Home and Family Perspective:

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Home and Family Perspective: Journal of the Utah Association of Family and Consumer Sciences was created to share some of the research and scholarly activities being carried out in the state with peers, colleagues, and others who may apply the findings in their work and family. The Journal is the creation of the College and University Committee of the Utah Association of Family and Consumer Sciences. Each author is responsible for the content in his/her respective article

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Wellness Works Utah™

A nutrition and physical activity program for K-12 schools, worksites, and communities

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Introduction

The impact on our nation resulting from overweight, obesity, and related health issues is startling. Medical costs for adults attributed to obesity were estimated to have been $147 billion in 2008. Childhood obesity is considered a national health crisis, with one in three children ages 2-19 considered overweight or obese. Over one quarter of Americas aged 17-24 is unable to qualify for military service because they are too heavy (Interagency Childhood Obesity Taskforce, 2010). In Utah, poor dietary habits and inactivity have caused us to reach a 60% rate of adult overweight or obesity (Centers for Disease Control and Prevention, 2010). Of elementary school age youth in Utah, 21% are overweight or obese (United States Department of Agriculture, 2010).

While volumes of research show our nation's current health situation is grim, it is also clear that the basic behaviors of improved eating habits and increased physical activity are critical strategies in the solution. Wellness Works Utah™ is a healthy living program designed to bring education and opportunity for increased fitness to individuals and groups of all ages in communities, schools, and worksites across the state.

A multifaceted approach must be taken to completely address the behavioral issues related to overweight and obesity; families and communities are two elemental foundations to the solution. Similarly, schools and worksites are identified by the Surgeon General as key setting for health and wellness education to prevent and decrease the prevalence of obesity (Health and Human Services, 2010). Wellness Works Utah™ promotes better health through nutrition education and physical activity and is designed for use with these key audiences. The program design is user friendly and aims to reach audiences across the state in all ages, activity level, and income bracket. Businesses, educators, community organizations and individuals can use the program to help guide them to reach their personal health and wellness goals.

Objectives

Since communities, worksites, schools and families have been identified as key places to initiate behavioral change to improve health, Wellness Works Utah™ has been designed as a programming tool to support leaders and participants in those places. Wellness Works Utah™ is designed to support health in all Utahans, including those with a desire of reducing overweight and obesity. Through education, incentives, friendly competition, and increase opportunity for physical activity, the Wellness Works Utah™ program aims to; 1.Increase participant daily activity time, 2. Increase daily fruit and vegetable intake, and 3. Decrease television viewing time.

Methods

Wellness Works Utah™ is the successful result of community partnership and collaboration. Foundational contributors include a Utah State University Family and Consumer Sciences Extension Agent and a committee comprised of representatives from the surrounding area, including those in the health and education professions. Members of the administration and faculty of the local middle school helped to create and pilot the Wellness Works Utah™ program and contributed to the design of the curriculum.

The target audience encompasses the entire communities including groups and individuals of, among other things, all ages, gender, and income and fitness level. The program also aims to reach and be user-friendly to civic, business, religious, education and other groups across the county. Wellness Works Utah™ is designed with the flexibility to be used across the state by other counties or organizations.

Wellness Works Utah ™ program starts with Registration Week. Individuals must come in person to a registration site during that week, (sites are established across the area) where basic health information is assessed and recorded. Participant's blood pressure and heart rate are tested and recorded, as well as height, weight, body fat and BMI. They answer basic questions about their daily nutrition choices. After this baseline information is collected, participants set nutrition and fitness-level appropriate goals for an established time period, and information is recorded and tracked. If the program is held at a school, the basic pre-test is performed in fitness for life, health or another related class. If the program is being adopted by a business, basic pre-testing will take place at a scheduled time determined by the organization, for example at a health fair day.

As a catalyst to increase program participation and commitment, incentives, workshops, and community activities are offered to participants. The Utah Supplemental Nutrition Assistance Education Program (SNAP-Ed) has partnered with Wellness Works Utah. ™ Professional Nutrition Educators trained through the SNAP-Ed program now offer nutrition and cooking classes in K-12 schools and throughout the community as part of Wellness Works Utah ™ , in addition to their regular courses. Classes are founded in the USDA My Pyramid program providing education on multiple aspects of healthy eating and nutrition including food groups, serving size, and food preparation. Other free or low-cost activities have been offered through Extension, 4-H, walk/ run clubs and competitions, community garden classes, dance classes, soccer lessons, cycling groups and other classes and groups for adults and youth relating to health and wellness.

The activity groups and community race series are other key elements in the Wellness Works Utah™ program. The race series, planned in coordination with a volunteer community team, was comprised of a one mile walk/five kilometer run, a five kilometer walk/10 kilometer run, and a five kilometer walk/ half-marathon. Even in poor weather (rain, wind and 30 degrees) there was strong participation in the Wellness Works Utah™ Race Series.

In the elementary and middle schools, youth in the fitness for life, health and PE classes participated in the Wellness Works Utah™ program. Incentives for the youth are designed into the program in partnership with the school administrators and teachers. They include items that support the health goals of the program for example water bottles, Frisbees, balls, and even a chance to play intramural games were designed as an incentive; all are things the youth love the chance to do!

In 2010, Wellness Works Utah™ kicked off its Walk Across Utah program. In this extension of the program, community members form teams of three to five people with a goal for each person to be active the equivalent of 60 minutes a day, as recommended by Presidential Fitness Challenge, which is now part of Let's Move (Let's Move.2010). A large map of Utah has been created, with historical landmarks (chosen by middle school Utah History class) across the state listed as target points to reach. This includes the estimation of distance between points "as the crow flies" used only for the purpose of tracking team's activity mileage for the Wellness Works Utah™ program. The map is designed to be posted in a central community area, and each week the Wellness Works Utah™ program leader tracks the team's mileage earned with a marker on the map. Incentives can be awarded to the team members when the reach a historical landmark.

Curriculum based upon My Pyramid (My Pyramid. 2010) materials has been compiled for middle and elementary school age youth in modified version of the Walk Across Utah program. It is a 17 week/semester team-based program that is cross-curricular in design, and can include math classes, health/PE classes. For example, students in math classes are tracking team mileage from weekly forms the youth complete, they figure the team averages and the mileage each team has moved on the map.

