSUE

Extension serves rural and urban residents by providing non-formal education and activities that improve lives. Health and nutrition programs are specifically created to meet community needs by influencing behavior changes to improve health outcomes. The National Institute of Food and Agriculture describes the hallmarks of the Extension program, in general, to be “openness, accessibility, and service” (United States Department of Agriculture, n.d.). These hallmarks can also be seen as characteristics of Extension professionals, especially those that serve limited English proficiency audiences.

According to the LEP.gov website, all federal programs and activities are required to provide meaningful access to individuals who are limited English proficient in accordance with Executive Order (EO) 13166 (United States Department of Justice, n.d.). The Cooperative Extension System receives federal funding and is the largest provider of federally funded nutrition programs, including the Expanded Food and Nutrition Education Program (EFNEP) and the Supplemental Nutrition Assistance Program Education (SNAP-Ed). Extension systems make significant efforts to meet their community's unique language-related needs, not only to improve health and well being, but also to comply with EO 13166. For example, North Carolina Cooperative Extension has a robust set of web pages devoted to Limited English Proficiency (LEP) which outline its LEP Policy and Language Access Plan and offer resources to help Extension Educators assess their community's language needs, data, and training for its staff (North Carolina Cooperative Extension, n.d.). Despite efforts like these, clear guidance and implementation of language proficiency testing for Extension staff is lacking.

## IMPLICATION FOR EXTENSION

While options exist such as professional translation services or contracts to translate nutrition education materials from English to other foreign languages, these solutions do not extend to direct education situations where an instructor teaches students and exchange communication. Bilingual staff, however, can help meet the need for delivering direct nutrition education in another language, such as Spanish. The United States Department of Justice LEP Federal Coordination and Compliance Section recommends verifying language qualifications, adding the importance of avoiding reliance on self-identified multilingual staff (United States Department of Justice, 2014). Thus, language certification of bilingual staff is recommended.

Many agencies and organizations go beyond an employee's bilingual self-declaration and employ testing to certify that their employees possess the language skills needed to support their role. When a federal government position requires a second language, it requires testing indicating skill levels ranging from no proficiency (score of 0) to functionally native proficiency (score of 5). Depending on the function, testing may be accomplished in four different domains of reading, speaking, listening, and writing, and are graded according to the Interagency Language Roundtable (ILR) Language Proficiency Scale (Herzog, 1980). A few companies in the U.S. provide language testing using ILR Scale measures; for example, one company administers tests in over 120 languages. This company can proctor remotely using a computer or telephone with an average cost of under \$150 per test, depending on the assessment options and test format (Language Testing International, 2021).

However, beyond the assessment of foreign language proficiency, another consideration is the time and effort burden placed on bilingual employees. The delegation of translation requests may be unfairly placed on bilingual employees

without appropriate compensation, recognition, or as an addition to their existing job duties. When an employee is needed to provide ongoing bilingual education, services, or translation and creation of written materials, that employee should be given a bilingual pay premium. For example, an employee that provides bilingual services for at least 10% of their work time as a state of Nevada employee is eligible to receive a premium equal to 5% of their regular pay (Chapter 284 - State Personnel System, 2019). Some work sites require that the employee certify time spent providing these services every pay period, while others do not. In order to receive recognition for their efforts, bilingual duties and the amount of the worker's time devoted to carrying them out should be explicitly stated under job duties in the employee's work performance standards. Doing this will also justify professional development associated with sharpening their bilingual skills, such as learning medical or industry-specific terminology.

When time or funding constraints make working with an external translation service challenging, most employees know who the go-to translator is in their workplace. Sometimes, a list of people with certified foreign language proficiency will be made available to all employees as a reference. However, it is essential for supervisors and bilingual employees to set boundaries together on the amount of time spent providing these services and for what purpose, and this can be outlined in their work performance standards. Additionally, a program employee with certified bilingual skills could be designated a certain amount of their work time to support others with similar needs in their unit.

There are other factors to consider when establishing plans to improve reach for those in the community with limited English proficiency (LEP). One of these factors is institutional commitment, which may be demonstrated with a formal policy and language access plan that operationalizes these efforts. The LEP.gov website has resources to help develop such plans, and several state Extension websites show they have developed LEP plans and resources. Another factor is cultural competence; the Texas WIC study cited the relevance of not only having certified bilingual staff, but the need to possess cultural competence to better connect to their clients (Greenberg et al., 2015). Cultural competence would recognize, for example, that not all Hispanics are the same. The PEW Research Center lists 23 different origins among the U.S. Hispanic population (Krogstad & Noe-Bustamante, 2021). Language, commonly consumed foods, and cultural practices can differ widely among these groups. So, even a highly proficient native Spanish speaker may feel inadequately prepared to address Hispanics with different origins; thus, the need for additional training and professional development to enhance cultural and linguistic competence.



## CALL TO ACTION

In order to better serve the community and ensure fair access to federally funded education and resources, Extension must ensure its workforce is adequately equipped. When a needs assessment indicates a justifiable need for services tailored to meet the unique needs of limited English proficiency individuals, a starting point for building a competent workforce should include (1) language proficiency testing, (2) bilingual pay premiums, and (3) work performance standards that include a description of bilingual duties and the amount of time spent doing them. Extensions should invest in the effort to properly vet and compensate their bilingual staff in order to better serve their communities as well as comply with federal LEP mandates.



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## ASSESSING EXTENSION CONSUMER ECONOMICS: CAPACITY, NEEDS, AND PRIORITIES

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### ABSTRACT

The importance of utilizing a needs assessment to guide Extension Consumer Economics programming cannot be overstated as households are touched by all issues addressed in Consumer Economics. Few studies have examined needs assessments in the context of Extension Consumer Economics (also known as personal finance, family resource management, family finance) programming. This article describes a Consumer Economics needs assessment study implemented with Family and Consumer Sciences (FCS) Extension educators in one southern state. Results identify perceived subject-matter knowledge, skills, capacity, volunteer support, and partnerships of Extension educators. The need for program resources and the importance of various Consumer Economics topics were also explored. Implications of the study and lessons learned conclude the article. These lessons can easily be translated for use across program areas.

## ASSESSING EXTENSION CONSUMER ECONOMICS: CAPACITY, NEEDS, AND PRIORITIES

**N**eeds assessments are foundational elements of any Extension program and a priority for Extension professionals (Caravella, 2006). Through the needs assessment process Extension educators and Specialists are able to determine issues, challenges, and potential solutions facing the people and communities they serve (Patton, 1982). Needs assessments have been used to provide critical information to help Extension professionals determine program priorities, craft annual plans of work, and aid in making informed decisions about program creation, expansion, and maintenance (Garst & McCawley, 2015).

According to Donaldson and Franck (2016), needs assessments seek to answer a series of questions about the people and communities being served by Extension. These questions include:

- What needs to people have?
- How can those needs be met?
- What assets already exist?
- What can be built on to continue to help people and communities improve?

The literature is replete with studies highlighting needs assessments in Extension. Researchers have detailed the use of needs assessments for informing professional development trainings for Extension educators (Conner et al., 2018). Others have highlighted the design and effective use of needs assessment tools in identifying programmatic needs (Bayer et al., 2020). Researchers have outlined effective need assessment methodologies for identifying clients' educational needs (Whitaker, 2018). And, researchers have explored methods for overcoming the limitations of the needs assessment process (Windon & Lewis, 2017). Despite these works, few studies have examined needs assessments in the context of Extension Consumer Economics (also known as personal finance, family resource management, family finance) programming. In fact, a review of the literature revealed only two such articles (Abdul-Rahman, 2012; Jewkes et al., 2021).

The importance of utilizing a needs assessment to guide Consumer Economics programming cannot be overstated (Vitt et al., 2000). Households are touched by all issues addressed in Consumer Economics (Berry et al., 2020). Consumer Economics programming topics are broad ranging from credit to advanced directives. Additionally, the economic conditions at the local, state, national and global levels all impact the financial stability of individuals and households in turn influencing their felt needs. Therefore, conducting a needs assessment can help determine the Consumer Economics issues of greatest importance to families and individuals at a given time thus helping Extension professionals to guide programming priorities. Additionally, previous research has identified a lack of ability and competency among Extension educators to teach consumer economics topics (Jewkes et al., 2021). This finding further provides an impetus for better understanding the needs of Extension educators in the state. Establishing successful Consumer Economics programs requires planning and vision. Ascertaining needs is the first step to realizing that vision and putting planning into action (National Endowment for Financial Education, 2013).

## OBJECTIVES

This article fills a void in the literature by describing a Consumer Economics needs assessment study implemented with Family and Consumer Sciences (FCS) Extension educators in one southern state. Specifically, this study was driven by the following objectives:

1. Identify the perceived subject-matter knowledge, skills, capacity, volunteer support, and partnerships of Extension educators to implement Consumer Economics programming.
2. Identify the resources Extension educators need in order to implement Consumer Economics programming.
3. Identify the importance of various Consumer Economics topics in county Extension programming.

Results of this study are presented. Implications for Extension Specialists or educators wishing to replicate this study are offered. Lessons learned conclude the article. These lessons can easily be translated for use across program areas.

## METHODS

A needs assessment instrument was developed by Consumer Economics Specialists with input from the Extension Consumer Economics leadership team (whose membership includes at least one county Extension educator from each of the three regions of the state and one 4-H Youth Development educator). Working with the state FCS Evaluation Specialist, the team examined the extant literature on the Extension needs assessment process. The result of this work was a 30-item online needs assessment survey. The survey was pilot tested with the Consumer Economics leadership team (n=8). Based on the pilot test, grammatical edits and slight modifications were made to instrument instructions. The study was exempt from IRB approval (UTK IRB 19-05530-XM).

An email invitation was sent to all 107 FCS Extension educators in the state inviting them to complete the online needs assessment. A follow-up reminder was sent one week later. A total of 60 FCS Extension educators responded resulting in a response rate of 56%.





## FINDINGS

Consistent with FCS Extension educators in Tennessee, the majority of respondents were female and working in rural counties (Table 1). Most reported spending less than 25% of their time on consumer economics topics and programs. An email invitation was sent to all 107 FCS Extension educators in the state inviting them to complete the online needs assessment. A follow-up reminder was sent one week later. A total of 60 FCS Extension educators responded resulting in a response rate of 56%.

Table 1

### Demographics Summary for Respondents

Demographics	n	Frequency	Percentage
Sex			
Female	54	51	85%
Male		1	1.7%
Chose not to answer		2	3.3%
Race/ethnicity	56		
White		48	80%
African American or Black		4	6.6%
Other races		2	3.3%
Chose not to answer		2	3.3%
Community	54		
Rural		38	63.3%
Suburban		12	20%
Urban		4	6.7%
Time spent delivering Consumer Economics programs	52		
0-24%		36	23.3%
25-49%		9	15%
50-74%		7	11.7%

*Note. Some respondents did not answer all questions.*

## OBJECTIVE 1: KNOWLEDGE, SKILLS, CAPACITY, VOLUNTEER SUPPORT, PARTNERSHIPS

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urvey questions were rated on a 5-point Likert scale (strongly agree to strongly disagree). Most educators reported high levels of confidence regarding their knowledge (71.1%), skills (83.3%), and capacity (81.7%) to implement Consumer Economics programs. A majority (66.7%) were planning to implement Consumer Economics programs

More than half (55.0%) reported having established partnerships to help with program implementation. Schools were the top partner selected by 58.1% of educators followed by banks (32.3%), government agencies (29.0%), nonprofit organizations (25.8%), and areas on aging (24.2%). Few were working with job training organizations (6.5%), attorneys (3.2%), legal service organizations (1.6%), or credit counselors (1.6%).

Educators' responses were compared based on two groups: educators who reported spending less than 25% of their time in Consumer Economics programs and educators who reported more than 25% of their time. Independent t-tests indicated significant differences between these two groups with educators who spent more time in Consumer Economics programs more likely to report higher confidence in subject matter knowledge, skills, and capacity to implement Consumer Economics programs. In addition, they reported higher levels of confidence related to partnerships (Table 2).

Table 2

Independent Group T-Test between Low and High Time Spent Delivering Consumer Economics Programs and Selected Variables

Selected Variables	Low Time		High Time		t-test (df)	p
	M	SD	M	SD		
Subject Matter Confidence	2.33	.89	1.53	.64	3.59 (36.42)	.001*
Skills	2.06	.75	1.33	.49	4.06 (39.90)	.002*
Capacity	2.14	.80	1.40	.51	3.96 (40.55)	.000*
Volunteer support	3.42	.94	2.93	1.16	1.43 (21.96)	.17
Established partnerships	2.81	.98	1.87	.74	3.73 (34.42)	.001*

*Note. Lower means indicate more confidence (scales were from high to low). \*p<.05.*

## OBJECTIVE 2: RESOURCE NEEDS

Educators identified participant recruitment for Consumer Economics programs as a challenge (67.8%). Other areas for improvement included the need for marketing materials (40.0%), additional educational resources (36.7%), and evaluation tools (33.2%).

## OBJECTIVE 3: CONSUMER ECONOMICS TOPICS

Out of the 32 Consumer Economics topics listed, all educators (100%) identified credit and youth programs as being very important or important for their communities. In addition, over 90% identified these topics as very important or important: budgeting, decision making, employment, finances in later life, fraud, homeownership, identity theft, Medicare, money management, retirement planning, savings, and Social Security. Topics rated the least important were: advanced directives, banking, disaster preparedness, and consumer rights.

## DISCUSSION

## SUMMARY

Data from The University of Tennessee Extension Planning database, revealed that Extension educators in the state spend the least amount of time on Consumer Economics programming in comparison to other FCS knowledge areas (community health, human development, nutrition and food safety). Extension educators in the state spend most of their programming time on community health and nutrition and food safety programming. This is in line with Jewkes et al. (2021) who found that half of the educators surveyed never delivered any personal finance education. While Extension educators are spending less time implementing Consumer Economics programming, results from this survey indicate the educators still feel equipped with the knowledge, skills, and capacity for implementing Consumer Economics programming. Additionally, those educators who spent more time implementing Consumer Economics programming reported higher knowledge, skills, and capacity for implementing these programs. Additional barriers, beyond knowledge, skills, and capacity, that are preventing Extension educators from increasing time commitments to Consumer Economics program are worthy of future investigation. Given that all FCS Extension educators in the state provide programming in all areas of FCS, it is reasonable to suspect staff time as a primary barrier.

Extension marketing and participant recruitment are perennial challenges facing Extension educators (Sneed et al., 2016). Given this, it is little surprise that participant recruitment and marketing materials would emerge as top needs for Consumer Economics programming. Moving forward, Extension Specialists would be well served to partner with other Extension program areas to address the challenges of participant recruitment and marketing in an integrated fashion. In doing so, all Extension programs including Consumer Economics programs could be elevated to a level of awareness in the communities served.

Additionally, despite close to 25 Consumer Economics programs and supporting educational materials, Extension educators still cited a need for additional educational resources and evaluation tools. This need does bring up interesting questions regarding Extension educators' familiarity with the current resources. It is possible that a disconnect exists between what is currently available and Extension educators' awareness and familiarity with those resources.

More than half of the Extension educators surveyed reported established partnerships to help with program implementation. The partners identified match closely with those reported by Extension educators through the Extension Planning database. The extent of involvement of each partner as well as how these partnerships are established and fostered are worthy of additional inquiry.

Extension educators perceived having adequate partner support for the implementation of their Consumer Economics programming. Volunteer support, however, was lacking with only slightly more than 20% indicating they have adequate volunteer support. Building volunteer capacity and increasing volunteer support will be critical to helping expand the reach of Consumer Economics programming across the state. Given the time constraints and programming demands facing Extension educators in the state, volunteer support may be the best and most feasible avenue for fostering program growth.

Fourteen Consumer Economics topics were identified as being very important or important by the Extension educators. The challenge becomes how best to support such a wide range of programming. The need for working cooperatively with Consumer Economics Extension professionals in other states as well as industry professional is paramount.

In light of tight budgets, the topics identified by Extension educators as important to their communities will be valuable as Extensions faculty and State Specialists make strategic programming decisions. These topics will help Extension faculty and State Specialists identify new pathways for resource development, professional training, and external funding.



Results from this study provide a snapshot of the Consumer Economics needs of Extension educators in one Southern state. While the results do hold value as a starting point for informing program development and future strategic directions, the results do raise additional questions. Central among the questions is exactly how State Extension Specialists should address the issues and needs that have surfaced. The approaches for informing next steps will come from best practices identified in the literature. In addition to the literature, follow up research using methods such as focus groups and key informant interviews may be necessary in order to take a deeper dive into the specifics behind many of the needs assessment answers. Thus, this survey is simply a starting point for additional inquiry as the research team seeks to better understand Consumer Economics in the state.

The research team gleaned lessons (outlined below) from the design and implementation of this state-wide needs assessment project. The lessons learned are not limited to Consumer Economics programming. Instead, these lessons translate across subject matter areas and can be used to inform needs assessments conducted by other Extension professionals in other program areas.

- **Involve county educators in instrument development.** Field staff from selected counties were asked to be part of the instrument development process. Their input helped to select the best research methodology, in this case an online survey, identify survey topics, and draft survey questions.
- **Use transition times.** This particular needs assessment was launched during a time of transition for the Extension Consumer Economics. The retirement of a long-time Consumer Economics Specialist and the hire of a new faculty member created an ideal situation for taking stock of current programming as well as future opportunities.
- **Pilot test.** Pilot testing can be an important first step when conducting any research. The feedback obtained from participants in the pilot testing phase allowed the researchers to make modifications to the survey instrument that addressed errors while increasing the flow and readability of the instrument.
- **Utilize the expertise of outside help.** For this project, the services of an outside evaluator were utilized. Though the evaluator did not have a background in Consumer Economics, she was invaluable in helping with survey design, layout, online launch, and initial data analysis.
- **Report back.** The data collected from the needs assessment survey were of interest to not only the research team but the County Extension educators who provided the responses. Therefore, an intentional effort was made to report back to the County Extension educators the results of the needs assessment survey. Such reporting occurred through an Extension publication and a presentation at an in-service training.



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# NEAFCS JOURNAL

## THE IMPORTANCE OF UNDERSTANDING HEALTH INSURANCE BENEFITS AMID POLICY AND ENVIRONMENTAL CHANGE

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### ABSTRACT

Under the Affordable Care Act (ACA), most health insurance plans were required to cover ten specific categories of health care, referred to as the essential health benefits. Policy changes and interpretations allowed for a growing selection of plans which lack coverage in one or more of the ten categories. Consumer resources and curricula were created to address continuing confusion about plan benefits, selecting, and using health insurance plans. Results from pre and post surveys confirmed the hypothesis that consumer education results in increased knowledge of health insurance benefits and confidence in selecting the best plan.

One of the provisions of the Affordable Care Act (ACA) was to require standardization of benefits for increased access to covered services, greater transparency, and less confusion in coverage. Yet, both state waivers and individual policy exemptions allow plans to move away from those standardizations. Because policies governing health insurance can rapidly change on both the national and state levels, and can vary between states, knowledge of and skills in using health insurance benefits are necessary for consumers to make informed health insurance coverage decisions. To address these issues, The Smart Use, Smart Choice™ Health Insurance Literacy Program was developed to provide consumers with the self-efficacy to select and optimally use their health insurance plans to protect both health and financial well-being.

A major intent of the ACA was to remove barriers to health care by making health insurance more affordable. Low-income individuals have been the primary beneficiaries of the ACA's premium subsidies and Medicaid expansion (Kominski et al., 2017). However, the ACA



still had problems with affordability. The new law was accompanied by a rapid increase in the average cost of premiums for employer-provided plans, which rose 55% between 2008 and 2018 (Kaiser Family Foundation, 2018). Marketplace premiums rose at an annual rate of 22% between 2014 and 2018 (Sacks, 2018). There were limits to how much some employers were able to absorb. There is evidence that these cost increases pushed some public insurance-eligible individuals out of the workplace (Li & Ye, 2017). Another goal of the ACA was to make health insurance more comprehensive for most policy holders. For consistency of care, all government-managed and employer sponsored plans were required to cover ten categories of services specifically detailed in the new law. These are referred to as essential health benefits (EHBs). The EHBs are: 1. ambulatory patient services, 2. emergency services, 3. hospitalization, 4. pregnancy, maternity and newborn care, 5. mental health and substance use disorder services, 6. prescription drugs, 7. rehabilitative and habilitative services and devices, 8. laboratory services, 9. preventive and wellness services, and 10. pediatric services (HealthCare.gov, 2022).

However, changes to the ACA allowed those who were unemployed or who were not eligible for employer-provided health insurance to purchase short term, low cost (STLC) health insurance with premium costs well below that of full benefit health insurance. These so-called “skinny plans” could be sold to individuals with an absence of one or more of the EHBs (Appleby, 2017) and were designed to provide inexpensive, limited coverage for those experiencing a gap in health insurance coverage (Pollitz et al., 2018). These plans could seem appealing to those experiencing a disruption in employment and income shortfalls; however, this leaves them susceptible to coverage gaps and less financial protection.

Shortly after the passage of the ACA, a team of researchers from University of Maryland (UMD) and University of Delaware (UD) Extensions began working to understand whether consumers were prepared to make health insurance decisions under the new law. The team worked to define the concept of health insurance literacy. They found that to fully understand health insurance, consumers had to be capable of understanding both health information and financial information (Kim et al., 2013). Health insurance provides access to health services, including preventative services for staying healthy (Brown et al., 2016). However, people have struggled to understand it (Levitt, 2015). A review of the literature showed that consumers were generally confused about health insurance terminology and did not feel confident in selecting the best health insurance coverage for their situation (Kim et al., 2013). Shifting state and federal policies have added to confusion (Doonan & Katz, 2015). It is incumbent on Extension to respond to legislative changes with educational resources (Rogers & Braun, 2015). Outcome evaluation has demonstrated that health insurance education does result in increased health insurance literacy (Koonce et al., 2017).

## PURPOSE AND OBJECTIVES

Policy change creates the exigency of reliable consumer health insurance resources. The team identified the need to create educational materials to assist consumers in understanding the different types of health insurance benefits and how different plans covered these benefits. The resulting program, Smart Use Health Insurance™ –Your Health Insurance Benefits (Benefits), has three objectives:

- Identify and describe the essential health benefits
- Explain how to receive the essential health benefits
- Explain the importance of getting and using the essential health benefits

The purpose of this study was to determine if health insurance education with a narrow focus on health insurance benefits could be effective in achieving the specific objectives of increased knowledge of the ten health insurance benefits, increased confidence to use those benefits to improve health outcomes, and increased confidence in selecting a policy which would meet health care needs. A study using the new curriculum was done to test the hypothesis that the educational program met these objectives and would result in statistically significant changes in the outcome measures.

## METHOD

Five UMD Extension educators taught 18 Benefits workshops to 108 individuals between 2017 and 2019. Participants were recruited from program email lists, other community programs, and social media. Potential recruits were adults who currently had health insurance through an employer or through the state or federal marketplace. Educators were provided with a script for consistency.

The contents of the program were written to help consumers understand the situations in which they might use different health insurance benefits, what might happen if their chosen plan did not cover healthcare services they wanted, and how to make sure to select a plan that would cover all the benefits they and their family required. During the workshop, educators taught the participants about the 10 EHBs and guided them through an activity so they could identify them. Participants also learned the best steps for getting and using health insurance benefits, including choosing in-network health providers and budgeting for costs. Finally, they learned why it is important to get and use health insurance benefits to stay healthy and protect finances.

The team piloted the program to ensure that it was achieving the stated objectives. The results of this pilot and its implication for consumers are discussed in subsequent sections. Brown et al., (2016) describe the five key theories that provided the program development framework: social learning theory, stages of change, planned health behavior, health communications, and adult education. Educational materials were created using the social cognitive and experiential learning frameworks. Participants received one hour of direct education and supporting materials on the ten essential health benefits and how to use them. The lesson included a case study to help participants experience identifying the ten benefits and their purposes.



A survey instrument, similar to ones tested with other program modules (Brown et al., 2016; Paez et al., 2014) was used to assess health insurance literacy levels both pre- and post-workshop. The instrument measured participants' likeliness to take informed health insurance actions and their level of confidence in these actions. Likelihood and confidence were measured using a 4-point Likert scale with responses ranging from "not at all likely" to "very likely" and scored respectively from 1-4. Approval for this research was obtained from the UMD Institutional Review Board. Participants were asked to complete pretest and posttest evaluations based on the program's objectives. Questions 1 and 2 measured confidence. Questions 3 through 5 measured likeliness to take action. The posttest, completed at the conclusion of the workshop, included the same 5 questions from the pretest and additional demographic questions. Paired T-tests were used to find out whether there were any statistically significant differences between pre- and post-survey data.

## RESULTS

**P**ilot program participants were diverse in income, education, age, gender and race. Evaluations were received from 102 participants. Table 1 shows the demographic characteristics of the participants. The majority of participants (86.4%) were under 65 years. The majority of participants were female (66.7%) and currently had health insurance (95.8%). White or non-Hispanic individuals were the largest racial group (46.7%) followed by African Americans accounting for 31.1% of participants. Almost half (47.2%) of the participants had graduated from college, 13.5% obtained a Bachelor's degree, and 33.7% obtained a graduate or professional degree.

**T**he SPSS v.24 software was used for statistical analysis. The impact of the workshops was measured by valid and reliable questions to measure consumers' confidence and likelihood of using their EHBs. A paired-samples t-test was used because the data were collected from one group of people on two different occasions (pre and post). All data in this analysis were matched. Results showed there were statistically significant differences between pre- and post- test responses on the improvement in confidence and likeliness to take action in all five items, as shown in Table 2.

**Table 1**

*Participant demographics (N=102)*

Demographics	Total Sample (n=102)
<b>Age (in years)</b>	<b>N</b>
18-29	30 (31.6%)
30-64	52 (54.9%)
65 and older	13 (13.7%)
<b>Gender</b>	
Male	16 (16.2%)
Female	66 (66.7%)
Other/Choose not to say	17 (17.2%)
<b>Race</b>	
Asian / Pacific Islander	4 (4.4%)
Black / African American	28 (31.1%)
Hispanic or Latino	13 (14.4%)
Native American or American Indian	1 (1.1%)
White / Non-Hispanic	42 (46.7%)
Other/Choose not to say	2 (2.2%)
<b>Health Insurance</b>	
Yes	92 (95.8%)
No	4 (4.1%)
<b>Education</b>	
Less than high school	5 (5.6%)
High school graduate or GED	21 (23.6%)
Some college, or Associate's Degree	21 (23.6%)
Bachelor's Degree	12 (13.5%)
Graduate or Professional degree	30 (33.7%)

Table 2

## Program Evaluation Results

Question	Respondents					
	Pre test		Post test		t	p
	M	SD	M	SD		
1. How confident are you that you know how to figure out your share of the cost for care, after the health plan pays their share?	2.78	.991	3.58	.636	-9.087	<.001
2. How confident are you that you know how to find out what is and is not covered before you receive a health care service?	2.98	.912	3.69	.580	-8.875	<.001
3. How likely are you to pay your premium on time?	3.37	1.012	3.69	.677	-3.611	<.001
4. How likely are you to find out if a doctor is in-network before you see him /her?	3.43	.887	3.77	.615	-4.464	<.001
5. How likely are you to use the essential health benefits you qualify for?	3.27	.827	3.78	.462	-6.200	<.001

Results indicated that the workshops increased consumers' confidence in understanding health and coverage. The change in their perceived capability was statistically significant indicating an increased likelihood to apply knowledge, pay premiums on time, find out if a doctor is in-network before a visit, and use their EHBs. Questions 1, 2, and 4 do not directly address EHBs but are nonetheless important measures of health literacy and address necessary actions to maintaining access to health insurance (Paez et al., 2014).

## DISCUSSION

Health insurance protects both health and financial wellbeing (Russell et al., 2014) and therefore an understanding of what is covered in a health insurance plan is important for making personal cost-benefit decisions. Results support our hypothesis that attending the Benefits program results in increased knowledge of health insurance benefits and confidence in selecting the best plan. The pre-program responses indicated that consumers have low confidence in their ability to determine their share of health costs and what benefits they are entitled to prior to receiving care. This supports earlier research that affirmed the complexity of accessing this information (Mehrotra et al., 2017; Sherman et al., 2017). Following the one-hour workshop, participants reported a statistically significant increase in their likelihood to use their EHBs, a key factor in staying healthy. Research indicates that consumers who understand and use their health insurance benefits stay healthier (Wang, 2020). Our results also indicate that program participants felt more confident in their ability to understand the usage of their health insurance benefits. We cannot say for certain that program participants will use their health insurance benefits, but the significant increase in intention to do so is promising. The limitations of behavioral intention are discussed more in subsequent sections. However, the results of this study show that the educational program was able to increase confidence and likelihood to engage in positive health insurance behaviors.

Understanding health insurance benefits is important for many reasons. First, access to testing, wellness checkups, and care is not just an individual need but a public health necessity. Consumers who understand and use their health insurance benefits stay healthier, and data from their health care touchpoints helps inform disease surveillance (Wang, 2020). Second, access to health insurance is highly tied to employment. In times of increasing employment interruption, as occurred during the COVID shut-downs, more consumers are finding themselves insurance shopping, and vulnerable to gap policies with lower costs but greater risk exposure (McDermott et al., 2020). However, these concerns are neither situational nor time bound. Third, one of the most frequently omitted



services in skinny plans are mental health benefits, which are a growing need (Appleby, 2017). Finally, under Section 1322 of the Affordable Care Act, states can apply for innovation waivers which could reduce standardization and lessen the impact of plan comparability (Kaiser Family Foundation, 2020; Gannot et al., 2018). This creates an environment where a move between states or even between plans in the same state might create confusion for a consumer reviewing the plans available to them. Frequently, cost becomes the predominant factor when making health insurance decisions, exposing consumers to both health and financial risk if there are gaps in coverage (Somers et al., 2017).

Health care and health insurance have been policy issues for decades. Because of this, timely, reliable, educational response to legislative changes with curricula and communication is imperative for Extension (Braun, 2012). Results of our pilot program showed that education makes consumers more likely to make informed cost-benefit decisions regarding the selection and use of their health insurance plans. The combination of rising rates of chronic illness (Parrill, 2020), health policy disruption, mental health needs, and policy destandardization necessitates a health insurance literate population.

Within the present policy environment, there is pressure to return a portion of both funding and flexibility to the states (Rice et al., 2018). This has the potential to further increase variability in benefits across plans. Extension is a well-respected leader in health insurance literacy, and well positioned to deliver consumer education widely and across diverse modalities (Kiss et al., 2018). Future research is needed to explore whether the increased knowledge and confidence gained from health insurance education translates into actionable steps to select health insurance with adequate benefits and to use those benefits to maintain or improve health. Additional research is also needed to know if impacts differ by race, gender, or age. It is important to better understand that health and financial impacts are derived from Extension health insurance literacy education.

A few limitations should be noted. First, participants self-selected for program participation. It can be inferred that those who chose to attend a health insurance workshop did so because of a perceived low level of health insurance literacy and the desire to gain knowledge. Second, the geographical representation is limited. All of the participants in the study were from a single state, Maryland. Under the Affordable Care Act, states have latitude concerning the expansion, operation, and management of health insurance (Lines et al., 2021). Some states established state-based marketplace exchanges. Other states decided against implementing their own exchanges, instead directing their citizens to the federal exchange (Knudson et al., 2015). Yet others took a hybrid approach, partnering with the federal government to build exchanges. The results of this study could be different if conducted in other regions of the country. Lastly, workshop attendees experienced statistically significant self-reported gains in health insurance use confidence and capability, but it must be noted that confidence and capability do not necessarily lead to direct action.

## CONCLUSION

Health insurance policy is a continually evolving landscape. Consumers do not have a sufficiently comprehensive understanding of their health insurance benefits, and therefore do not utilize the full range of those benefits to maximize health. Individuals who understand and use their health insurance benefits have better health outcomes than those who do not. As such, it is important for Extension to continue to be a leader in health literacy education. The study of our pilot program demonstrates that education successfully helps consumers to make informed choices with their health insurance plans. They indicated likeliness to use their benefits to stay healthy and had the confidence to determine costs and coverage, all validated measures of health insurance literacy. Understanding how to compare policies using the EHBs gave our pilot participants the knowledge and confidence to select plans that meet their needs, and that protect their health and finances. When experiencing a health care need, health insurance benefit decisions have significant consequences. Benefits increased confidence and reduced confusion for our pilot participants by providing important information about EHBs. This gave them the knowledge and confidence to select plans that met their needs, and to make informed decisions that protect their health and finances.



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## REPRESENTATION OF OLDER ADULTS IN NUTRITION EDUCATION PUBLISHED LITERATURE

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### ABSTRACT

**C**ooperative Extension's National Framework for Health Equity and Well-Being identifies ageism as an elicited bias contributing to structural inequity. This retrospective study assessed the relative representation of older adults in research articles, research briefs, and reports published in the Journal of Nutrition Education and Behavior (JNEB) from 1969 to 2020. The review found that historically, older adults represented 4% of the research articles, 3% of the research briefs, and 4% of the reports published in JNEB. To equitably represent all life stages, an enhanced focus on older adult nutrition education and behavior research, and journal publication are warranted.

### REPRESENTATION OF OLDER ADULTS IN NUTRITION EDUCATION PUBLISHED LITERATURE

**I**n the Cooperative Extension's National Framework for Health Equity and Well-Being, the root causes of structural inequity are ableism, ageism, xenophobia, racism, homophobia, classism, and sexism (Burton et al., 2021). By addressing these determinants of elicited bias, Cooperative Extension can "improve population health and achieve equity in health status" (Burton et al., 2021). Ageism has been defined as "the stereotyping, prejudice, and discrimination against people on the basis of their age" (Burnes et al., 2019). However, ageism is not commonly thought of as a significant social determinant of health, although at both individual and structural levels, it has detrimental impacts on health outcomes in older persons globally (Chang et al., 2020). Ageism is increasing (Chang et al., 2020) and becoming more evident as demographics reflect an ever-

Funding: This study was supported by the Department of Food Science and Human Nutrition, Institute of Food and Agricultural Sciences, University of Florida.

increasing older population (Donizzetti, 2019). Given the historical emphasis on youth and families in Cooperative Extension programming (Mincemoyer et al., 2004), an equitable focus on older adults, specifically related to nutrition education programming, needs to be examined.

There is a lack of published literature exploring if ageism affects community nutrition education programming and related research through Cooperative Extension. We can only glean suggestive evidence that some nutrition educators may have received little background and experience regarding older adults during their education and training. A content analysis of nutrition textbooks found a lack of emphasis on gerontology compared to maternal and childhood topics (Wellman et al., 2004). In addition, most of the terminology used to refer to older adults was neutral, 14% negative, and only 5% positive. A similar study revealed that nutrition textbooks failed to give a comprehensive or positive presentation of aging, which the authors suggest may impede students' development of favorable attitudes towards the older adult population (O'Neill et al., 2005). More recent research has shown that few undergraduate students had a course that allowed them to interact with older adults (Obhi et al., 2019).

However, students in a College of Human Sciences, including the majors, of Food Science and Human Nutrition, Diet and Exercise, Family and Consumer Sciences, reported fewer stereotypical attitudes and more aging-related course content (but fewer experiences with older adults) than students in the College of Engineering or the College of Agricultural Sciences (including Agricultural Education Studies). Evidence suggests that when college students have quality experiences with older adults, they tend to have more positive attitudes towards them (Obhi & Woodhead, 2016). The authors point to opportunities in undergraduate programs to enhance aging-related knowledge through curricula and experiential learning to increase positive attitudes towards aging and thus better prepare students for diverse careers (Obhi et al., 2019).

It is not known if interacting with older adults and exposure to aging content translates to professional practice reflective of less ageism. It is possible that a lack of emphasis on older adults and aging in post-secondary curricula, particularly when older adults have been portrayed in a less than favorable light, may contribute to fewer nutrition educators and Extension specialists undertaking aging and older adult nutrition and behavior programming, evaluation, and related research. A first step towards examining this issue may be to quantify nutrition education and behavior journal publications specifically focused on older adults and aging, community programming, evaluating effectiveness, and community impact. Although nutrition education and behavior research results are published in many US-based journals (e.g., Journal of the National Extension Association of Family and Consumer Sciences, Journal of Extension, Journal of the Academy of Nutrition and Dietetics, and Current Developments in Nutrition), the Journal of Nutrition Education and Behavior (JNEB), was selected for this study because it is considered a "global resource to advance nutrition education and behavior related research, practice, and policy." Further, the mission of the Society of Nutrition Education and Behavior (SNEB) is to "[advance] food and nutrition education research, practice and policy that promote equity and support public and planetary health" (SNEB, 2021).



In 2019, SNEB recommitted to representing the growing demographic of older adults (SNEB, 2019). One metric to assess SNEB's historical commitment to aging may be to determine if there has been an equitable representation of life stages, specifically older adults, in articles published in the Society's journal.

## OBJECTIVES

This study determined the relative representation of published articles in the JNEB dedicated to adults over 65 years. The hypothesis was that older adults would be underrepresented given the perceived emphasis on infants, children, and adolescents in special issues of the journal and educational sessions offered at SNEB's annual conferences.

## METHODS

A retrospective, systematic inventory of the published literature in the JNEB was conducted from September to December of 2020. Research articles, research briefs, and reports published from 1969 to December 2020 were examined to determine the relative proportion by life stages: infants, children, and adolescents (< 18 years), young adults (noted as college-aged), adults (18 to 64 years), and older adults (> 65 years). Articles with older adults included as part of a greater adult population were also quantified. An "other" category included articles that did not target or indicate any life stage. All abstracts of articles were reviewed, and if the target life stage was not explicitly described in the abstract, the article's full text was reviewed to confirm the target life stage. The number and classification of articles in each issue were recorded, and the percentages of research articles, research briefs, and reports on each life stage were calculated.

As per the JNEB's current guidance (SNEB, 2022), research articles are "reports of original research on any aspect of nutrition education and behavior." Research briefs are defined as "articles that satisfy all criteria for a Research Article but report results from a small or non-representative sample or report on a topic that is considered low priority but would be of interest to some readers of JNEB." Finally, reports "discuss policy issues relevant to nutrition education and behavior" or "review emerging topics as they relate to nutrition education and behavior," and often "reflect newly proposed models or processes with relevance to policy or research methodology."



## RESULTS

The articles published in the JNEB by life stage from 1969 to 2020 are presented in Table 1. Of the 2,424 articles reviewed, most articles focused on infants, children, and adolescents, representing 32% of the research articles, 42% of the research briefs, and 22% of the reports. Older adults were the least represented of all life stages; only 4% of the research articles, 3% of the research briefs, and 4% of the reports focused on older adults. However, as part of a greater adult population, older adults were included in an additional 8% of research articles, 9% of research briefs, and 5% of reports, but often a small proportion of the total sample studied.

Table 1. Articles published in the *Journal of Nutrition Education and Behavior* by life stage from 1969-2020.

Life stage	Research Articles n (%)	Research Briefs n (%)	Reports n (%)
Infants, children, and adolescents <sup>1</sup>	537 (32)	190 (42)	64 (22)
Young adults <sup>2</sup>	121 (7)	43 (9)	21 (7)
Adults <sup>3</sup>	422 (25)	132 (29)	71 (25)
Older adults <sup>4</sup>	58 (4)	12 (3)	11 (4)
Older adults as part of a greater population	139 (8)	39 (9)	13 (5)
Other/did not specify	408 (24)	38 (8)	105 (37)

<sup>1</sup>Infants, children, and adolescents: < 18 years

<sup>2</sup>Young adults: noted as college-aged

<sup>3</sup>Adults: 18 to 64 years

<sup>4</sup>Older adults: ≥ 65 years

In general, many of the articles on older adults focused on chronic diseases such as “CDE [Certified Diabetes Educators] and Non-CDE Dietitians’ Knowledge of Exercise and Content of Exercise Programs for Older Adults with Type 2 Diabetes” (George et al., 2006). Reports were least likely to be age-related and tended to focus on evaluation techniques, dietary patterns, or skill-related topics such as “Reliability and Validity of a Scale for Evaluating Dietitians’ Interviewing Skills” (Gregory et al., 1995).

## DISCUSSION

The mission of SNEB is to advance food and nutrition education research, practice, and policy and promote equity. However, the results of the present study suggest that the older adult life phase has been underrepresented in published nutrition research and behavior in the Society’s journal compared to younger life stages. This finding may indicate that less nutrition and behavior research, targeting the older adult life stage, has been conducted, and thus, fewer manuscripts have been submitted for publication. Alternatively, the results may suggest a publication bias, i.e., submitted articles with older adult themes may be rejected at a higher rate than those targeting younger populations. It is also possible that nutrition education and behavior articles with older adult themes may be routinely submitted to other nutrition or aging journals. However, a recent meta-analysis concluded that although nutrition education effectively increases healthful food intake in older adults, few randomized trials have been published testing “the efficacy of nutritional interventions in food habits among older people” (Neves et al., 2020).



Databases of journals searched by Neves et al. (MEDLINE, LILACS, Scopus, Cochrane Library, Web of Science, and Google Scholar) support a general lack of published nutrition education research in the older adult population.

The root cause of the publication inequity revealed by the present study may be that fewer nutrition programs targeting older adults are developed, delivered, and evaluated compared to younger cohorts. In a recent needs assessment of Extension professionals in the North Central Region of the U.S., only 43% of respondents reported having adequate resources to address the identified nutrition and food safety needs of older adults (Yelland et al., 2019). Further, few older adult and aging programs are listed in the National Registry of Cooperative Extension Programs and Assets repository of the United States Department of Agriculture (USDA) National Institute of Food and Agriculture (USDA, 2022). Using 'older adult' as the search term, four programs were identified, and 'senior' resulted in one program being identified. "Dining with Diabetes" was the only program identified in the search that targeted nutrition and older adults. Research is needed to confirm if there is a relative lack of nutrition programming targeting older adults and if the existing programming encompasses a wide range of relevant food and nutrition topics. Specifically, does food and nutrition programming targeting older adults include prevention such as the promotion of brain health, or does it focus on disease management only, such as Alzheimer's disease? Beyond nutrition programming, there may be a need to assess whether Cooperative Extension programming with aging and older adult themes contributes to negative stereotypes of aging, such as "Grey for a Day" (Yelland & Piper, 2020), versus promoting positive messaging such as "Keys to Embracing Aging: Curriculum to Promote Healthful Living Across the Life Span" (Kostelic et al., 2020) and "Positive Minds-Strong Bodies" program (Alegría et al., 2019).

Knowledge, attitudes, and perceptions of nutrition educators regarding older adults and aging, and the extent to which ageism may be permeating nutrition education programming have been underexplored in Cooperative Extension. There may be a need for nutrition educators to increase their awareness related to potential systematic bias due to ageism. As the published literature may not adequately represent older adults, caution must be taken when generalizing findings from studies of the younger populations to the older adult. Additionally, when undertaking nutrition education and behavior research, conscious steps towards the equitable representation of older adults may be needed. Nutrition educators have an opportunity to promote positive attitudes and perceptions of older adults through program delivery as well as participation in relevant practice-based research to strengthen the nutrition education and behavior evidence base. Collaborating with older adult volunteers may further support these efforts (Kaplan et al., 2019).

This analysis has limitations. Only articles published in the JNEB were evaluated; thus, the results cannot be generalized to other nutrition or education journals. A more comprehensive evaluation could be undertaken to determine if this bias exists in the larger body of nutrition education and behavior research literature. Such a study would provide more generalizable results and generate further thought on ageism in the nutrition education landscape.

## CONCLUSION

The primary focus of the published articles in JNEB has been on the infant, children, and adolescent life stage, and less on the older adult life stage — representing only 4% of the research articles, 3% of the research briefs, and 4% of the reports. There may be a deficit in such research, or there may be barriers to publication. Going forward, the editorial board of JNEB may need to develop a strategy to increase the publication of articles targeting older adults, helping to close the existing gap. Given the Cooperative Extension's National Framework for Health Equity and Well-Being directive to address structural inequities originating from determinants of elicited bias such as ageism, it may be appropriate and prudent to assess the extent to which Cooperative Extension might contribute to publication inequity. Research exploring nutrition educators' perceptions and attitudes towards aging and older adults and the relative extent of aging-related Extension program delivery is needed. There is also the opportunity to design educational programs that foster positive attitudes towards older adults across the socioeconomic and cultural spectrum.



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# NEAFCS JOURNAL

## Improving Emotion Regulation Skills Among Youth Through Intentional Social-Emotional Learning Lessons in Afterschool Programs

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Source: Parenting for Brain ([www.parentingforbrain.com](http://www.parentingforbrain.com))

### ABSTRACT

Social-emotional learning (SEL) has a significant impact on youth wellbeing, so incorporating intentional SEL lessons into afterschool program activities helps to enhance the development of SEL skills. Recognizing the need for SEL activities among afterschool youth participants, Extension faculty and afterschool staff from Utah State University used parent and youth assessments and continuous improvement cycle principles to inform program design, implement intentional SEL lessons, and increase emotion regulation skills, resulting in a 25% reduction of risky, negative behaviors among 73 elementary-aged youth.

### IMPROVING EMOTION REGULATION SKILLS AMONG YOUTH THROUGH INTENTIONAL SOCIAL-EMOTIONAL LEARNING LESSONS IN AFTERSCHOOL PROGRAMS

Social-emotional learning (SEL) is the process through which youth acquire the knowledge, attitudes, and skills needed to recognize and manage emotions, demonstrate care and concern for others, establish positive relationships, make responsible decisions, and handle challenging situations constructively (Durlak et al. 2014; Taylor et al., 2017).

Providing youth with SEL programs, characterized by safe, caring, and well-managed learning environments, has been found to reduce risky behaviors, increase positive self-perception, and enhance academic attainment (Durlak et al., 2011; Prince et al., 2010; Taylor et al., 2017). Introducing SEL lessons during elementary school years is positively related to increased social and mental health outcomes and effective classroom functioning, as well as student learning (Devaney & Moroney, 2018). When youth can focus their attention, manage negative emotions, and positively navigate peer relationships, they are more likely to have better grades and higher standardized test scores (Jones et al., 2017; Kwon et al., 2016).

Furthermore, providing intentional SEL lessons in afterschool settings allow for greater focus on SEL skills development because afterschool programs do not have school-day curricular demands and allow for broader developmental goals. Afterschool programs create environments that directly influence emotional development by providing opportunities for youth to form relationships with peers and caring adult mentors, helping to enhance SEL skills development (Devaney & Moroney, 2018; England-Mason & Gonzalez, 2020; Hurd & Deutsch, 2017). Additionally, afterschool-based SEL lessons are effective in promoting targeted SEL competencies, increasing social and academic adjustment, and decreasing conduct issues and emotional distress (Taylor et al., 2017).

## THE ROLE OF EMOTION REGULATION

Emotion regulation refers to the capacity of youth to manage their emotional responses, including employing strategies to increase, maintain, or decrease the intensity and duration of positive and negative emotions. The ability to recognize and regulate emotions aids youth in maintaining and focusing attention, empathizing with others' perspectives, and interacting positively with peers. Increasing emotional regulation skills help youth recognize, express, and regulate their own emotions and handle their feelings in prosocial ways (Jones et al., 2017; Young et al., 2019). Positive emotion regulation skills among elementary-aged youth have been positively related to academic functioning, including motivation and engagement. Studies show that youth who displayed higher levels of emotion regulation participated more actively in class, leading to high levels of academic performance, engagement, and competence (Kwon et al., 2016).

Moreover, after-school programs provide youth with increased opportunities to develop emotion regulation techniques through SEL skills-building exercises because youth participants are afforded the ability to practice and perform targeted skills pertaining to emotion regulation. Application of those skills to real-world experiences and frequent feedback from after-school educators allow youth to take an active role in their learning and focus on personal improvement (Hurd & Deutsch, 2017).



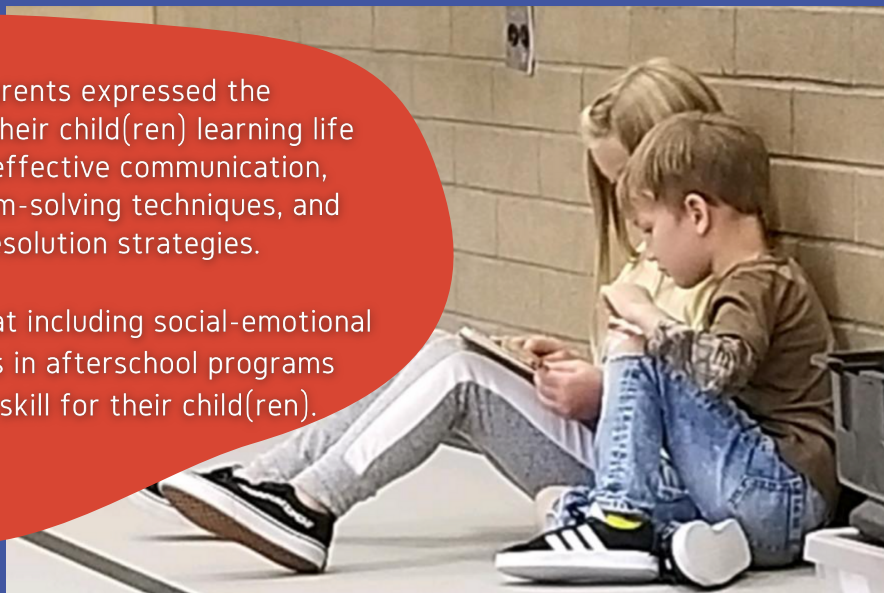
## PURPOSE

Sanpete County's afterschool program operates four days per week at four elementary schools, serving 73 youth in kindergarten through 6th grade. Located in rural Utah, the program is comprised of low-income youth who have been determined by school administrators to need extra academic and social interventions based on testing scores and behavior management. Additionally, 96% of youth program participants are eligible to receive free and reduced lunches. The need for incorporating SEL lessons focusing on emotion regulation came to the forefront based on needs assessment data from parents and youth pre-test results.

A pre-program, institutional review board (IRB) approved needs assessment survey was disseminated to all parents (N= 45) who had youth enrolled in the afterschool program. Thirty-six parents completed the survey, resulting in an 80% response rate. Survey results indicated a need for focusing on SEL lessons with parents reporting the following:

86% of parents expressed the importance of their child(ren) learning life skills such as effective communication, positive problem-solving techniques, and conflict resolution strategies.

82% indicated that including social-emotional learning lessons in afterschool programs was a needed skill for their child(ren).



Source: Sanpete County 4-H Afterschool

Additional IRB-approved evaluations addressing multiple measures related to SEL, including self-responsibility, healthy and prosocial behavior, and emotion regulation were administered to 73 youth in grades K-6 who participated in the afterschool program. Due to the diverse age range, trained afterschool educators employed procedures such as reading evaluation questions and working one on one with younger youth to ensure comprehension.

Pre-test results pointed to a need for intentional lessons and activities that focused on emotion regulation based on scores indicating that 38.36% (12.33% completely agree + 26.03% agree) of youth reported that they cannot control their anger when disagreeing with others. Research relating to the benefits of SEL, coupled with parent feedback and youth pre-test results, served as the catalyst for Extension faculty and afterschool staff to develop a plan for incorporating SEL lessons into afterschool program activities, primarily focusing on emotion regulation.

## METHOD

Sanpete County's afterschool program is a collaborative effort between Utah State University Extension, North Sanpete School District, South Sanpete School District, and multiple community agencies. Afterschool program activities are held daily (Monday–Thursday), serve youth from low-income families, and provide a combination of academic and enrichment lessons. Funding for all program activities is provided by Utah's Department of Workforce Services, Office of Child Care.



Source: Sanpete County 4-H Afterschool

Needs assessment data, coupled with research highlighting the importance of SEL programming, served as the driving force behind the implementation of intentional SEL lessons for afterschool youth. Additionally, Extension faculty and afterschool educators employed the continuous improvement cycle (Hamre, 2014; McKown & Herman, 2020) to inform program practices. Afterschool professionals planned a course of action to improve SEL developmental skills, then executed the plan weekly for six weeks using research-based lessons from the A Little Spot of Feelings & Emotions curriculum. Lessons were grounded in Collaborative for Academic, Social, and Emotional Learning (CASEL) principles and aligned with Common Core Standards (Alber, 2021). The CASEL framework serves as a foundation for communities to use evidence based SEL strategies in ways that are most meaningful to their local context and align with each communities' strengths, needs, and cultures (Durlak et al., 2011; Taylor et al., 2017). Weekly lessons incorporated a variety of learning techniques including hands-on group activities, creative writing, arts & crafts, and STEM. Coping strategies were introduced and helped youth acknowledge and manage overwhelming

feelings and emotions. Additionally, reflection and discussion segments allowed for youth to share and connect their feelings to real-world experiences. The next step required the collection of data from multiple sources, including youth, afterschool educators, and parent evaluations. Pen-paper surveys were disseminated to youth, whereas afterschool educators and parents completed evaluations through on-line Qualtrics surveys. The final step within the continuous improvement cycle required afterschool professionals to adjust the plan based on evaluation results. It was through this process that Extension faculty and afterschool staff were able to successfully implement SEL lessons to meet program goals, which yielded positive results among youth participants.

## RESULTS

Participation in SEL lessons resulted in learning and behavior changes among youth participants as new skills and practices were put into place. In order to gauge the effectiveness of the action plan and SEL lessons, pen-paper post-test evaluations were conducted with youth participants. Additional online post-test evaluations were conducted with afterschool educators and parents.

## YOUTH POST-TEST EVALUATION RESULTS

Six weeks after weekly SEL lessons were implemented during afterschool program sessions, youth ( N =73) participated in an IRB-approved post-test to determine emotion regulation skills. Results of the post-test indicated that the action plan had been successful. When compared to pre-test assessment scores of 38.36%, only 13.7% (8.22% completely agree + 5.48% agree ) of youth reported that they cannot control their anger after participating in emotion regulation lessons. Intentional SEL lessons focusing on emotion regulation skills resulted in a 25% reduction of negative, risky behaviors.



Source: Grade Power Learning  
([www.gradelearning.com](http://www.gradelearning.com))

## AFTERSCHOOL EDUCATOR EVALUATION RESULTS

Emotion regulation has been positively associated with increased academic motivation and engagement, as well as contributing to more effective learning environments (Devaney & Moroney, 2018; Kwon et al., 2016). To gauge the effectiveness of SEL lessons, afterschool educators ( N =12) from all four school sites participated in IRB-approved evaluations. Survey results indicated program objectives were met with 90% of afterschool educators reporting a decrease in impulsivity among youth and an increase in youth applying positive techniques for controlling their emotions, resulting in positive changes in daily afterschool environments.



## PARENT EVALUATION RESULTS

Parents with youth attending afterschool program activities indicated a need for SEL lessons in a pre-program needs assessment. At the end of the six-week lesson cycle, parents were asked to share feedback concerning SEL skills development among their children. The following verbatim narratives were chosen to show program impact:

- “Since she has started the program, I’ve seen her confidence level rise. I have seen her self-esteem rise. There have been many positive outcomes that we wouldn’t have otherwise had.”
- “It has helped provide a healthy outlet for controlling his emotions.”
- “He is able to get supervised social interaction and positive peer leadership. In the few months he has participated I have seen a dramatic difference in his confidence, his behavior, and overall better positive outlook on life.”
- “It truly helps kids develop socially, emotionally, intellectually, and physically. Our family is so grateful to have a safe and positive place for our kids.
- “The program has helped increase confidence and provided experiences for problem solving.”

## SUMMARY

Extension professionals in Sanpete County, Utah used needs assessment data and research to create an action plan for implementing SEL lessons in afterschool settings at four elementary schools. The purpose of providing SEL lessons was to equip afterschool youth with positive emotion regulation skills, and successful implementation resulted in a 25% reduction in negative risky behaviors. In addition, afterschool educators noted positive changes in afterschool environments, including increased engagement among youth participants. Furthermore, parents reported positive changes in SEL competencies, including increased confidence, self-esteem, and healthy emotional control.

## IMPLICATIONS FOR EXTENSION

A significant aspect of program success lies in the intentionality of implementing SEL lessons over a set period; however, Extension programs can incorporate activities that encourage problem-solving skills and address emotions among youth participants. In addition to improving SEL skills development, Extension professionals who combine SEL activities with other learning subjects have an influential role in providing impactful learning environments that promote increased peer relationships, personal improvement, and engagement in real-world situations.



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# NEAFCS JOURNAL

## ENCOURAGING FINANCIAL CONVERSATIONS: COMBINING COACHING AND FINANCIAL COMPETENCY SKILLS TO BUILD CAPACITY AMONG HELPING PROFESSIONALS



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### ABSTRACT

**S**ocial service staff are on the frontlines of supporting economically vulnerable populations but may lack training in personal finances. The Encouraging Financial Conversations (EFC) course teaches helping professionals strategies to initiate financial conversations with their clientele. Based on a series of pre and post-surveys, EFC participants reported higher levels of comfort when discussing finances with clients. Participants also had a better understanding of the role they can take in supporting clients' financial goal attainment. These results support strategies that expand financial literacy professional development for social workers and helping professionals.

### ROLE OF THE HELPING PROFESSIONAL

**H**elping professionals include social workers, home visitors, case managers, and other front-line staff at social service agencies and organizations. These individuals frequently work with economically vulnerable populations, particularly when program guidelines limit access to individuals at or below the federal poverty level. Helping professionals may see the need for clients' access to financial education and yet may not have the training, time, or resources to address this need. Sherraden and Huang (2019) define financial capability as a person's opportunity to act (their access to beneficial financial products and services) and their ability to act (their financial knowledge and skills.)

Therefore, when an individual has access to beneficial financial services, and can apply the knowledge of how to utilize them, they have better outcomes at achieving financial functioning and improved financial well-being (Sherraden, 2017). Helping professionals often take a capabilities approach; but lack a background in financial capability building specifically.

According to Huang et al. (2021), "social work can play a key role in addressing financial capability and asset building in financially vulnerable populations." McHenry and Pacheco (2021) found that social workers were highly interested in financial literacy and identified poverty as one of the main threats to society. Sherraden et al. (2017) found that social work students gained an increased understanding of financial capability and asset building, and more confidence in helping clients with financial management after courses on the topic were added to their college curriculum. Kindle (2013) surveyed social work students and determined that it would be best if financial literacy education were targeted to traditionally aged social work undergraduate students because they are least likely to have had the opportunities to gain significant personal financial experience.

A newer strategy to build financial capability is financial coaching (Theodos et al., 2018). In financial coaching, the financial coach and the client establish a trusted alliance, explore perspectives to help the client increase awareness of their financial behaviors, formulate plans for reaching goals, and follow up on actionable change (Collins et al., 2013). Applying a financial coaching approach within a social service setting has been shown to improve client's financial stability (Geyer et al., 2019).

The Encouraging Financial Conversations (EFC) training incorporates a unique combination of teaching coaching skills and self-reflection strategies for helping professionals to learn how to support their client's financial capability. The EFC training also includes support for helping professionals on how to approach their work with a cultural humility lens. Using a cultural humility lens involves addressing the individual client's needs within their environmental context. Practitioners also need to acknowledge their own personal money values and biases in order to practice a nonjudgmental approach to their work.

EFC combines practicing coaching skills and understanding the financial competency skills needed by individuals throughout their lifespan. This article contributes to the literature by providing a summary of surveys of participants in the EFC course. These findings inform recommendations for future social work practice for those professionals who are already working in the field and may not have had previous financial education or training on facilitating financial conversations with clients.

## PURPOSE

Talking about finances is not easy or comfortable for many people. It may be regarded as very personal and private.

The University of Wisconsin's Division of Extension developed EFC to equip social workers and other helping professionals with tools to help them better meet the needs of their clients and to empower their clients to reach financial goals.

Participants learn strategies to help guide conversations with clients around financial competencies, such as budgeting or debt management. As staff who are on the frontlines of serving Wisconsin's most vulnerable populations, providing them with financial education, resources, and skills could help their clients make the best use of their limited resources. The three main objectives of this program evaluation are to increase helping professionals:

- Comfort level when working with clients on financial matters
- Preparedness to bring up a financial topic with clients;
- Understanding of their role in helping clients with financial concerns

## METHOD

### PROGRAM DESCRIPTION

Through the EFC curriculum, professionals are provided a 6-hour training on financial conversations with clients who express financial concerns. The training includes both financial knowledge and communication techniques. The participant learning objectives are to:

- Recognize how values and biases surrounding money affect financial decision-making,
- Review aspects of financial capability and six core financial competencies, and how these relate to financial well-being; and
- Identify opportunities for assisting clients with common financial management topics and explore financial approaches and resources relevant to clients' needs.



	Financial Capability
	Goal Setting
	Maximizing Income
	Spending
	Saving
	Borrowing
	Protecting
	Financial Problem-solving Guide



[fyi.extension.wisc.edu/financialcapability](http://fyi.extension.wisc.edu/financialcapability)

The EFC curriculum provides resources to engage and coach clients on financial problem-solving around six financial competencies: goal setting, spending plans, saving, building credit and debt management, maximizing income, and protecting themselves from fraud and identity theft. In addition, the training engages participants in discussions revolving around weaving a cultural humility lens into their approach with clients. EFC includes a focus on inclusivity. Allowing open dialogue about sensitive topics such as race provides an opportunity to facilitate meaningful conversations with participants (Dixon-Kleiber et al., 2021).

The cultural humility lens approach during EFC training activities provides opportunities to reflect on participants' own values and biases, to be more sensitive to others' situations, and create a less judgmental approach during client conversations.

The curriculum can be offered online or in-person and provides flexibility for organizations to offer 6 individual one-hour sessions, two half-day programs, or one full-day program. This study is based on the work of 10 virtual courses in Wisconsin between November 2020 and December 2021.

## RECRUITMENT

Educators promoted EFC through local, regional and statewide Division of Extension channels for community agency partners to share with their staff. Promotional methods included the use of flyers, social media posts, agency listservs, and word of mouth by colleagues. As of December 2021, over 300 helping professionals, including those from Head Start, Community Action Program agencies and homeless shelters, participated in an EFC professional development training.

The course evaluation sought to answer how comfortable trainees feel utilizing the course information, barriers to utilizing it, how useful the training was, if they see having financial conversations as part of their role, and whether they have used this information with clients. The survey questions included items about comfort level with financial content, relevancy of course topics addressed, usefulness of course activities and materials, application

intent of material use, potential barriers to using information with clients, and identifying the support needed to use what was learned during the course. Paired t-tests were used to determine if statistically significant changes in outcome variables were achieved between the three-time points of the surveys. Open-ended survey data was initially reviewed by a financial program specialist to create code categories and then analyzed by two educators and one evaluation specialist. Survey comparisons were conducted in three waves to assess program effectiveness over time. Wave one provided pre-course and after-course survey comparisons based on 131 matched responses using a two-tailed t-test, as seen in Table 1.

## PROGRAM EVALUATION

All registered participants received an emailed link to an online pre-survey before the training, a post-survey link after taking the course, and a follow-up survey link emailed two months after course completion. The surveys were administered online using Qualtrics. The follow-up survey was sent four times to ensure maximum participation. The UW-Madison Education and Social/Behavioral Science IRB determined that this project is not research involving human subjects as defined by DHHS and FDA regulations. 1

Table 1

*Pre-Course and After-Course (immediately after the course) survey comparisons of participants' self-assessed outcome variables – comfort, preparedness, importance, and clarity of role*

Outcome Variables	Pre-Course Mean	Pre-Course Standard Deviation	After-Course Mean	After-Course Standard Deviation	p value
I feel comfortable working with clients on financial matters. (n=131)	2.7	0.8	3.4	0.6	<0.01*
I feel prepared to bring up a financial topic with my clients. (n=131)	2.7	0.9	3.6	0.6	<0.01*
Dealing with financial concerns is an important part of my work with clients. (n=131)	3.5	0.7	3.6	0.7	0.56
I understand the role I can take in working with clients on financial concerns. (n=131)	2.9	0.8	3.7	0.5	<0.01*

Notes: Likert Scale: 1=Not at all, 2=A little, 3=Somewhat, 4=Very Much; \* p value of  $\leq 0.05$ , a commonly used standard for a statistically significant difference between two means, using a paired two-tailed t-test.



Wave two provided pre-course and 2-month follow-up comparisons based on 63 matched responses, as seen in Table 2. Lastly, wave three provided post-course and 2-month follow-up comparisons based on 64 matched responses, as seen in Table 3.

Table 2

*Pre-Course and Course-Follow-Up survey (8-10 weeks after the course) comparisons of participants' self-assessed outcome variables – comfort, preparedness, importance, and clarity of role*

Outcome Variables	Pre-Course Mean	Pre-Course Standard Deviation	Course-Follow-Up Mean	Post-Course Standard Deviation	p value
I feel comfortable working with clients on financial matters. (n=63)	2.7	0.8	3.3	0.7	<0.01*
I feel prepared to bring up a financial topic with my clients. (n=63)	2.8	1.0	3.4	0.8	<0.01*
Dealing with financial concerns is an important part of my work with clients. (n=64)	3.6	0.6	3.5	0.8	0.46
I understand the role I can take in working with clients on financial concerns. (n=62)	3.0	0.8	3.5	0.6	<0.01*

Notes: Likert Scale: 1=Not at all, 2=A little, 3=Somewhat, 4=Very Much; \* p value of  $\leq 0.05$ , a commonly used standard for a statistically significant difference between two means, using a paired two-tailed t-test.

Table 3

*After-Course (immediately after) and Course-Follow-Up (8-10 weeks after) survey comparisons of participants' self-assessed outcome variables – comfort, preparedness, importance, and clarity of role.*

Outcome Variables	After-Course Mean	After-Course Standard Deviation	Course-Follow-Up Mean	Course-Follow-Up Standard Deviation	p value
I feel comfortable working with clients on financial matters. (n=64)	3.4	0.6	3.3	0.6	0.32
I feel prepared to bring up a financial topic with my clients. (n=65)	3.6	0.5	3.5	0.7	0.12
Dealing with financial concerns is an important part of my work with clients. (n=63)	3.6	0.6	3.5	0.7	0.46
I understand the role I can take in working with clients on financial concerns. (n=64)	3.8	0.4	3.6	0.6	<0.01*

Notes: Likert Scale: 1=Not at all, 2=A little, 3=Somewhat, 4=Very Much; \* p value of  $\leq 0.05$ , a commonly used standard for a statistically significant difference between two means, using a paired two-tailed t-test.

## FINDINGS

### SURVEY ANALYSIS

Survey respondents reported statistically significant improvements ( $p$  value of  $\leq 0.05$ ) over time on three main outcome variables: (1) participants feeling more comfortable working with clients on financial matters, (2) participants more prepared to bring up a financial topic with my clients, and (3) participants understanding the role they can take in working with clients on financial concerns. For these outcomes, respondents show a change of almost a one-point increase over time on a four-point scale where 1="Not at all", 2="A little", 3="Somewhat", 4="Very Much". For example, participants reported feeling somewhere between "a little" and "somewhat" prepared to bring up a financial topic with clients before the course (mean 2.7, SD 0.9) whereas after the course, they reported feeling somewhere between "somewhat" and "very much" prepared (mean 3.6, SD 0.6). These changes were significant when comparing a) pre-course survey results to immediately after the program (as seen in Table 1) and b) pre-course survey results to two months after the program (as seen in Table 2). The degree of change reported immediately after the program were sustained for at least 8-10 weeks, except for "I understand the role I can take in working with clients on financial concerns" which decreased from a mean of 3.8 (after-course) to 3.6 (follow-up) as seen in Table 3.

The following data includes all respondents at post-survey and the 2-month follow-up survey time point. The top three ways that respondents plan to use or have used information from the training include: discussions with clientele (92% on post-survey; 69% follow-up), personal financial management (80% on post-survey, 63% follow-up), and visit websites (88% on post-survey, 55% follow-up). About one-third of respondents to the follow-up survey said they are spending more time working with clients on financial topics than before the course.

## QUALITATIVE ANALYSIS

**A** qualitative analysis of open-ended questions provided feedback for program improvement. When asked to share something meaningful they learned and will apply from the training, participants (29%) reported examples of specific content that was covered, including the following quote: "Maximizing Your Income (module) was an especially helpful resource/session for me and the work I do with clients. I appreciated the attention to my questions about immigrants and documentation, as my clients are primarily immigrants." More than one-quarter of participants (28%) reported examples of resources that they shared, including: "I plan to provide budgeting information, websites, names of helpful agencies to the families I work with." and "The income and benefits tracker sheet is a great tool that I will use with the population that I work with." Lastly, many participants (15%) shared examples of how their mindset was changed from the program, for example, "The values activity/list helps me be less judgmental." and "This can be a daunting topic, especially with low-income families. I really appreciated the conveyed understanding that there are emotional aspects to spending."

**T**he addition of cultural humility exploration and examples during the course provided the opportunity to take the perspective of the client and create awareness of our own values and biases. One participant stated: "What I really liked was when you would remind us to put our attention to incorporating a cultural humility lens. To think about our clients and what is relevant for them. You repeated that, gave examples which really made it hit home for me. Thank you! So important and a message that we can never hear enough about."

**T**he responses also revealed several potential barriers for professionals when using the EFC materials in their work with clients. One participant wrote, "Not all clients have budgeting issues. But would use when the topic arise. Also worried that a lot of clients are so tight with money or so far behind on bills that when these ideas are talked about, they will feel defeated already." Another responded, "I feel that the biggest barrier I see is just getting people to talk about finances before there is a crisis, and continuous conversation."

## LIMITATIONS

**T**hese data are limited to those who responded to surveys. It is plausible the participants who were most engaged and most likely to use EFC are those who are included in the data, especially for multiple survey follow periods. This could result in these findings being more favorable than if all EFC participants were included.

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## PROGRAM ADAPTATIONS

**EFC** participants indicated through unsolicited email feedback to facilitators and through post-course surveys that ongoing updates of emerging financial information and additional supplemental topics would be beneficial. Therefore, additional "Booster" sessions covering COVID-19 impacts, engaging in financial conversations, and rebuilding credit were added in August 2021 to provide ongoing support, practice, and updated information to previous program participants. In addition, while the materials are designed to be used in six 1-hour sessions, educators have also adapted the materials to present one-time 6-hour trainings for organizations.

## SUMMARY

In conclusion, social workers and other helping professionals benefit from learning about personal financial management and financial coaching strategies to help understand the role they can take with clients. EFC equips helping professionals with tools and materials to help them meet the needs of their clients and to empower their clients to reach financial goals. Post-survey and follow-up survey results show the intentions of participants to use information from EFC and to apply EFC content to their work, for both discussions with clients and with their own personal financial management.

EFC is a promising professional development curriculum that can aid helping professionals when working with clients on financial matters. EFC prepares helping professionals with activities around financial coaching conversation skills and self-reflection on personal values and biases to ensure a nonjudgmental approach when working with clients on personal finances.

## RECOMMENDATIONS FOR PROFESSIONAL DEVELOPMENT

The barriers identified by participants in the program evaluation provide feedback for EFC course improvement to be inclusive of the needs of helping professionals. Due to time constraints as a frontline professional, keeping trainings flexible by offering one-hour sessions multiple times per year or virtual sessions to reduce travel and expenses may help with consistent attendance during the duration of the training. Creating additional “Booster” sessions with updated financial information that benefits clients and an opportunity to practice applying coaching communication skills and materials could provide a supportive network with their peers. In addition, by focusing on limited-income audiences and scenarios for the core training and subsequent “Booster” sessions, EFC participants could discuss with other helping professionals who are experiencing similar case management challenges.



[You may click here to access the references, tables, and graphs for this article.](#)



[You may click here for the Table of Contents](#)

## ACKNOWLEDGEMENTS:

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# NEAFCS JOURNAL

## WELLNESS WEDNESDAYS WITH FCHS: BEST PRACTICES AND LESSONS LEARNED FROM IMPLEMENTING AN ONLINE HEALTH EDUCATION PROGRAM

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JOIN ALEX DELCOLLO AS SHE DISCUSSES  
**THE NEAT WAY TO FITTING  
IN MOVEMENT**

ON WEDNESDAY JANUARY 6TH AT 2 PM  
<https://go.rutgers.edu/gnt13z1p>



**FCHS**  
Family & Community  
Health Sciences

**WELLNESS  
WEDNESDAYS**  
*with fchs*

**RUTGERS**  
New Jersey Agricultural  
Experiment Station

### ABSTRACT

**T**he Department of Family and Community Health Sciences of Rutgers Cooperative Extension created a weekly webinar series titled “Wellness Wednesdays with FCHS” soon after COVID-19 restrictions prevented in-person programming to ensure audiences had regular access to reliable health and wellness information. The program, now two years old, has reached over 5000 attendees and has been adapted to ensure effective delivery, marketing, and data collection. Lessons learned and best practices developed from this program may be useful to other Extension professionals looking to implement a successful online educational program.

In the spring of 2020, most in-person programming halted due to COVID-19 social distancing ordinances. The Department of Family and Community Health Sciences (FCHS) at Rutgers Cooperative Extension quickly realized the need to develop virtual programming that would keep its state-wide audiences engaged, connected, and well-informed. Research indicates that heightened stress is associated with behaviors such as increased sugar and fat intake, increased alcohol consumption, and decreased frequency of exercise (Gallagher et al., 2020; Leow et al., 2018). Recognizing that life during COVID-19 would likely increase stress for many, therefore potentially leading to a decrease in health-promoting behaviors (Fong et al., 2019; Wardle et al., 2020), FCHS faculty and staff conceptualized and implemented a program titled “Wellness Wednesdays with FCHS.” This program would provide a weekly webinar on topics related to nutrition, health, and wellness via a web conferencing platform and be available for anyone who registered to attend.

## BACKGROUND AND PURPOSE

The purpose of Wellness Wednesdays with FCHS was to ensure that the department’s audiences had a consistent, reliable way to access evidence-based health and wellness information from the safety of home. Each webinar presented information on a specified topic, as well as practical ways to adopt and maintain health-promoting behaviors related to that topic; for example, fitting in more physical activity throughout the day, or understanding how to read the new nutrition facts label. Webinars were designed to appeal to a general adult audience.

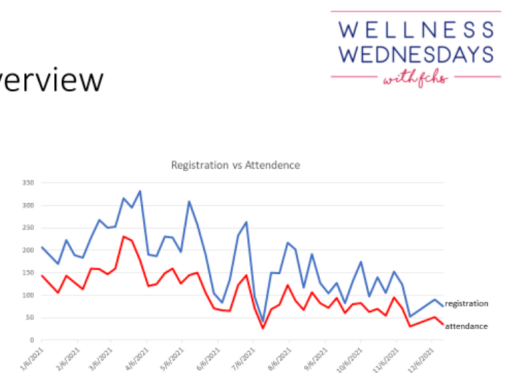
At the time, no one knew just how long COVID-19 restrictions would necessitate virtual programming. The first Wellness Wednesdays with FCHS webinar aired in May 2020; two years later, this program continues to provide free weekly webinars presented by all twelve FCHS faculty and staff educators, as well as guest speakers from other Rutgers departments, on a variety of relevant topics.

FIGURE 1

### 2021 Program Overview

- 47 presentations
  - Involved entire department\*
- Total registrations – 8,272
  - 5,008 attended
  - 107 attendees on average per presentation
  - Peak attendance of 231

\*SNAP-Ed did not present, as they are grant funded, supported in other ways



Between May 2020 and December 2021, 79 Wellness Wednesdays FCHS webinars were held. In 2021, an average of 107 people attended each presentation (Figure 1). Because this program was developed with some urgency and has continued for two years, FCHS adapted the program along the way to ensure effective delivery, communication, and data collection. Included here are lessons learned and best practices developed during the design, implementation, and evaluation of Wellness Wednesdays with FCHS.

## FINDINGS

### IMPACT ON PARTICIPANTS

**V**irtual programming was a new educational approach for FCHS, and the department did not have any prior data on its impact. With the program's inception in May 2020, FCHS began to distribute polls and surveys to attendees to ascertain their opinions on the quality of the program; knowledge, attitude, behavior change; and demographics. Survey results indicated that 88% of participants intended to change their behavior based on concepts presented in one or more Wellness Wednesdays webinars. Qualitative data from surveys included feedback such as:

“ I HAVE ATTENDED ALL OF THE WELLNESS WEDNESDAY FCHS PRESENTATIONS LISTED AND HAVE LEARNED SOMETHING NEW IN EACH PRESENTATION. I GREATLY APPRECIATE THE EXTENSIVE SCIENCE-BASED RESEARCH THAT EACH FACULTY MEMBER PRESENTS. SOME OF THE CHANGES THAT I HAVE INCORPORATED INTO MY DAILY LIVING INCLUDE DRINKING GREEN TEA MORE OFTEN TO REAP ITS MANY BENEFITS; INCORPORATING EXERCISE AND MOVEMENT THROUGHOUT THE DAY, RATHER THAN JUST AT A SPECIFIC TIME ONCE A DAY; ESTABLISHING A 'SLEEP SCHEDULE' OF GOING TO BED THE SAME TIME EVERY NIGHT; TAKING TIME TO INFUSE ECO THERAPY INTO MY DAY AND APPRECIATE NATURE, EVEN IF I'M JUST LOOKING OUT AT MY BACKYARD; INCORPORATING MORE LAUGHTER INTO MY DAY. ”

“ I LEARN SOMETHING FROM EACH SEMINAR THAT I CAN EASILY ADAPT TO MY DAILY LIFE. I FIND TOPICS SUCH AS ADDING FRUITS AND VEGGIES AND SEAFOOD TO MY DIET ARE THINGS I SHOULD DO BUT THE SEMINARS SERVE AS A REMINDER. THE RECIPES ARE NICE TO HAVE AND GIVE ME NEW IDEAS WHEN PLANNING MEALS. ”

**B**oth quantitative and qualitative data demonstrated participants' behavior change and increased knowledge in subject areas, indicating that an online educational program like Wellness Wednesdays has the potential to effect change in knowledge, attitudes, and behavior.

### IMPACT ON THE DEPARTMENT

**R**utgers Department of Family and Community Health Sciences is county-based; currently, 12 FCHS faculty and staff educators serve 16 of New Jersey's 21 counties. New Jersey is among the most diverse states in the country in terms of race, ethnicity, and income level (State of New Jersey, 2022). Furthermore, New Jersey is the most densely populated state, ranking 11th largest in population but 47th in geographic size, making it a difficult task to create programming that appeals to, and is easily available for, all residents. Due to the disparate needs of each county, each FCHS educator has differing programmatic foci. This has resulted in a department that is quite responsive to their communities' needs, but also de-centralized in creating educational programming. Wellness Wednesdays created an opportunity for FCHS to unite as a department to address the overarching problem of reaching its audiences during a time of physical separation. Wellness Wednesdays has also afforded FCHS the opportunity to create, deliver, and evaluate a collaborative, department-wide program for the first time with all its current faculty and staff educators. This has further resulted in FCHS being able to demonstrate collective impact by reporting the data from Wellness Wednesdays to stakeholders at the university, local, county, state, and national levels.

In late 2020, after several months of running Wellness Wednesdays with FCHS webinars, FCHS surveyed its own faculty and staff to obtain their feedback on the program.

Their responses overwhelmingly indicated their satisfaction with the program; in particular, FCHS faculty and staff said that it was a well-run program, expanded their reach as a FCHS educator, and their sessions were easy to present

(see Figure 2). These survey results suggest that virtual programming will continue to be a mode of educating even after COVID-19 social distancing requirements are no longer in place.

Figure 2 - FCHS presenter survey

How do you feel the Wellness Wednesday with FCHS program was run this summer?

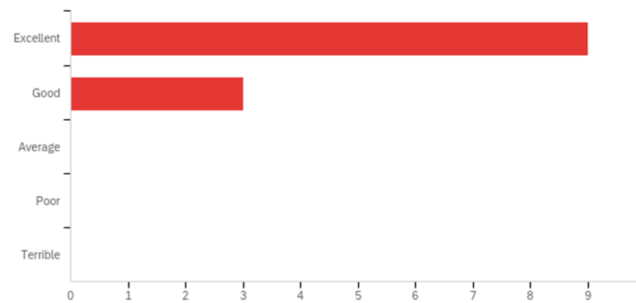
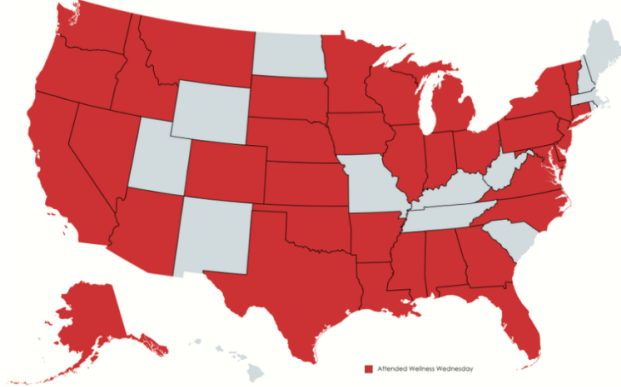


Figure 3



## EXPANDING OUTREACH

Wellness Wednesdays' reach quickly expanded as attendance increased each week and attracted new attendees from throughout New Jersey and beyond. The program reached all 21 New Jersey counties and in 2021 attendance was documented from 41 states (Figure 3), two US territories (Guam and the U.S. Virgin Islands), Poland, Thailand, Dominican Republic, Philippines, India, and Norway.

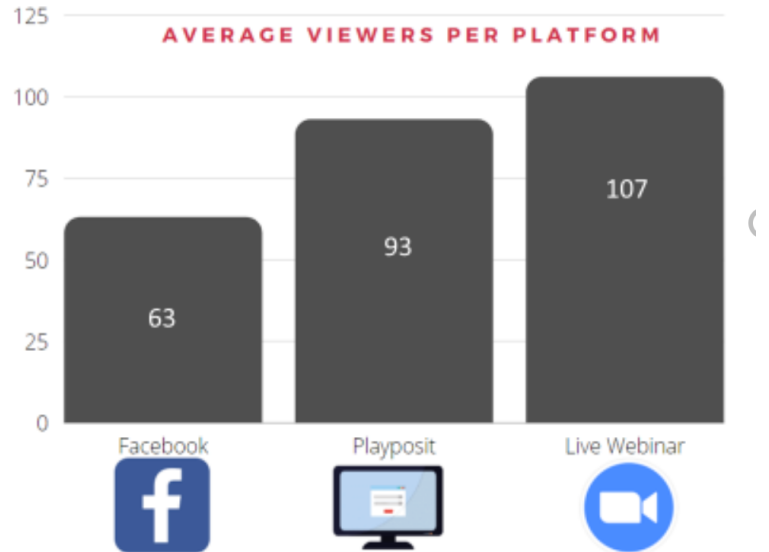
Additionally, data on program attendance indicated 40% of participants were new to FCHS in 2020 (950 new of 2390 survey respondents), and in 2021, 41% of program participants were new to FCHS (1936 new of 4556 respondents). On average, there were 37 new participants per webinar in 2020 and 34 in 2021. The webinar series attracted new learners and expanded the reach of the department compared to in-person learning from 2019 as well. In fact, in 2021, Wellness Wednesdays reached 51% of the audience that the entire FCHS department reached in-person in 2019. Wellness Wednesdays with FCHS enabled the department's expansion to new audiences, increased the number of viewers for educational outreach and offered the department the opportunity to impact learners as the urgent need for evidence-based health information arose.

All Wellness Wednesdays webinars are recorded, then archived on a webpage, where they are organized by topic. This allows audiences to watch recordings of past webinars and access educational materials that are housed on the webpage even if they are unable to attend the live webinar. When participants view an archived webinar, they are prompted to answer poll questions about demographics at the beginning and questions about content, instruction and intended behavior change at the end.



## 2021 Program Overview

- Facebook
  - 25 presentations streamed on Facebook Live
  - 1,683 reaches
- Playposit
  - 47 presentations posted
  - 4,363 total views for 2021 recordings
- Website Viewership
  - 12,561 total visits to all WW subpages
  - 7,089 total visits to main WW site



These polls allow data collection from audiences who did not attend the live webinar. The total webpage views since May of 2020 is 19,529 and includes visitors from across New Jersey and beyond. Approximately 4363 individuals viewed recorded webinars from January to December 2021, almost doubling the program's live webinar audience (Figure 4). This demonstrates that the archived webinars were instrumental in allowing FCHS to significantly expand its reach beyond the live webinar audience.

## MARKETING THE PROGRAM

The survey asked Wellness Wednesdays registrants how they heard about the program. FCHS faculty and staff were surprised to learn that most participants – on average 65% - indicated that email was the method by which they learned about, and were prompted to register for, one or more webinars. Social media (Facebook, Instagram, and Twitter) accounted for only 2% - 6% of responses, indicating that social media was not an effective marketing tool for Wellness Wednesdays with FCHS. These results are consistent with research showing that email marketing is considered one of the most effective marketing activities (Hudak et al., 2017). As a result, FCHS has concentrated its efforts on expanding its outreach and marketing via email by soliciting list serves from faculty and staff, ensuring that the Wellness Wednesday email list serv stays accurate and up-to-date, and encouraging FCHS and other Rutgers personnel to share marketing emails with anyone who may be interested in attending.

## USE OF TECHNOLOGY

Much like the transitions that traditional university instruction required during COVID 19 (Habib et al., 2020), Cooperative Extension also met the needs of learners through trial-and-error and use of several technology

platforms. The concept of a weekly live webinar seemed simple enough to execute; however, FCHS personnel quickly learned that they would have to learn new software programs and employ diverse technology applications to ensure effective program content, delivery, marketing, and data collection. Various platforms and strategies were tested to create the best operational practice for the Wellness Wednesdays with FCHS webinar series.

## WEBINAR PLATFORM

Initially, a webinar platform was used based on existing account access to deliver webinars and collect data from viewers using the poll feature. However, in 2021, after participant feedback, FCHS switched from this initial platform and began using Zoom instead. Polling was used to gather information during live webinars, in both platforms.

## PARTICIPANT FEEDBACK

Qualtrics was used to send quarterly surveys to all participants who attended at least one webinar. The data gathered from polls and Qualtrics surveys has informed FCHS about audience interests for future webinar topics. Through participant feedback and increased knowledge about various technical applications, FCHS was able to support learners and continually improve the webinar series.

## SOCIAL MEDIA

Social Media and interactive video learning platforms allowed for increased viewership of both live and recorded webinars. Twenty-five Wellness Wednesdays with FCHS webinars were streamed on Facebook Live, attracting 1683 Facebook users and expanding the program's reach even further (see Figure 4).

## SOFTWARE

Kaltura and PlayPosit are software programs that allow users to create and edit streamed or uploaded videos, share content, and generate assessments for viewer responses. Kaltura was used in 2020 to edit and post webinars on the webpage. Kaltura provided an opportunity to include closed captioning of the videos to increase accessibility for the hearing impaired. In 2021, PlayPosit was utilized to expand data collection of recorded webinars, as a tool which allowed embedding questions into existing videos (Figure 4). Kaltura and PlayPosit were both used to increase the program's reach and collect data from viewers that would not be available otherwise. PlayPosit was used to administer survey questions to recorded webinars, thereby capturing data from viewers who were not watching the webinar in real time. This data illustrated that FCHS was able to double its reach, and that viewers have been from varying states including Arkansas, Florida, Kentucky, and across New Jersey.

Through trial-and-error, FCHS discovered technology that best captured data for program results and met the needs of the department to deliver effective programming. Furthermore, using polls and surveys, FCHS was able to remain responsive to its audiences' needs to continually seek out new and improved mechanisms to administer quality programming.

## AUDIENCE FEEDBACK

The survey administered to Wellness Wednesdays' audiences allowed FCHS educators to receive feedback directly from its audiences. In general, during pre-COVID times, FCHS educators had worked with a community point person such as a librarian or senior center coordinator to schedule educational programs. This point person tended to request that a certain topic be presented; however, there was no way to know if this topic was actually of interest to the audience. Wellness Wednesdays surveys have effectively eliminated the intermediary, ensuring that educators hear directly from consumers, an approach that has been shown to be beneficial in guiding programs and dissemination (Serrano et al., 2014). This has resulted in FCHS educators tailoring programs to consumers' needs and incorporating new topics that the department may not have considered teaching without that feedback. Furthermore, many survey respondents requested topics beyond the scope of FCHS educators' expertise; therefore, the department recruited guest speakers from other Rutgers departments, including Social Work, Nutritional Sciences, Food Sciences, the Cancer Institute of New Jersey, and Human Ecology. This has resulted in several successful collaborations between FCHS and other departments that likely would not have occurred without the responses from Wellness Wednesdays' attendees.

## DISCUSSION

Wellness Wednesdays with FCHS has established itself as an essential program for the Department of Family and Community Health Sciences despite its rapid and unprecedented implementation. FCHS had no way of knowing how long the department might need a virtual program to reach participants due to the pandemic lock down; however, evidence from data collection supports Wellness Wednesdays' continued delivery even as COVID-19 restrictions ease. Additionally, the program provided an opportunity to reach new audiences and expand outreach to both a national and international audience. The significant participation at each webinar over the past two years demonstrates the staying power the webinar series possesses. Although in-person programming has begun to resume, it appears that the future direction of Wellness Wednesdays with FCHS is to continue, as participation remains steady, and the audience has come to rely on the evidence-based information provided each week. Additionally, the data collected from participants has informed FCHS personnel on consumer interest and will be useful for future program development. Wellness Wednesdays with FCHS filled a gap when in-person learning was not possible and provided lessons learned about collaboration, data collection and use of technology to meet both audience and educator needs. In the future, FCHS plans to continue expanding the department's reach with Wellness Wednesdays using a health equity approach, incorporating topics that address health disparities and bringing this program in line with the Cooperative Extension framework for health equity so that FCHS' audiences have a "fair and just opportunity to be as healthy as possible" (Burton et al., 2021).



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## COMMUNITY-BASED PAIN EDUCATION IN EXTENSION



## AUTHOR NOTE

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## ABSTRACT

**W**ith the nation's opioid overdose crisis among the most pressing rural public health concerns, mitigating it is of utmost importance. Pain management education offered by Extension may help. This review of four Extension-implemented strategies providing community-based pain management education includes (1) self-management workshops, (2) pain education with opioid monitoring, (3) a pain management integrated support group, and (4) focused informational materials. Implementation barriers and advantages of each method are discussed, with many effective in disseminating knowledge. Nonmedical pain management resources are under-resourced and are an impactful way that Extension can meet the land-grant mission to support vibrant, healthy communities. In 2021, the nation lost over 100,000 individuals to substance-related overdose deaths (National Center for Health Statistics, 2021), with almost 275 lives lost each day. Overdose deaths related to prescription opioids quadrupled between 2000 and 2014, with consensus forming around the importance of safe medication and pain management as critical to addressing the opioid overdose crisis (Compton et al., 2016).





**T**here are 50 million adults in the U.S. who experience pain daily, and over 19 million of those have high-impact chronic pain which interferes with the ability to conduct normal daily activity (U.S. Department of Health and Human Services [HHS], 2019). While urban areas may have multiple resources to help patients manage pain, many rural areas served by Extension have limited resources. As a result, patients in rural areas are prescribed opioids more often, report more pain, and may misuse prescription opioids earlier or more often in adolescence (García et al., 2019; Keyes et al., 2014; Monnat & Rigg, 2016), resulting in higher opioid overdose rates than urban

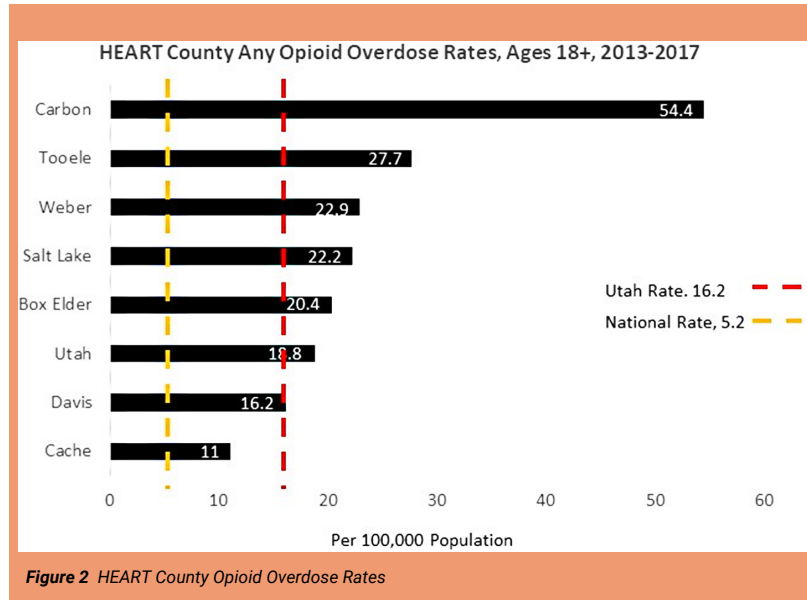
populations (Mack et al., 2017). Several factors increase the risk of opioid-related overdoses in rural communities, including a lack of resources that comes with rural living, such as limited treatment services (Corso & Townley, 2016). Opioid medications are easy to disperse and are low-cost treatments for pain. Yet an alarming 21-29% of patients misuse prescription opioids, and 80% of individuals who use heroin first misused opioid prescriptions for pain (National Institute on Drug Abuse [NIDA], 2018). Experts indicate that prevention strategies, including safe medication disposal and alternative pain management, must be included in pharmaceutical care for pain to adequately prevent Opioid Use Disorder (OUD) (Kertesz & Gordon, 2019; Volkow et al., 2019).

**A** study examining the circumstances preceding opioid fatalities in Utah found that 63% of individuals were unemployed, and 59% had experienced recent financial setbacks (Porucznik et al., 2011). For these individuals, highly effective alternative pain management options such as massage, physical therapy, and acupuncture may not be affordable or accessible options. Affordable access to pain management education might help alleviate the financially motivated over-reliance on opioids. Given the pervasiveness of pain, gaps in pain management resources, and lack of awareness about opioid risks, Extension can further serve the public good by providing pain management education.

## OBJECTIVES/PURPOSE

**P**ain management education has the potential to produce great impacts in efforts targeted toward the opioid overdose crisis harm reduction. This issue was raised as a priority in Utah, where overdose rates have consistently been much higher than the national average (HHS, 2019). Addressing the opioid overdose crisis in Utah requires recognition of unique aspects of rurality. Rural locations have limited resources and unique constraints on providing access to adequate healthcare, such as limited clinical staffing and geographic challenges in dispersing resources (Rosenblatt et al., 2015).

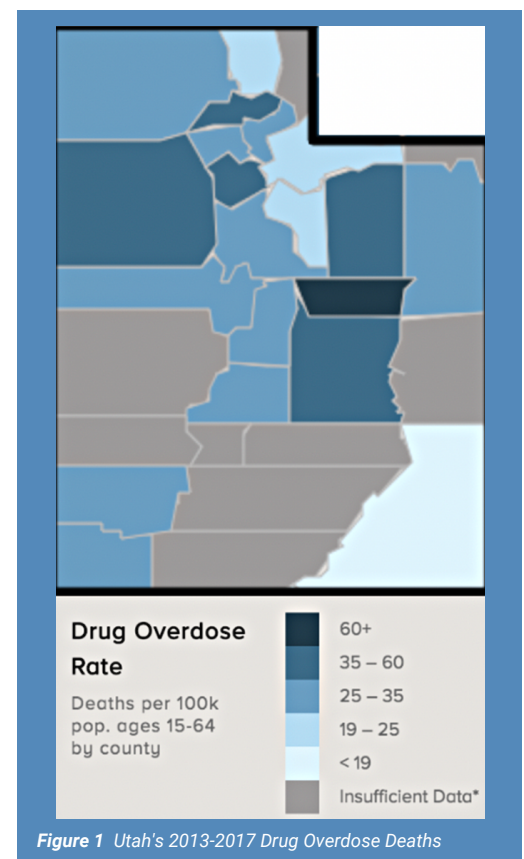
The Utah land-grant Extension program took on a bold initiative in 2018 to broaden its health focus to address the opioid overdose crisis, maximizing Extension's collaborations at both the local and state level. Utah State University Extension created the Health Extension: Advocacy, Research, and Teaching (HEART) Initiative adding



five new multidisciplinary health-focused faculty members in nine of the greatest-need counties in Utah as established by the Centers for Disease Control and Prevention (see Figure 1; NORC, n.d., and Figure 2; CDC, 2019). The HEART Initiative empowered faculty to conduct needs assessments and develop local coalition prevention models, building rural and urban partnerships to bring needed evidence-based health resources and programming into local communities.

The HEART Initiative quickly began identifying programming needs, acquiring new funding partners, and establishing new collaborators to expand Extension's role in region-specific health education.

Rural communities voiced a critical need; better access to alternative pain management options (HEART, 2018). In response, HEART faculty have attempted to bring pain education resources to communities in Utah through multiple evidence-based methods (Yaugher et al., 2020; Yaugher et al., 2021). The evidence-based approaches focused on: (1) appropriate screening for opioid misuse through opioid monitoring in prescription databases (Patrick et al., 2016), (2) adequate access to alternative pain management strategies (Penney et al., 2016), (3) chronic pain support programming (Finlay et al., 2018; Subramaniam et al., 1999), and (4) community education about the best practices for pain management (Lovell et al., 2014). This multifaceted approach facilitated by Utah State University Extension sought to fill gaps in pain management education and equip those in rural communities with evidence-based pain management tools.



## **METHOD 1** LIVING WELL WITH CHRONIC PAIN (LWCP) WORKSHOPS

LWCP is a Stanford-produced, evidence-based self-management workshop series based on self-efficacy theory (Lorig, 2015). The Stanford Chronic-Disease Self-Management Program began with a focus on chronic conditions and has since expanded to focus on subsets of chronic conditions, including pain (Groessler et al., 2011; LeFort et al., 1998). Self-management teaches topics such as goal-setting, communication, exercise, nutrition, and others. Self-management is a promising general strategy for addressing chronic conditions, showing more than two decades of success (Lawn & Schoo, 2010; Lorig et al., 1999; Ory et al., 2013).

**S**elf-management has been tested successfully with different populations like Veterans and stroke patients (Battersby et al., 2009; Beattie et al., 2013; Wellington, 2001). The approach of coupling self-management with education can be used simultaneously as prevention and as a targeted intervention (Grady & Gough, 2014; Schulman-Green et al., 2012), making it relevant and ideal for community implementation.

**T**he LWCP workshop format is an intensive, six-week series of small-group sessions lasting 2.5 hours addressing the stated self-management strategies (Grady & Gough, 2014; LeFort et al., 1998). Implementing this evidence-based community class requires intensive facilitator training, obtained by coordinating with state-level, grant-funded programs. Two faculty members and two community volunteers received the training. Extension faculty worked with local health departments, locally funded community organizations, senior centers, and state agencies to share staffing and materials costs and promote the workshop series. One Extension and one partner representative facilitated the 15-hour courses teaching evidence-based strategies for chronic pain self-management.

## **METHOD 2** VETERANS AFFAIRS (V.A.)-MODELED PAIN EDUCATION

**T**he Veterans Affairs (V.A.)-modeled Pain Education and Opioid Safety program adopts a proven prevention strategy that screens for opioid misuse and reduces opioid overdose deaths (Patrick et al., 2016). Opioid monitoring with urinalysis screenings coupled with patient education was implemented with proven success at the V.A. Salt Lake City (SLC) Health Care System (HCS) (Marszalek et al., 2020). This innovative program combines patient education on the specifics of opioid safety, opioid monitoring, and alternative pain management education to reduce opioid overdose risk (Clinton-Lont et al., 2016).

**T**he program's education portion is facilitated by attending a workshop just once every 6-months for the duration of prescription opioid treatment combined with a personal health assessment which includes opioid monitoring from a medical provider. The workshop addresses a wide array of opioid-related topics. For example, participants learn opioid safety basics, emergency overdose response (e.g., naloxone education), safe medication storage practices, and evidence-based nonpharmacological treatments for chronic pain such as behavioral therapy.

## METHOD 3 PAIN EDUCATION SUPPORT GROUP

The pain education support group was developed in response to the time and cost-intensive nature of the LWCP program, as a cost-effective and community-based alternative pain management strategy. Peer support is the process of giving and receiving nonprofessional and non-clinical assistance, and it typically occurs with individuals who share characteristics or conditions (Tracy & Wallace, 2016). Peers serve as trusted information sources and can reduce barriers to accessing care (Gidugu et al., 2015; Lauckner & Hutchinson, 2016; Purcal et al., 2019).



Peer-based facilitation has been recommended in the American Medical Association (AMA) journal of ethics (Mendola & Gibson, 2016; Moos, 2008). Akin to the growth of community health workers, rural locations with limited options for alternative pain management (e.g., yoga classes, tai chi, or athletic gyms) can benefit from a peer support model to provide sustainable access to health education.

Extension personnel developed a curriculum for the Pain Education and Community Empathy (PEACE) program using evidence-based complementary alternative medicine (CAM) approaches successful in treating pain. The most commonly utilized CAM therapies reported by pain patients are massage therapy (27%), chiropractic care (18%), acupuncture (8%), herbs/supplements (7%), and yoga (6%) (Fleming et al., 2007).

PEACE incorporates the self-management CAM modalities and cognitive techniques that have proven benefits for pain (Garland & Howard, 2018; Grady & Gough, 2014; National Academy of Sciences, 2011). The curricula developed were peer-reviewed and addressed CBT education for Pain, Yoga/Tai Chi, Mindfulness, Visualization, Acupressure, Heat Therapy, Massage, Muscle Relaxation, Breathing, Nutrition, Supplements, Hydration, Exercise, and Sleep.

The PEACE class starts with a brief 15-minute instruction in a pain management method that is scripted for easy facilitation and includes an experiential exercise. The remaining time (typically 35 minutes) is spent in group sharing, with question prompts provided in the facilitation manual. Facilitating the PEACE support group includes paraphrasing a prepared script, leading the group in an outlined experiential activity, and leading a discussion period.



## METHOD 4 FACT SHEET DISTRIBUTION

Fact sheets are one to four-page informational briefs on a specific topic in an easy-to-access format. They are written in layman's terms, simplify complex ideas, use present-tense language, talk briefly about crucial constructs, and use lists and charts to visually represent data (Center for Rural Health, 2020). In Extension, Fact sheets are evidence-based and subjected to a peer-review process to ensure the presented information's viability, readability, and accuracy. Fact sheet development solicited input from communities and faculty statewide. Three fact sheets were proposed based on community-expressed interest and a review of evidence-based practices addressing mindfulness-based approaches for pain management (Voss et al., 2019), alternative pain management techniques (Condie et al., 2020), and cognitive-behavioral practices for managing pain (Swensen et al., 2020). After peer-review, published fact sheets were made available online and printed for community distribution.

## RESULTS

### LIVING WELL WITH CHRONIC PAIN

**LWCP** workshops were provided to all adults aged 18 years or older at no cost and with no exclusion criteria. One hundred and two (102) community members with varying health conditions, including fibromyalgia, arthritis, and back pain participated in in-person LWCP workshops. A total of eight in-person workshops were held across three counties and four physical sites offering a total of 464 hours of self-management training to community members co-facilitated by Extension faculty. Three (3) of the series were held in rural areas and five (5) in urban areas.

**Table 1**

*Participant Demographics and Select Survey Responses*

	Response category	% (Count)
How old are you? (285 responses)	18-39	18% (52)
	40-59	35% (99)
	60-69	23% (66)
	70+	24% (68)
How much did this program contribute to your confidence in managing your pain? (156 responses)	Not at all	3% (5)
	Very little	5% (8)
	Somewhat	48% (75)
	To a great extent	44% (68)
Because of this program, I have felt an improvement in my ability to move and do daily tasks (157 responses)	Strongly disagree	3% (5)
	Disagree	5% (7)
	Neither agree nor disagree	24% (38)
	Agree	35% (55)
	Strongly agree	33% (52)

In 2020, COVID-19 policy changes allowed the Stanford-based program to be offered in virtual formats for the first time. An additional 224 individuals in 68 Utah cities received a combined total of 612 hours of pain management education through synchronous online access. Three Extension offices in Utah participated in this expanded virtual program offering. Online access created additional implementation barriers but facilitated broader reach with no reported differences in outcomes. The virtual-access training added burdens in shipping the required course materials and manuals to participants. With 47% of participants aged 60 years and older, technology facilitation required additional support.

The online program also had higher attrition rates (approximately 50% attendance compared to 75% for in-person offerings). All workshops showed self-reported improvements among participants (see Table 1).

**T**he LWCP program requires a 10-day initial facilitator training and ongoing lengthy 6-week workshops for implementation. Turnover in trained volunteers increased the burden and cost of facilitator training demands. The price of manuals is an additional ongoing concern, as the Stanford-based program does not provide online or free access to manuals. The investments of time, training, and material costs are barriers to implementing this highly effective, evidence-based approach.

## VETERANS AFFAIRS-MODELED PAIN EDUCATION

**F**ull implementation of the V.A. Pain Education and Opioid Monitoring program was not achieved. Separating the education components from the clinical monitoring proved too great a challenge for the non-clinical structure of the Extension education system. While the program obtained institutional review board (IRB) review and approval, implementing the program to fidelity created legal concerns regarding protecting patient confidentiality in an Extension system that does not have patient privacy protections in place. The failed model led to better communication in offering Extension programming to community-dwelling veterans and defining Extension's scope in health services.

## PAIN EDUCATION SUPPORT GROUP

**T**he PEACE pain support group achieved Utah State University IRB determination #11743, as non-human subjects research for community implementation in 2021. PEACE was piloted in four settings; a community classroom, online, at senior centers, and inside jails for incarcerated persons. Program promotion did not differ from other Extension programs in levels of effort, but participation rates varied substantially by site type. Community classroom recruitment for the class resulted in low attendance, with only five attendees across three sessions. Virtual attendance was low, with one attendee across five offered sessions. Senior Center attendance was slightly higher, with 19 attendees across seven sessions. Finally, utilization was highest in the jails, with 165 attendees across 18 offered sessions, likely due to the access to participants in a single location for an ongoing period.

Additionally, online and in-person participation in the LWCP model used clinic-based referrals, which might explain the higher participation rate than seen in the PEACE community referral model. IRB approvals have not been authorized for publishing data from the incarcerated population of program attendees, and there was insufficient data to analyze the program outcomes of the other pilot sites. Anecdotally, participants in both community and jail settings expressed knowledge gain and awareness of how pain management information can lead to behavior change and improved wellness.

## FACT SHEETS

All published pain education fact sheets have been utilized in multiple community settings. Two community partners provide fact sheets as part of regular resource sharing, and paper copies of the fact sheets are distributed at Extension offices across the state. There have been over 500 virtual downloads of the first fact sheet published in 2019, over 400 downloads of the second, and over 100 downloads for the third fact sheet published late in 2020. Additionally, the fact sheets have been incorporated into the PEACE community class.

A strong feature of Extension is its ability to provide non-formal education that emphasizes knowledge gain with the utility and practicality of consumer-based information (National Institute of Food and Agriculture, 2020). Fact sheets are another productive method to provide evidence-based information on pain that can reach the targeted audiences and serve as an effective dissemination strategy for Extension faculty.

## CONCLUSION

It has been established that patients need access to education and preventive methods for managing pain in the current era of opioid risks and overdoses. Extension has a key role to play in filling this education gap, especially in rural areas. The innovative programming through the Extension system in Utah has explored and tested multiple models: Living Well with Chronic Pain, Veteran Affairs-Modeled Pain Education, Pain Education Support Group, and Fact Sheets, finding immediate success by partnering with other agencies to offer pain workshops and producing evidence-based fact sheets. Ensuring that Extension offerings do not cross into territory that could be considered clinical in nature will be critical for the success of future efforts. Another lesson learned from recruitment efforts is that pain management education is a specialized topic that may not be as relevant to community-wide promotion. The specialized topic is perhaps better if targeted to specific populations who have higher levels of need and thus may increase attendance at these targeted groups.

An overall emphasis on collaboration with partner agencies engaged in community health promotion has been a strength of Extension programs. Part of the value of Extension programs is the ability to deliver low-cost, evidence-based materials to community members. More time is needed to explore the utility of the peer and volunteer-based community approaches to pain management education. The time-intensive and well-resourced, high-cost programs produced more engagement and better outcomes in the piloted communities. Pain education as a community health priority in reducing the opioid overdose crisis is a promising area for Extension educators addressing community health needs.



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## COOKING TOGETHER (VIRTUALLY) TO BUILD COMMUNITY AND PROMOTE HEALTH DURING COVID-19

### ABSTRACT

The COVID-19 pandemic exacerbated and exposed health and education inequities, especially among low-income populations and communities of color (James & Thériault, 2020). Increasing access to educational opportunities and providing family education to support healthy family meals and evidence-based child-feeding practices during a pandemic is a promising practice for supporting health. This paper describes the efforts of one extension CalFresh Healthy Living program to implement virtual Family Cook Nights through partnerships with three low-income schools during COVID-19. Outcomes include positive behavior changes reported by twelve families on matched pre-and-post assessments and high feasibility and acceptability for implementation as reported by school partners and extension educators.



The COVID-19 pandemic exacerbated social inequities and led to income loss, which increased food insecurity to 38% in March 2020 and poor health outcomes among at-risk populations (Wolfson & Leung, 2020). Food insecurity is defined as “a condition [of] limited or uncertain access to sufficient, nutritious food for an active, healthy life [and it] disproportionately affects low-income communities and communities of color” (Coleman-Jensen et al., 2020). These inequities have also deeply affected access to and participation in educational programs, which in turn has had negative consequences on the well-being and mental health of adults and youth (James & Thériault, 2021).

Increasing access to educational opportunities and providing virtual family education to support healthy family mealtimes and evidence-based child-feeding practices from the Happy, Healthy Families curriculum during a pandemic is a promising practice for supporting individual and community health. Teaching healthy child feeding practices such as including children in food preparation and avoiding using food as a reward are associated with healthy behaviors in children, including an increased preference for fruits and vegetables, increased enjoyment of cooking, and higher self-efficacy for selecting and eating healthy foods (Blanchet et al., 2020). Further, teaching parents to avoid unhealthy child-feeding practices may prevent negative long-term health consequences. According to Jensen et al. (2020), “besides a direct relation with higher intake of unhealthy foods, frequent use of food as a reward may also increase the risk of being overweight through long-term effects on eating behavior.”

## OBJECTIVE

Recognizing the uncertainty of COVID-19 and the importance of supporting the health and food security of families in the local community, the Youth, Families and Communities program of the University of California Cooperative Extension in Santa Barbara County (UCCE) collaborated with schools and partners to pilot a virtual Family Cook Nights series. The mission of the UCCE program is “to cultivate environments where local youth, families, and community members have access to research-based resources and knowledge in order to be the creators of a healthy, inspired, active and connected [community]” (University of California Agriculture and Natural Resources [UCANR], 2022). The objective of the virtual Family Cook Nights programming was to improve child-feeding practices among participating parents and/or caregivers and cooking skills with families while using the tools and resources available to them in their own homes. An additional objective was to assess the feasibility and acceptability of virtual programming to provide nutrition education during a pandemic and without the common barriers experienced by families with low incomes to participate in in-person classes such as transportation and childcare.

## BACKGROUND

To implement virtual Family Cook Nights, UCCE partnered with schools serving students in Transitional Kindergarten through 6th grades in Santa Maria, CA where greater than 80% of students participate in the Free or Reduced-Price School Meal Program. These school partnerships were an integral part of the success of this program. In addition, school staff and administrators encouraged participation in the Family Cook Nights program, provided access to school resources and technology, and integrated the program as a part of the services offered on their school campus.

Since the first pilot in 2020 UCCE staff and school partners have hosted three virtual Family Cook Night series (4 classes per series) simultaneously in English and Spanish via Zoom video conferencing at three school sites. Families with children in TK-6th grades plus their siblings between the ages of 0-17 signed up through their respective schools and were given access to the virtual classrooms through school computers and district Zoom rooms. All registered families received a link to an online session, and translation was provided during sessions. Breakout rooms were implemented at the start of each session to allow participants to view lessons, discuss activities, and share feedback in their preferred language. UCCE staff were trained in language justice concepts such as cultivating multilingual spaces for participants by utilizing zoom translation features, understanding varying interpretation methods (consecutive interpretation, simultaneous interpretation), and recognizing the varying dimensions of language and language access, in addition to regular nutrition education and adult education trainings (Arguelles et al., n.d). Using the Healthy, Happy Families curriculum, UCCE educators taught healthy nutrition, child feeding, and physical activity behaviors. Positive child feeding behaviors included how to involve youth in cooking and meal preparation, using words instead of food to praise positive behavior, enjoying family meals together, and continuing to offer new foods to children even after the child disliked it the first time. Families also learned about basic nutrition following the United States Department of Agriculture (USDA) MyPlate and food safety concepts. UCCE educators demonstrated age-appropriate tasks and shared best practices to assist families in engaging youth in the process of preparing meals in the home.

**UCCE** educators continued to strengthen partnerships with Santa Barbara Food Bank (SBFB), school partners, youth, and families in Santa Barbara County. Families utilized resources available in their homes and supplemental materials were provided by the SBFB and UCCE staff, such as recipe ingredients, measuring cups, cutting boards, and MyPlate demonstration plates. During each class, UCCE educators provided families with the opportunity to share their experiences and thoughts with the group and welcomed participation from all family members.

## FINDINGS

**Table 1**

*Participant demographics, self-reported*

Age and gender	Female	Male	Unknown	Total
Less than 5 years old	1	7	12	20
5-17	18	18	17	53
18-59	21	9	28	58
<b>Total</b>	<b>40</b>	<b>34</b>	<b>57</b>	<b>131</b>
<b>Ethnicity Total</b>				
Hispanic / Latino				66
Non-Hispanic / Latino				2
Prefer not to respond				6
<b>Unknown</b>				<b>57</b>
<b>Race</b>				
American Indian or Alaskan Native				1
Asian				0
Black or African American				9
Native Hawaiian or other Pacific Islander				0
White				23
Prefer not to respond				19
<b>Unknown</b>				<b>79</b>

**A**t the beginning of each series, program staff sent participating adults a link to a family demographic card where they entered age, race, ethnicity, and gender information for each participant in their family. A total of 131 individuals participated in at least one Family Cook Night class (see demographics in Table 1). Sixty-nine individuals participated in the English sessions, and 62 participated in the Spanish sessions.

Thirty-nine families participated in at least one session of a Family Cook Night series. Each family present at the first class was sent a link to complete one pre-survey per family before any interventions took place. Each family present at the final class of the four-class series was sent a link to complete a post-survey after the last class of the series. An individual code was generated for each respondent, and a total of 12 pre- and post-

were matched. The evaluation study protocol was reviewed by the UC Davis Institutional Review Board and determined to be exempt (IRB #213961-13). The survey questions were adapted from “My Child at Mealtime” (Ontai et al., 2020) and includes questions related to healthy eating and child feeding habits, such as:

1. MY CHILD SITS AND EATS MEALS WITH AN ADULT
2. I WARN MY CHILD S/HE WILL NOT GET A TREAT IF S/HE DOESN'T EAT
3. IF MY CHILD DID NOT LIKE A FOOD, I AVOID SERVING IT TO HIM/HER AGAIN

After attending the Family Cook Nights, adult survey respondents reported changes to their approach to feeding their children (Table 2). In matched pre- and post-surveys (n=12) 11 of 12 respondents indicated that they made at least one positive behavior change while six reported two positive behavior changes and one reported seven positive behavior changes.

The behaviors that changed the most from pre to post included not offering a treat for eating food (66.67% reported positive change), children eating snacks at the same time every day (33.33% reported positive change) and serving foods to kids again after they reject it the first few times (91.67% reported positive change). The behaviors that did not change from pre to post include preparing at least one food that they are sure their child will eat (0 change reported) and begging their child to eat their food (2 changes reported). For the behaviors that did not change from pre to post, most parents reported positive behaviors at pre-survey already.

**Table 2**

*Family Cook Nights pre and post participant responses*

Questions with the greatest change reported by participants  
(No/Rarely = 1, Sometimes = 2, Often = 3, Very Often = 4)

Change (Post – Pre)	How many respondents reported this change post-pre	Percent of respondents reporting this change (n=12)
Q1: I warn my child s/he will not get a treat if s/he doesn't eat. (negative number = positive behavior change)		
0 (no change)	4	33.33%
-1	5	41.67%
-2	2	16.67%
-3	1	8.33%
Q2: My child eats snack at about the same time every day. (positive number = positive behavior change)		
0 (no change)	5	41.67%
1	4	33.33%
-1	3	25.00%
Q3: If my child did not like a food, I avoid serving it to him/her again. (negative number = positive change)		
-3	2	16.67%
-2	2	16.67%
-1	4	33.33%
0	3	25.00%

In qualitative data collected from program participants and partners, we received a lot of support for the series. When asked about the class series, this is what a school principal and parent remarked:

- "Our families enjoyed it and had fun. Cooking is community building. We appreciate the thoughtfulness of the food bank and CalFresh [UCCE]". - Liberty Elementary School Principal
- "Gracias a ustedes por la información que dan a la comunidad para estar más saludables" Thank you for the information you give to the community to be healthier". - Participating Parent

Additionally, UCCE educators debriefed using a plus-delta self-assessment process facilitated by the program supervisor to engage in a group reflection and identify areas for continuous improvement after each programming week. This procedure was submitted to the UC Davis Institutional Review Board and determined to be

research not involving human subjects, IRB review is not required (IRB # 1956450-1). Plus-delta methodology is used in the healthcare field as a debriefing strategy where participants are asked to reflect on their individual or collective performance (Cheng, Eppich, Epps, Kolbe, Meguerdichian et al., 2021). Plus-delta is easy to implement and promotes capacity for self-assessment and improvement. In this plus-delta process, educators identified things that worked well to maintain and build upon in the classes (plus) and opportunities for improvement (delta), are presented in Table 3.



**Table 3**

*Plus-Delta with UCCE staff delivering Family Cook Nights*

Plus	Delta
"Good participation/engagement: Participants shared ideas, questions, and had cameras on"	"Spread out lessons 2 days per week"
"No need for transportation or childcare"	"Add more questions for interaction"
"Liked the info that was discussed; several parents were surprised by sugar content; felt that talking about family mealtimes is very important"	"When taking screen shots ask participants to focus their camera on the food (pin their video for a better image). This is especially important if participants do not have a photo release on file"
"Recipe worked well, and parents were surprised their kids ate the salad"	"Survey is difficult to fill out (opening a link from the Zoom Chat, creating an ID, understanding the questions)"
"Participants liked learning about food safety"	
"Promotion/recruitment through school and trusting their methods"	"Lack of direct communication with participants (for reminders/updates)"
"Families enjoyed the recipes and liked that they could participate from the comfort of their own home"	
"I love seeing the whole family participating"	

## SUMMARY

Overall, the virtual Family Cook Nights Series supported at least one healthy change in almost all the responding parents' child feeding behaviors, offered families the opportunity to practice cooking healthy recipes together, and promoted inclusion of male caregivers in the feeding process. Additionally, it created the opportunity for UCCE educators to serve community members that otherwise they may not have been able to serve due to lack of transportation, time, childcare, and COVID-19 restrictions.

## SUSTAINABILITY

At the beginning of the 2021-22 academic school year, three qualifying sites participated in a new series of Family Cook Nights with positive feedback on the virtual model; remarks from the UCCE team, "families enjoyed the recipes and liked that they could participate from the comfort of their own home" and "I love seeing the whole family participating." The virtual series not only helps meet community needs but keeps families and staff safe as the COVID-19 pandemic persists.



[You may click here to access the references, tables, and graphs for this article.](#)



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## SUSTAINABILITY

**W**e anticipate that the increase in awareness of our virtual Family Cook Nights at our partnering sites will continue to drive more community members to attend our series. In addition, the UCCE team is working on bringing more qualifying sites to support this program, will continue to innovate and support enhancing equitable access to Family Cook Nights in Santa Barbara County, and stay responsive to community needs.



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## MONEY MILESTONES: PROMOTING CHILDREN'S FINANCIAL LITERACY THROUGH PARENT AND CAREGIVER EDUCATION AND SOCIALIZATION

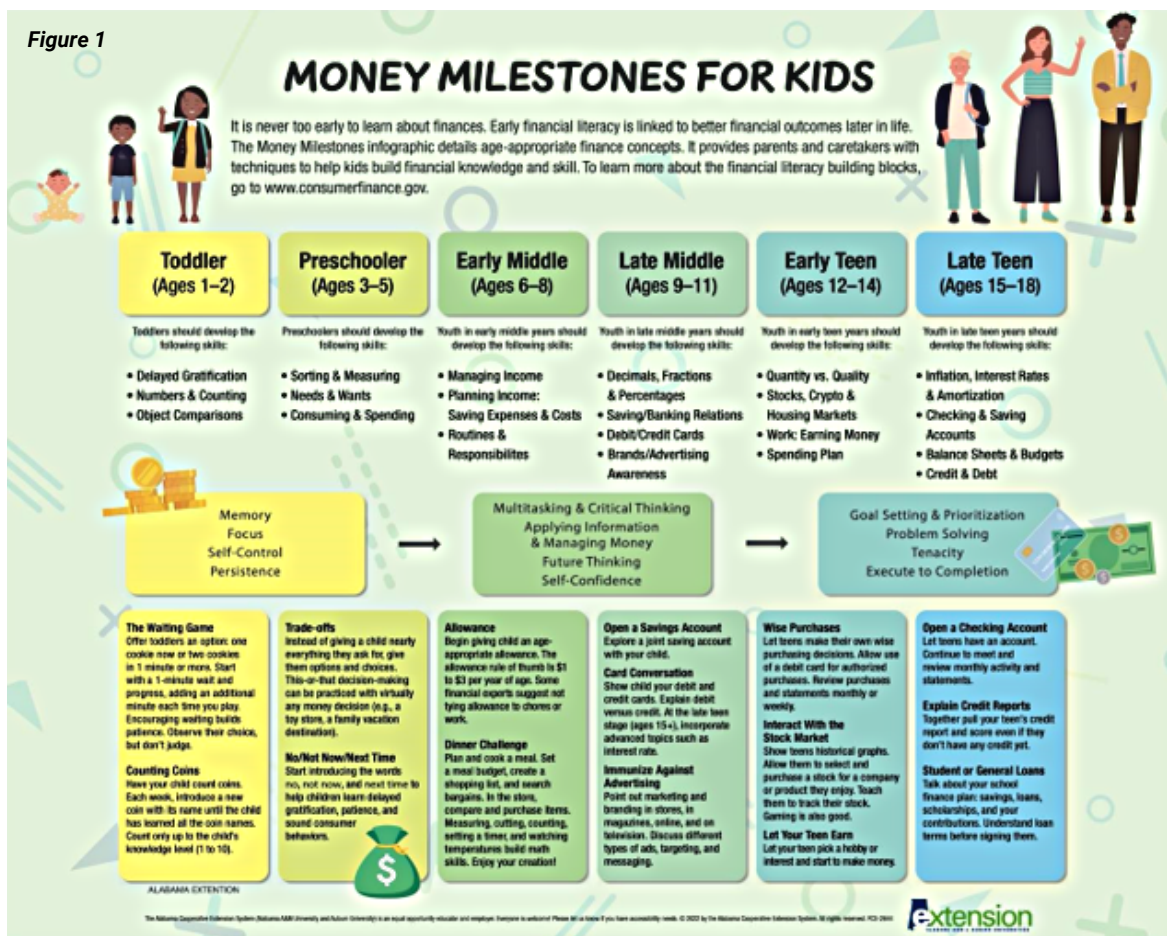
### ABSTRACT

**M**uch literature supports the value of basic money management skills, financial socialization, and education at an early age. Although financial socialization occurs primarily in the home among family members, many parents and caregivers are uncomfortable discussing finances with their children. This study presents a conceptual resource entitled Money Milestones for Kids that is designed to be an accessible, user-friendly guide to help parents and caregivers develop and encourage financial literacy in children. The goal of this resource is to help address the critical significance of developing financial literacy in children by equipping parents and caregivers with tools that facilitate financial experiential learning and socialization practices.

### INTRODUCTION

**T**he concept of financial literacy has attracted increasing attention in scholarly and public domains within the past several decades (Hastings et al., 2013). Financial literacy is defined as having the ability to read, understand, and use basic concepts of personal finance, money, and asset management (Hogarth & Hilgert, 2002; Vitt et al., 2000). In the U.S.'s consumer-driven society, ensuring a strong foundation in financial literacy principles is essential for a safe and prosperous life. To reduce financial risks and ensure prosperity, it is critical to equip citizens with the tools to achieve financial literacy. In response to this, many public policymakers have instituted educational initiatives to begin to develop financial literacy in children (Contreras & Bendix, 2021). Indeed, the literature suggests that basic money management skills and familiarity and comfort with finances should be taught from an early age (Friedline, 2015).

Although personal finance education in schools is useful, it is insufficient alone to develop financially literate citizens. Foundational money management skills should begin at home through parental socialization and supplemented with education received in school (Van Campenhout, 2018). Previous studies have shown that adults develop attitudes toward finances through family members' conversations about money that they witness as children (Edwards et al., 2007); indeed, these conversations can serve further to buffer misinformation about finances received outside of the home (Danes & Haberman, 2007). However, 69% of parents have reported that they are reluctant to discuss money management with their children. Such reluctance to teach children about money may stem from their own discomfort with financial principles (T. Rowe Price Group, Inc., 2017).



The extensive body of literature about the importance of children's financial literacy has led to a growing number of actionable resources that parents and caregivers can use to develop their children's financial knowledge and skills. Rooted in concepts of children's developmental stages and cognitive skills, we present a conceptual resource entitled Money Milestones for Kids (Figure 1). The goal of this resource is to help address the critical significance of developing financial literacy in children. Accordingly, it is an accessible, user-friendly guide for parents and caregivers to develop and encourage financial literacy in their children through educational and socialization practices. The following section outlines relevant literature used to support the conceptualization of Money Milestones for Kids (Figure 1), which is presented and discussed subsequently.



## LITERATURE REVIEW

### CHILDREN'S FINANCIAL LITERACY EDUCATION AND SOCIALIZATION

In general, concepts of literacy are acquired through education (Shim et al., 2010), and several scholars have supported the notion of teaching children financial literacy practices (Lusardi & Mitchell, 2009; Lusardi et al., 2010; Mandell, 2008; Totenhagen et al., 2015). In particular, targeting children at an early age, as young as five, in financial literacy has been recommended widely in the literature (McCormick, 2009; FFLEC, 2016; Friedline, 2015; OECD, 2014; Suiter & Meszaros, 2005; Whitebread & Bingham, 2013).

Experts advocate coupling children's financial education with parental socialization and involvement (Van Campenhout, 2018). Given the limitations of children's financial education in schools, as demonstrated by such findings as those from The American Public Education Foundation (Spann, 2021), family socialization is crucial in developing children's financial literacy (Van Campenhout, 2018), as parents serve as role models (Hibbert et al., 2004). Shim and Serido (2011) found that parents' financial influence was at least 1.5 times more effective than formal financial education such as that provided in schools. Financial socialization in the home is essential to children's financial well-being and is the primary means by which they increase their own financial literacy (Grusec & Davidov, 2008; Shim et al., 2010; Sohn et al., 2012). Children learn by observing parental financial behaviors and participating in household and personal financial processes (Danes & Dunrud, 1993; Moschis, 1987; Shim et al., 2010; Webley & Nyhus, 2006), where it has been shown that parents influence their children's financial norms and attitudes (Lusardi et al., 2010; Norvilitis & MacLean, 2010; Shim et al., 2010), values (Webley & Nyhus, 2006), and behaviors (Clarke et al., 2005; Grinstein-Weiss et al., 2011; Norvilitis & MacLean, 2010).

### EXPERIENTIAL LEARNING AND AGE-APPROPRIATE MONEY CONCEPTS

Learning from experience is a vital part of education, and approaches in experiential education are particularly effective in teaching financial literacy to younger age groups (Batty et al., 2020). Further, real-world experiences practicing the financial concepts they learn are key (Batty et al., 2015). Children's experiential financial education should focus on "life events" (Amagir et al., 2018), such as selecting and using credit cards, setting financial goals, managing savings, debt, and paying bills (Peng et al., 2007). Because children experience financial interactions at each developmental stage (Drever et al., 2015), opportunities for financial education exist at each developmental stage as well (Beutler & Dickson, 2008). Drever et al. (2015), suggested that establishing the building blocks of financial literacy (i.e., executive function) is vital in the pre-elementary and elementary years. Further financial socialization begins in the middle years, and financial skills should be established in adolescence.

A Consumer Financial Protection Bureau (CFPB, 2016) report presented an evidence-based developmental competency model that explains the way to build financial capabilities in children and adults ages 3-21.

The model suggests that children can acquire financial literacy through a combination of parent and caregiver interactions and experiential learning opportunities. The CFPB's (2020a) model defines three developmental "building blocks," or skillsets/knowledge of finances for K-12 education. The CFPB's (2020b) building blocks for financial literacy are (1) executive function, (2) financial habits and norms, and (3) financial knowledge and decision-making skills. Executive function describes the general cognitive abilities necessary to "... plan ahead, focus attention, remember information, practice self-control, and juggle multiple tasks" (CFPB, 2020b, p. 12). Financial habits and norms describe the "... values, standards, routine practices, and rules" used day-to-day in one's financial life (CFPB, 2020b, p. 22).

**Table 1**

CFPB's (2020b) Building Blocks and Financial Skills Aligned with School Grade Groups				
Building Block		Elementary School	Middle School	High School
Executive Function	Impulse control	✓	✓	✓
	Strong working memory	✓	✓	✓
	Attention span and focus	✓		
	Planning and prioritizing	✓	✓	✓
	Task initiation	✓	✓	✓
	Self-control	✓		
	Flexible thinking (i.e., understanding others' viewpoints)		✓	✓
	Responding and adjusting (i.e., incorporating feedback into work and activities)		✓	✓
Financial Habits and Norms	Positive money attitudes	✓	✓	✓
	Savings planning	✓	✓	✓
	Spending planning	✓	✓	✓
	Math skills	✓	✓	✓
Financial Knowledge and Decision-making Skills	Spending and saving decision-making consistent with goals	✓	✓	✓
	Self-confidence in money tasks	✓	✓	✓
	Ability to meet goals	✓	✓	✓
	Research and seek financial information		✓	✓

Building Block		Early Childhood (Ages 3-5)	Middle Childhood (6-12)	Adolescence and Young Adulthood (Ages 13-21)	Building Block		Early Childhood (Ages 3-5)	Middle Childhood (6-12)	Adolescence and Young Adulthood (Ages 13-21)	Building Block		Early Childhood (Ages 3-5)	Middle Childhood (6-12)	Adolescence and Young Adulthood (Ages 13-21)
Executive Function	Begins to demonstrate self-regulation, persistence, and focus	✓			Financial Habits and Norms	Has begun to develop basic values and attitudes toward keeping (saving) and using (consuming) resources	✓			Financial Knowledge and Decision-Making Skills	Has early numeracy skills such as counting and sorting	✓		
	Can use self-regulation, persistence, and focus when using and managing limited resources like time, money, treats, or belongings	✓				Has begun to develop a positive attitude toward planning, saving, frugality, and self-control		✓			Grasps very basic financial concepts such as money and trading	✓		
	Shows the ability to plan ahead and delay gratification		✓			Has begun to show positive financial habits, such as planning and saving		✓			Understands core basic financial concepts and processes		✓	
	Shows future orientation		✓			Can make spending and saving decisions consistent with his or her goals and values		✓	✓		Has managed money or other resources successfully to reach his or her own goals		✓	
	Demonstrates critical thinking skills			✓		Is self-confident about completing age-appropriate financial tasks		✓	✓		Grasps advanced financial processes and concepts			✓
	Demonstrates future orientation			✓		Has a positive attitude toward planning, saving, frugality, and self-control			✓		Can manage money or other resources successfully to reach his or her own goals			✓
	Demonstrates the ability to plan ahead and delay gratification			✓		Shows positive money management habits and decision-making strategies			✓		Can identify trusted sources of financial information and process that information accurately			✓
						Can make spending and saving decisions consistent with his or her goals and values			✓					

**Table 2**  
CFPB (2020b) Building Blocks and Financial Skills Aligned with Children Age Groups

**Table 3**

*President's Advisory Council on Financial Capability's Financial Milestones per Age Group (Rosen et al., 2011)*

Age Group	Financial Milestones
Ages 3-5	"You need money to buy things."
	"You earn money by working."
	"You may have to wait before you can buy something you want."
	"There's a difference between things you want and things you need."
Ages 6-10	"You need to make choices about how to spend money."
	"It's good to shop around and compare prices before you buy."
	"It can be costly and dangerous to share information online."
	"Putting your money in a savings account will protect it and pay you interest."
Ages 11-13	"You should save at least a dime for every dollar you receive."
	"Entering personal information, like a bank or credit card number, online is risky because someone could steal it."
	"The sooner you save, the faster money can grow from compound interest."
	"Using a credit card is like taking out a loan; if you don't pay your bill in full every month, you'll be charged interest and owe more than you originally spent."
Ages 14-17	"When comparing colleges, be sure to consider how much each school would cost you."
	"You should avoid using credit cards to buy things you can't afford to pay for with cash."
	"Your first paycheck may seem smaller than expected since money is taken out for taxes."
	"A great place to save and invest money you earn is in a Roth IRA."
Ages 18+	"You should use a credit card only if you can pay off the money owed in full each month."
	"You need health insurance."
	"It's important to save at least three months' worth of living expenses in case of an emergency."
	"When investing, consider the risks and the annual expenses."



The U.S. Department of the Treasury's Youth Subcommittee of the President's Advisory Council on Financial Capability created a set of money milestones for youth ages three through eighteen (Rosen et al., 2018). The Financial Capability money milestones cover financial concepts that children in each age group should know (see Table 3).

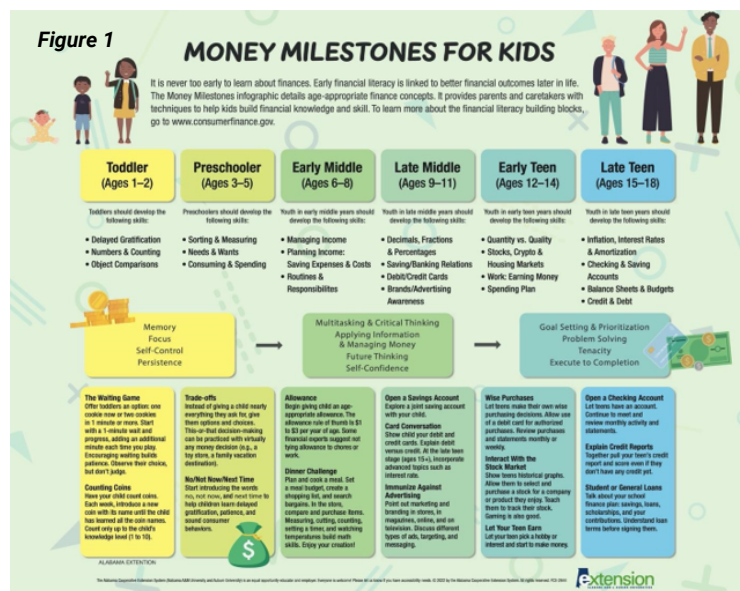
## RESULTS

### MONEY MILESTONES FOR KIDS: A RESOURCE

As discussed, an extensive and growing body of literature on children's financial literacy supports the necessity of early education that exposes children to financial concepts and helps them acquire skills (for an exhaustive summary of youth financial literacy education programs, see Amagir et al., 2018). Parents and caregivers may become overwhelmed easily about the way to teach children about money.



As described above, to address this need, we developed a model referred to as Money Milestones for Kids, an accessible and user-friendly resource to engage children in age-appropriate money concepts, cognitive skills, and activities (see Figure 1). The following subsections outline the resource.



## MONEY MILESTONES BY AGE GROUP

Fundamentally, there are key financial concepts and skills that children should know. When children are toddlers (i.e., ages 1-2), basic skills such as delayed gratification, numbers and counting, and object comparisons should be reinforced. Delayed gratification is the notion of foregoing smaller immediate rewards for a larger reward later, which has been shown to be a vital executive function that contributes to later appropriate financial behaviors (Diaz et al., 1992).

When children are preschoolers (i.e., ages 3-5), basic skills such as sorting and measuring, distinguishing needs from wants, and basic consumption and spending should be encouraged.

When children are slightly older, they can begin to acquire more complex money concepts. Children in early middle age (i.e., 6-8) can be allowed to manage some of their own money, plan what to do with their income (including basic saving), understand expenses and costs, and develop financial routines and responsibilities. Children in late middle age (i.e., 9-11) may begin to learn such mathematical skills as understanding decimals, fractions, and percentages, that can help them develop their money skills further. In addition, providing education about savings and checking accounts, credit and debit cards, and some brands and forms of advertisements are also encouraged at this age. Youth who reach adolescence in their early (i.e., ages 12-14) and late teens (i.e., 15-18) may begin to understand the concept of the number versus quality of financial choices, such as those when making decisions about in which stocks to invest, cryptocurrency, the housing market, and developing a spending plan or budget. At this age, many youth are able, and should be encouraged to, earn their own money, in which concepts of credit and debt, inflation, interest, and amortization, as well as their own checking and savings accounts can be developed.

## COGNITIVE DEVELOPMENT THAT SUPPORTS MONEY CONCEPTS

These financial concepts and skills both support and reflect children's growing cognitive development. Similarly, cognitive skills build on lower levels of processed understanding. Toddlers (i.e., ages 1-2) and preschoolers (i.e., ages 3-5) should develop their ability to focus, memorize information, and persist at tasks, as

well as cultivate self-control (an executive function). Early (i.e., 6-8) and late middle-aged (i.e., 9-11) children should progress to developing more advanced cognitive skills, such as multitasking, critical thinking, applying information learned, and basic money management. These children should focus on planning ahead and developing self-confidence in making financial decisions. The cognitive skills in the early (i.e., 12-14) and late teen years (i.e., 15-18) should progress further, such that they develop skills in setting long-term financial goals, prioritizing consumption needs and wants, and executing plans to completion. Both younger and older teens should be able to solve complex financial problems and remain steadfast in the face of obstacles or unplanned financial events.

## FINANCIAL ACTIVITIES THAT SUPPORT COGNITIVE SKILLS

Incorporating financial activities into daily, weekly, and monthly routines supports children's experiential learning and helps parents increase financial socialization. The Money Milestones for Kids resource provides age-appropriate activities that support money concepts and skills and cognitive development. For toddlers (i.e., ages 1-2), self-control and delayed gratification can be practiced by "learning to wait." Playing games that develop the "learning to wait" function, such as "Simon says," "red light/green light," or "follow the leader," build children's executive function. Counting and comparing coin sizes and shapes is also a useful and entertaining method with which to acquire numeracy skills at this age. Executive function can be developed further in preschoolers (i.e., ages 3-5) through other variations of "learning to wait," such as a game of "no/not now/next time." Using the words "no/not now/next time" regularly enhances and develops delayed gratification, patience and persistence, the ability to distinguish needs from wants, and develops the notion of consumer choice.

Previous research has advised that if parents choose to give children an allowance, the practice should begin in the early middle years (i.e., ages 6-8). Several studies have investigated allowances' use and effectiveness. Collins and Odders-White (2021) showed that receiving allowances increased children's financial responsibility. While some parents make allowances contingent on work or chores performed, others apply the practice as a money management lesson. The act of designing the allowance practice can engage both parent/caregiver and the child actively; discussions can cover whether to provide allowance as payment for work or chores, the amount receivable, and its frequency. Alternatively, those parents and caregivers who cannot, or choose not to, provide an allowance can play games with their children, such as the Allowance board game by Lakeshore Learning.

Planning and cooking a meal with a child is another financial activity that can be used during the early middle years (i.e., ages 6-8). Setting a budget for the meal, creating a shopping list, and searching for coupons or bargains can improve a child's ability to manage money and think critically about financial concepts.



**F**urther, while children are in the store during this activity, they can compare food/ingredient prices, sizes, and nutritional values, and thus increase their numeracy skills. Finally, preparing a meal, following a recipe, measuring ingredients, setting a timer, and watching cooking temperatures can increase math skills. Lastly, enjoying the fruits of their labor, such as their meal, helps build children's self-confidence.

**C**hildren ages 9-11 can begin to interact with financial institutions by opening a savings account. Interacting with banking personnel, products, and services at this age can help familiarize children and make them feel comfortable with banking institutions. Many banks and credit unions offer "first banking" custodial accounts for minors, which often include interactive features that make saving and money management engaging for children. Adolescent-aged children are ready to practice more advanced money concepts and skills. Early teens (i.e., ages 12-14) can begin to earn money if earning was not incorporated earlier in allowances. They can begin to use a pre-paid debit or credit card to make independent purchases to practice wise consumption behaviors. Teens at this age should also begin to interact with finances beyond currency. Allowing teens to shadow or listen in on family financial discussions about budgeting, stocks, bonds, mutual funds, and cryptocurrency will introduce them to concepts they may soon begin to learn about in more detail in the classroom. At this age, teens can begin to discuss historical charts, and selecting and tracking stocks. Not all parents and caregivers interact with stock markets and cryptocurrency equally, or are homeowners. In those cases, teens can still gain experiential education through gamification, for example by playing board games (e.g., Monopoly) or online stock market games.

**F**inally, adolescents in the late teen years (i.e., ages 15-18) can progress from a savings account to a checking account and continue the practice of reviewing monthly activity statements. For many teens in this age group, concepts such as inflation, interest rates, and amortization may be covered in school. Parents and caregivers can reinforce this learning at home by continuing to include teens in financial discussions. Talking about credit cards, sharing monthly statements, explaining credit scores, interest, and minimum payments are helpful at this age. Further, learning the way to use a credit card at this age may discourage irresponsible credit card use in college and as adults (Shelstad et al., 2018). Similarly, increasing financial literacy by preparing for post-secondary education such as college, certification, or trade school may reduce student loan debt levels (Markle, 2019; Montalto et al., 2019). Debt management and planning on the part of older teens should include post-secondary educational planning. Conversations about college costs, comparing programs and financial aid, and debt repayment should begin in high school or earlier. Teens who receive financial socialization and education are less likely to default and experience less financial stress about student loans (Fan & Chatterjee, 2019).

## CONCLUSION

**F**inancial literacy is critical in such consumerism-focused societies as the U.S., where consumption choices often hold significant risk for individual citizens ( Contreras & Bendix, 2021). By introducing money concepts at a young age and supplementing cognitive skills that are developing concurrently, we can encourage a strong foundation in financial literacy for the future of our children. This paper presents a comprehensive resource for parents and caregivers to promote children's financial literacy. A combination of previous literature on children's financial education and socialization was synthesized to create a diagram that can show parents and caregivers the milestones their child should be meeting to develop a financially literate foundation. To position and explicate each milestone, we applied various cognitive skills that children should be developing at each stage. Further, aligning these cognitive skills with foundational money skills allowed us to suggest certain actionable financial activities that parents and caregivers can exercise with their children to ensure they meet each milestone.



[You may click here to access the references, tables, and graphs for this article.](#)



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## PUBLIC VALUE: PERSPECTIVES FROM MINNESOTA EXTENSION FOOD SAFETY PROGRAMMING



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### ABSTRACT

Cooperative Extension has existed in the U.S. for a century. Extension professionals play a major role in community-based, science-driven problem-solving that leads to stronger and better-functioning societies. However, as public expectations of accountability rise and funding streams become more limited, Extension professionals need to better articulate the public value accrued from administered programs. This study offers perspectives on Extension programming within the context of food safety, and reports on stepwise progress while addressing the challenge of successfully executing long-term studies to collect more robust data.

## PUBLIC VALUE: PERSPECTIVES FROM MINNESOTA EXTENSION FOOD SAFETY PROGRAMMING

The United States Cooperative Extension system was established in 1914 to deliver useful, practical, science-based information to communities in nontraditional settings (Franz, 2014). However, as public expectations of accountability rise and funding streams become more limited, Extension professionals need to better articulate the public value accrued from administered programs (Ahmed & Morse, 2010; Franz, 2015; Kalambokidis, 2004, 2011; Peters & Franz, 2012). The role of Extension in the dissemination of information is also evolving as online learning offers a more convenient and in some cases inexpensive option to acquire knowledge (Kassebaum et al., 2016; Yeung et al., 2019).

According to Kalambokidis et al. (2015), public value can be classified into four aspects, namely; a) narrowing information gap; b) fairness or justice of resource distribution; c) public benefits and costs; and d) public goods (nonrival and nonexcludable). All four potentially address a type of market failure to meet a need. In exploring the public value of a program, accurately pinpointing and clearly articulating the failure being addressed is crucial. However, making a case for aspects a) and b) above is highly challenging because of information abundance, and the need for a community consensus on program goals, respectively. This leaves aspects c) and d) as the basis for most public value messaging (Kalambokidis et al., 2015).

Simply put, public value would be any benefits cascading into the greater (tax-paying) community, usually to individuals not directly involved with Extension programming (Franz, 2015; Kalambokidis et al., 2015). On the other hand, private value is essentially the return on investment realized by the individuals directly involved with Extension programming (Kalambokidis et al., 2015). In this food safety example, the most relevant benefit is meeting the food production requirements set forth by the Minnesota Department of Health (Minnesota Department of Health, 2019).

At the University of Minnesota (UMN), Extension is organized into four centers (UMN Extension, 2021). Food safety education is offered by one of 12 teams in the Center for Agriculture, Food and Natural Resources (AFNR). In a previous study, one of us evaluated the private and public value of three of the food safety courses offered through AFNR, namely: a) Keep It Safe! Keep It Legal! for cottage food producers; b) Serve It Up Safely™ for food protection managers; and c) the Produce Safety Rule for specialty crop farmers (Omolo, 2020). In this study, we focus on the results from the Serve It Up Safely™ course, which is divided into 12 topic-specific modules, each designed and approved for one continuing education credit (UMN Extension, 2022). These modules provide learners with choices based on their interest and business needs. From an industry standpoint, the modules are typically considered to be 12 different mini-courses. The design makes it easier for Extension faculty to relate comments and feedback to the relevant modules for continuous improvement.



## OBJECTIVES

The objective of this study is to offer perspectives on the public value of Extension food safety programming, using the UMN's Serve It Up Safely™ course as an example.

## METHODS

In Chapter 5 of a recent dissertation study, Omolo (2020, pp. 54–66) explored the public and private value of the UMN Serve It Up Safely™ food safety course., by analyzing the 2019 post-training evaluation data from UMN Extension - AFNR. The data were captured in Qualtrics survey software (Qualtrics, 2019). Questions covered focused on course content, delivery and level of satisfaction based on learner expectations. Learners also provided feedback on self-assessed knowledge gain and behavior change goals in key areas related to food safety practices. For detailed evaluation questions, contact the corresponding author or refer to Appendix D of the dissertation (Omolo, 2020, p. 121). While the example used is based on food safety programming, the considerations may be relevant in any other areas of Extension-based efforts.

## FINDINGS

In the results, Omolo (2020, pp. 54–66) reported that 747 out of 1624 learners responded to the evaluation (46% return rate). All except three of the respondents were from Minnesota (2 from China and 1 from Denmark). The learners were predominantly white (92%), non-Hispanic or Latino (90%), and over 18 years old (93%). More than half of the learners were women (55%). They work in a wide range of food establishments (>20 mentioned). The majority (89%) reported having a deeper understanding of the respective subject matter as a result of the course. Ninety-two (92%) percent said they could use the content learned at their jobs and 90% planned to use the lessons learned to train others at work. While 76% intended to change food safety practices, 85% would add or update existing standard operating policies/procedures. Additionally, 40% would suggest the respective course modules to others and only 20% would retake the respective course module again, given that there are 11 others to choose from.

## DISCUSSION

The safety of food at away-from-home eateries is overseen by a certified food protection manager (CFPM). Current certification of CFPMs is based on the assumption that certification leads to greater food safety knowledge, resulting in safer establishments (Yeargin et al., 2021). A 2013-14 study by the US Food and Drug Administration (FDA), indicated that continued presence of a CFPM on the premises resulted in better compliance and better Food Safety Management Systems (FSMS) inspection scores (FDA National Retail Food Team, 2018).

## DISCUSSION

**F**indings from other studies support this observation (Appling et al., 2018, 2019; Brown et al., 2014; Cates et al., 2009; Hedberg et al., 2006; Lipcsei & Kambhampati, 2016; McFarland et al., 2019). Brown et al. (2014) suggest that greater knowledge is associated with factors such as working in a chain restaurant, working in a larger restaurant, having more experience and having more duties (Brown et al., 2014). McFarland et al. (2019) recommend that behavior-based training should be included in addition to food safety knowledge-based education. This sentiment was the primary topic in a decade old book by Yiannas (2009), titled Food Safety Culture: Creating a Behavior-Based Food Safety Management System.

**L**earners taking the UMN Serve It Up Safely™ course usually do so as part of their recertification continuing education requirement. While the course is intended to provide current, science-based food safety information, the extent to which learners apply it is influenced by many factors including the work environment, management commitment and personal value systems (Aquino et al., 2021; Yeargin et al., 2021; Yiannas, 2009). It would be invaluable if Extension professionals had access to internal data about company food safety culture. This would help contextualize the training and education evaluation data within the realities of the work environments, to better assess the likelihood of employee behavior change based on knowledge gained through the course (Yeargin et al., 2021). However, due to the sensitive nature of company data, such information would be challenging to obtain.

It is important to mention that the evaluation data presented in this present study were self-reported and may be biased. According to Rosenman (2011):

“THERE ARE MANY REASONS INDIVIDUALS MIGHT OFFER BIASED ESTIMATES OF SELF-ASSESSED BEHAVIOR, RANGING FROM A MISUNDERSTANDING OF WHAT A PROPER MEASUREMENT IS[,] TO SOCIAL-DESIRABILITY BIAS, WHERE THE RESPONDENT WANTS TO ‘LOOK GOOD’ IN A SURVEY, EVEN IF THE SURVEY IS ANONYMOUS. (P. 321)”

Nevertheless, Yiannas (2009) and Aquino (2021) propose that knowledge assessment is one of the leading indicators of food safety. It is opportune, then, that Extension plays a major role in knowledge dissemination and assessment. Besides the learners who directly benefit from the course, below are ways that non-participants may find value.

## VALUE TO CUSTOMERS

On average, Americans eat about 50% of their meals away from home, usually at away-from-home eateries (Angulo & Jones, 2006; Lipcsei et al., 2019). Unfortunately, the majority of reported foodborne illnesses are associated with these locations (Angulo & Jones, 2006; Hall et al., 2012; Lipcsei et al., 2019).

In a 2017 CDC report, 841 foodborne disease outbreaks resulting in 14,481 illnesses, 827 hospitalizations, 20 deaths, and 14 food recalls were reported. Of these 64% occurred at eateries (Centers for Disease Control and Prevention, 2019). In instances where etiology is determined, norovirus accounts for the majority of the cases, followed by Salmonella (Lipcsei et al., 2019). Regardless of the inherent risks associated with a food product, food handler hygiene plays a critical role in ensuring food safety (Scallan et al., 2011; Scharff, 2012; Tack et al., 2019). Restaurant-associated outbreaks are often attributed to food handlers who are under the management of and often trained by CFPMs. With this in mind, it is safe to conclude that consumers are the most obvious beneficiaries of properly trained CFPMs.

## VALUE TO THE COMMUNITY

Every individual seeking an education opportunity belongs to a community beyond the program experience. While the knowledge and skills gained are primarily geared towards the individual's benefit and behavior change, immediate family members and friends may benefit if the individual applies the learned food safety practices at home and around family and friends. This was recently well summarized by one learner who stated that "Everything we learn helps others in some way, like our family and friends, when they see us practice what we've learned" (Anonymous learner, Personal communications, 12/12/2021). The benefit goes much further if the individual chooses to share the information with others and teach them how to apply the same skills (e.g. how to safely prepare and serve food). From the data presented herein, it was noted that 92% of the learners could use the content learned at their jobs, and 90% planned to use the lessons learned to train others at work. Additionally, 40% of them would recommend the course modules to others. These data indicate intent, which reflects goodwill and a positive attitude towards food safety on the part of the learners (Yiannas, 2009).

## VALUE TO THE STATE OF MINNESOTA

The UMN Serve It Up Safely™ is one of 325 initial and renewal course options approved by the Minnesota Department of Health (Minnesota Department of Health, 2019). As of December 2021, there were 33,397 active certified food protection managers in the state of Minnesota, all of whom participate in any one of the approved courses as needed (Zerwas, Personal Communication, 12/20/2021). While the courses are offered by both public and private entities, the state benefits from the ongoing collaborative community-based research and engagement happening at the University. An earlier study at the University looked comprehensively at the 325 programs, and examined the influence of demographic characteristics and delivery methods on food safety knowledge of learners. The results showed no impact related to the mode of delivery, gender or delivery location on knowledge gain (Makari, 2014). This was useful because it reflects consistency in the different programs and delivery methods. Extension professionals have an opportunity to learn about a diverse range of issues and concerns as they interact extensively with local communities. In the specific case of food safety education, these professionals convert the mostly abstract regulations into manageable, practical information that learners can use to achieve their intended food safety goals.

## FURTHER CONSIDERATIONS

**A**lthough the UMN Serve It Up Safely™ course is part of the educative measures against foodborne illness in the state, it is almost impossible to pinpoint or claim that a decision made by an individual after the course was a direct result of this experience alone. As such, the UMN Extension's story on public value should be understood as part of the bigger ongoing effort on food safety as a collaborative effort of many sectors across the state. The impact of the education program becomes a cog on a large wheel – a contribution towards the overall goal of ensuring the safety of the state's food supply. By considering this approach, the education team then spends more time capturing the broader context within which these programs are offered and how the efforts fit into that landscape. Franz (2014) mentions that Extension should consider how engagement with communities changes the economic, environmental and social conditions. This shift in focus may require additional resources, most notably time, without necessarily increasing the amount of funding from the legislature. Nonetheless, the goal is for Extension to remain relevant and competitive as needs continue to increase and funding is limited (Ahmed & Morse, 2010; Peters & Franz, 2012).

When having conversations about public value, it is important to consider the individuals in the discussion (Kalambokidis, 2013). Depending on the program being discussed, it is beneficial to have relevant stakeholders (Franz, 2014). It is not enough to have discussions or even document public values. These values must then be communicated to the right people, including public officials. One subtle group that could benefit from this communication is college level students interested in community based work, who will often look for clear descriptions of these impacts. By articulating these (potential) impacts, it may be possible to encourage and incentivize a new generation of Extension professionals.

Craig and Borger (2019), as well as Peters and Franz (2012) contend that Extension could benefit from highlighting the value of programs to the public, with a focus on relevant data. This is obviously not a trivial matter, but it is one that is becoming increasingly necessary as the pressure mounts on Extension to justify the need for public funding. While public input is pivotal, Extension professionals can and should invest time in discussing what value they see in their programs beyond the direct impact. While planning or in the process of executing long term studies needed to collect data on the behavior change of learners, Extension professionals should still report on stepwise progress, based on the available short term data.

## ACKNOWLEDGMENTS

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# NEAFCS JOURNAL

## FEASIBILITY STUDY OF A VIRTUAL PILOT PROGRAM TO ADDRESS THE SOCIO-EMOTIONAL LEARNING NEEDS OF RURAL YOUTH DURING THE COVID-19 PANDEMIC.

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### ABSTRACT

A substance prevention curriculum was piloted virtually with 766 middle and high school students in Western Maryland during the COVID-19 pandemic. We assessed the program's results using self-reported questionnaires (n= 181 students) and implementation outcomes with instructors (n= 14). Middle school students' knowledge and drug refusal skills increased significantly from pre- to post-test. Knowledge increased significantly for high school students. Overall fidelity, acceptability, appropriateness, and feasibility were rated high. Feasibility, acceptability, and appropriateness themes were identified. The study results suggest essential considerations for practitioners who consider virtual delivery of similar programs in the future.

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**S**tudies have found that adolescents living in rural areas might be at greater risk for poor mental health outcomes in comparison to urban youth (Curtis, Waters & Brindis, 2011). During the pandemic, and specifically during lockdown, youth ages 11-17 were more likely to show moderate to severe anxiety and depression symptoms in comparison to other age groups (Mental Health America, 2021). Exposure to different stressors, such as isolation, restricted social networks, and limited community resources and healthcare services, can contribute to poor mental health outcomes (Loades et al., 2020; Mack, Jones & Ballesteros, 2017).

**S**ocio-emotional learning (SEL) interventions have been found to be successful in promoting mental wellbeing and preventing substance use disorders among adolescents (Durlak et al., 2011). SEL strengthens self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011). These SEL interventions can help prevent or reduce problem behaviors such as school disengagement, substance use, risky sexual behavior, violence, depression, and attempted suicide (Zins & Elias, 2007), regardless of race, SES, or residency (Taylor, Oberle, Durlak & Weissberg, 2017). Despite the multiple studies on in-person SEL interventions that have shown positive results on mental health (O'Conner, De Feyter, Carr, Luo & Romm, 2017; Haggerty, Elgin & Woolley, 2011), there is limited research regarding virtual prevention programming.

**T**he Maryland Rural Opioid Technical Assistance (ROTA) team implemented an adapted online version of the Botvin LifeSkills (BLS) program (Botvin Lifeskills Training, 2021a) with 536 middle school and 230 high school students in Western Maryland. Western Maryland is a rural area consisting of Washington, Allegany, and Garrett counties. Allegany county was specifically selected for program delivery due to accessibility and sociodemographic factors. Allegany county has received one of the poorest health rankings in Maryland, with low educational attainment and high rates of substance misuse (County Health Rankings & Roadmaps, 2022). In 2020, Allegany County showed the largest percent increase in opioid-related deaths within Maryland (Maryland Opioid Operational Command Center, 2021).

**T**he middle school BLS curriculum included 14 one-hour lessons and the high school BLS curriculum included 10 one-hour lessons that were delivered twice a week. The sessions explored topics such as self-image, decision making, coping with anxiety, communication skills, social skills, resolving conflicts, managing stress, positive and negative coping mechanisms, the impact of the media, and expressing emotions. The original curriculum was created to be taught in-person, but due to COVID-19 restrictions, the program was adapted to be taught online upon receiving permission from the developers (National Health Promotion Associates Inc.) of the BLS curriculums. The BLS materials were adapted for virtual delivery, including the development of PowerPoint presentations and handouts.

Trained program staff and college student volunteers delivered the curriculum. School physical education or related (PE) teachers served as both Board of Education representatives responsible for all activities occurring within their assigned classrooms and class moderators, shadowing our work to deliver the curriculum on their own in the future.

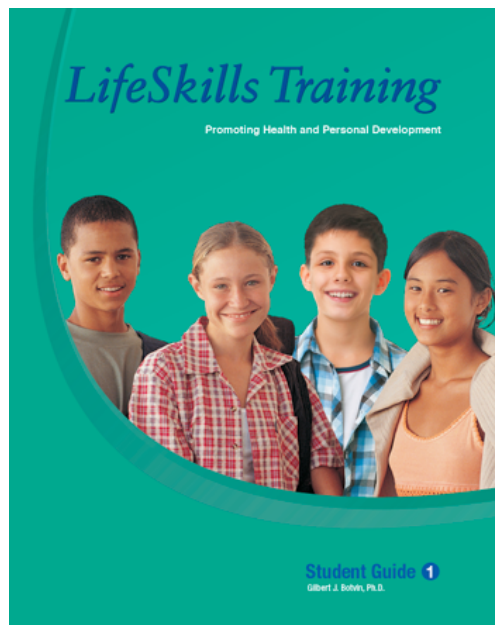
## OBJECTIVE

The primary aim was to assess student's change in knowledge and skills after participating in the online version of the BLS. The secondary aim was to assess implementation measures (fidelity, appropriateness, acceptability, feasibility) of the virtual delivery of the BLS program as reported by BLS instructors and PE teachers.

## METHODS

### SETTING AND SAMPLE

We recruited students from one middle school and one high school to implement the BLS program as a replacement for the physical education classes during the COVID-19 pandemic (February to April 2021). Recruitment was conducted through an ongoing partnership between a lead local Extension educator and high school health education faculty.



Botvin Lifeskills Training Student Guide

### DATA COLLECTION

An online questionnaire was administered to students at baseline and at the end of the six-week course (post-test) for our first aim. We used the BLS student survey (Botvin Lifeskills Training, 2021b) for middle school and high schools. For our second aim, we asked the instructors to complete Botvin's fidelity checklists and open-ended questions concerning weaknesses and strengths when delivering the program. PE teachers reported acceptability, appropriateness, and feasibility data via a Qualtrics survey. The University of Maryland human subjects' protection committee (institutional review board) reviewed and approved all research procedures.

### ANALYTIC STRATEGY

We ran descriptive statistics to assess the demographic characteristics of the group. We conducted paired t-tests to assess differences in means from baseline to post-test for aim one variables. For fidelity, a summative score was created for each lesson and then converted into a percentage. For lectures where educators marked all the activities as complete, the fidelity percentage was 100.

## ANALYTIC STRATEGY (CONTINUED)

For additional implementation constructs of acceptability, appropriateness, feasibility, and inner and outer setting (Weiner et al., 2017), average scores per teacher were added and then divided by the number of teachers to get a total average score for each construct. For the qualitative responses, first and second author conducted a template analysis to identify themes, which were later reviewed and confirmed by the entire research team. Additional information was added based on experiences shared by the teachers and instructors during the weekly and monthly check-ups.

## RESULTS

Study results are organized by student outcomes (aim 1) and instructors' implementation perceptions and outcomes (aim 2). Students' demographic information can be found in Table 1.

Results report the Student's t-test ( $t$ ), degrees of freedom ( $df$ ), mean ( $m$ ), probability value ( $p$ ) and standard deviation ( $sd$ ).

### INITIAL KNOWLEDGE, ATTITUDES, AND SKILLS OUTCOMES

Pre- to post-test scores for anti-drugs attitude, anti-drinking attitude, relaxation skills, assertiveness skills, self-control skills, and subjective well-being did not show statistically significant changes in either group. Among middle school students, scores for anti-smoking attitudes decreased significantly ( $t=1.91, df=154, p=.029$ ). Drug refusal skills ( $t=3.38, df=151, p<.001$ ), anti-drug attitude ( $t=4.71, df=155, p<.001$ ), and life skills knowledge ( $t=6.23, df=155, p<.001$ ) increased significantly from pre- to post-test. Overall knowledge skills for both middle school students ( $t=6.61, df=155, p<.001$ ) and high school students ( $t=2.57, df=26, p=.008$ ) increased significantly. Results are found in Table 2.

**Table 1**

<i>Participant characteristics of middle and high school students</i>		
	Middle School (n=416)	High School (n=117)
Age Range (Mean)	11-15 (12.6)	14-18 (15.8)
Female n (%)	216 (52%)	57 (49%)
<b>Race/Ethnicity n (%)</b>		
Black or African American	22 (5%)	3 (3%)
White	317 (76%)	105 (91%)
More than one race	51 (13%)	5 (4%)
<b>Family Structure n (%)</b>		
Two parents in household	257 (61%)	80 (69%)
Single Parent	121 (29%)	29 (24%)
Other family type, no parent reported	39 (10%)	6 (5%)

**Table 2**

*Socio-emotional learning outcomes by middle and high schoolers*

	Middle School (n=155)					High School (n=26)				
	Pre		Post			Pre		Post		
	M	SD	M	SD	t	M	SD	M	SD	t
Overall Knowledge	0.72	0.12	0.78	0.13	6.61**	0.87	0.1	0.91	0.12	2.57*
Life Skills Knowledge	0.78	0.16	0.83	0.15	6.23**					
Anti-drugs Knowledge	0.63	0.13	0.7	0.15	4.71**					
Anti-drugs Attitude	4.58	0.53	4.49	0.82	-1.37	4.36	0.58	4.4	0.5	0.62
Anti-smoking Attitude	4.64	0.48	4.52	0.83	-1.91*	4.4	0.61	4.47	0.48	0.77
Anti-drinking Attitude	4.52	0.61	4.47	0.84	-0.81	4.19	0.77	4.25	0.65	0.53
Drug Refusal Skills	3.74	1.73	4.21	1.34	3.38**	4.24	1.29	4.16	1.28	-0.67
Assertiveness Skills	3.28	0.8	3.33	0.86	0.65	3.08	0.86	3.24	0.81	1.2
Relaxation Skills	3.94	0.95	4.03	1.02	1.01	3.83	0.98	3.96	1.01	1.07
Self-Control Skills	3.33	0.92	3.44	0.88	1.37	3.81	0.69	3.87	0.77	0.44
Subjective well-being	5.24	1.44	5.42	1.3	1.42					
Perceived Stress	2.67	0.83	2.61	0.77	1.09					

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

## FIDELITY

At the end of each class, all instructors were asked to complete the fidelity checklist using an online survey. For high school cohorts, one instructor completed the fidelity checklists, with all lessons having a 100 percent fidelity rate. For middle school cohorts, six middle school instructors completed between 6 to 19 fidelity checklists, with an average of 11 fidelity checklists per lesson. The average fidelity completion rate for middle school was 95 percent. The lessons focusing on developing skills, such as communication skills (86%) and making decisions (88%) had the lowest fidelity completion.

## ACCEPTABILITY, APPROPRIATENESS, FEASIBILITY, AND INNER AND OUTER SETTING

Seven PE teachers partnered with the instructors to deliver the lessons between middle and high school. All teachers who completed the questionnaire (n=6) had been teaching for more than five years. Three teachers were already familiar with similar curricula, and three had never received training for similar programs. Both curricula rated high in acceptability, appropriateness, and feasibility (m =4.5 sd =.54), and inner and outer setting rated lower (m =3.83 sd =.40). Implementation scores are presented in Table 3.

**Table 3**

*Teacher and school staff implementation questionnaire (n=6)*

	Mean ± SD	Range
<b>Acceptability</b>	4.5 (.54)	(4-5)
The LifeSkills program meets my approval		
The LifeSkills program is appealing to me		
I like the LifeSkills program.		
I welcome the LifeSkills program.		
<b>Appropriateness</b>	4.5 (.54)	(4-5)
The LifeSkills program seems fitting		
The LifeSkills program seems suitable		
The LifeSkills program seems applicable.		
The LifeSkills program seems like a good match		
<b>Feasibility</b>	4.5 (.54)	(4-5)
The LifeSkills program seems implementable		
The LifeSkills program seems possible		
The LifeSkills program seems doable.		
The LifeSkills program seems easy to use.		
<b>Inner and Outer Setting</b>	3.83 (.40)	(3-4)
What is the general level of receptivity in your organization to implementing the intervention?		
How does the program relate to the school's mission and vision?		
How essential is this program to meet the needs of the youth served by your school?		

## FEASIBILITY THEMES

Instructors and the PE teachers reported three main themes concerning the feasibility of the program: technology use and access, class engagement, and partnership formation. One of the main weaknesses the project encountered for online delivery was poor internet connection. Due to unreliable internet connection, some students could not participate synchronously in the classes and instead watched the recording of the lectures. Technical difficulties reduced the allotted time for some lectures. However, specific online tools made lessons more engaging. Our shift from Zoom to Schoology, the education platform provided by the schools, increased attendance and student engagement, providing a safer online delivery channel. Instructors used NearPod to play games with students, set quizzes, create activities, and interact through writing boards where students could share their thoughts.

## FEASIBILITY THEMES (CONTINUED)

**T**he class engagement was challenging in an online setting. Some of the more complex topics, such as anxiety, were hard for students to share aloud, but they used the chatbox to share their feelings and emotions. In addition, most of the students kept their cameras off, which made it difficult for the instructor to gauge the students' engagement level. During debriefing meetings, instructors highlighted online tools such as the chatbox and the class management system, as well as the use of videos and interactive activities, as essential tools to facilitate student engagement. Instructors also mentioned the vital role of teachers who were already familiar with the students to help with class discussions (e.g., encourage participation from all students) and increase the completion rates of the baseline and post-class questionnaires.

**P**artnership formation was crucial for the feasibility of the program both in terms of recruitment and its delivery. By incorporating the curriculum as part of the student's PE lessons, we increased students' attendance. Teachers' support was crucial for a successful delivery. The pre-existing relationship between the university's instructors and the schools allowed our team to overcome outreach barriers and provided additional networking opportunities for targeting middle and high school students.

## APPROPRIATENESS AND ACCEPTABILITY THEMES

**T**eachers found the topics appealing, appropriate and acceptable for the students. Teachers reported that some of the worksheets were not very appealing to the students, as some of the suggested activities required in-person interactions. Although all adaptations were completed as a team effort to provide consistency across classes, instructors still found it difficult to adapt certain in-person activities to the online format. The online format did not allow the instructors to carry out all of these activities in the originally intended (i.e., in-person interaction) way. Instructors (n=2) mentioned that some of the lectures were too basic for middle and high school students and that the content could be reviewed to make it more relevant to their own lived experiences.

## DISCUSSION

**M**iddle school students who participated in the online BLS program reported increases in knowledge outcomes and drug refusal skills. However, results did not show significant increases in students' self-reported skills related to substance abuse prevention and subjective well-being. Fidelity, feasibility, acceptability, and appropriateness measures had positive outcomes as reported by instructors and PE teachers. Nevertheless, qualitative data suggest considerations to increase the fidelity, feasibility, acceptability, and appropriateness of the program for our focus population. The results suggest important considerations and implications for practitioners who consider virtual delivery of similar programs in the future.



One of the implementation weaknesses reported by instructors was how certain activities, particularly ones involving a great deal of student-to-student interaction, were not amenable to online delivery on the platforms used. Experiential Learning Theory (Kolb, 2014) suggests that learning is likely to remain in the abstract if done without experiential components, such as live skills practice. This may explain why there were increases in self-reported general anti-drugs and life skills knowledge (abstract), but not self-reported skills (concrete). It is also important to note that anti-drinking and anti-drug attitudes were already high at the baseline assessment in both middle and high school students. The same could be noted about drug-refusal, relaxation, assertiveness, and self-control skills in middle school students, which could explain why no significant changes were found. Low literacy levels, demonstrated by participating schools' average reading proficiency scores and teachers' accounts, could have led to a lack of understanding of the questions to grasp what was being asked.

Technology access presented both an opportunity and a barrier in terms of reaching rural adolescents. It was an opportunity in that the reach of programming was amplified beyond the physical location of program staff. However, rural internet access is still lagging well behind that of suburban and urban areas (Perrin, 2019). Even for rural locations with broadband access, the connection speed varies greatly (Lai & Widmar, 2021). This presents a challenge to the implementation of virtual prevention programs. During our program implementation, we experienced technical challenges due to inconsistent internet access and the unfamiliarity of school staff with distance education software.

## IMPLICATIONS FOR PRACTICE

### PROGRAMMING CONSIDERATIONS FOR YOUTH

Recent reviews have shown that the effectiveness of traditional, knowledge- and skills-based interventions tends to decline as adolescence progresses (Yeager, Dahl & Dweck, 2018), hence the program might be better suited for middle school students than high school students. For middle- and later-adolescent audiences, an intervention more focused on changing norms rather than providing knowledge may be more effective (Miller & Prentice, 2016).

To increase fidelity for the in-person activities, researchers should consider utilizing a platform that allows for small-group interaction via breakout rooms when delivering programs virtually. However, this may also present a supervision challenge for the program staff. Therefore, online delivery of experiential programming may also require the presence of enough trained staff to supervise participation in each of these small-group interactions. Larger group interactions may be facilitated by using educational software that allows for competitive pop quizzes (e.g., NearPod), "writing" on virtual whiteboards, and matching exercises. Programs such as NearPod have a wider array of interactive tools to keep students engaged. To increase students' participation, it is helpful if the class is offered within the standard curriculum of health instruction, including graded assignments.

## SCHOOL PARTNERSHIPS DURING ONLINE DELIVERY

A best practice for youth development programs is to partner with schools for program delivery (Anderson-Butcher, Paluta, Sterling & Anderson, 2018). Community-based program staff should leverage their relationships with school faculty to reach new program participants and facilitate their participation when the format is online. Our implementation data showed that the instructors appreciated it when teachers could serve as active participants in the program delivery. In addition, program staff should orient teachers to the online delivery methods, and specifically make the request that teachers take an active role in classroom management. The less time program staff spend on classroom management, the more time they can spend facilitating each lesson's activities.



Although this study has considerable strengths, such as data triangulation, some limitations need to be addressed. One of the main challenges of the study was the quick curriculum adaptation to a virtual environment due to the changing circumstances and pressing needs created by the pandemic. In ideal circumstances, the online program would have been adapted with the developers' help and piloted with a small group of the focus population. Attendance was also hard to capture due to having the asynchronous option of the program, which was a necessity for children with low bandwidth. Low response rates in High School students at post-test could have also contributed to skewed results.

The context of COVID-19 allowed us to expand to deliver programs online. In addition, the rapid program adaptation, implementation, and evaluation provided us with lessons, and additional tools to bridge research and practice in a timely manner.



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# THE IMPORTANCE OF UNDERSTANDING HEALTH INSURANCE BENEFITS AMID POLICY AND ENVIRONMENTAL CHANGE

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# IMPROVING EMOTION REGULATION SKILLS AMONG YOUTH THROUGH INTENTIONAL SOCIAL-EMOTIONAL LEARNING LESSONS IN AFTERSCHOOL PROGRAMS

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## ENCOURAGING FINANCIAL CONVERSATIONS: COMBINING COACHING AND FINANCIAL COMPETENCY SKILLS TO BUILD CAPACITY AMONG HELPING PROFESSIONALS

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# MONEY MILESTONES: PROMOTING CHILDREN'S FINANCIAL LITERACY THROUGH PARENT AND CAREGIVER EDUCATION AND SOCIALIZATION

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# FEASIBILITY STUDY OF A VIRTUAL PILOT PROGRAM TO ADDRESS THE SOCIO-EMOTIONAL LEARNING NEEDS OF RURAL YOUTH DURING THE COVID-19 PANDEMIC

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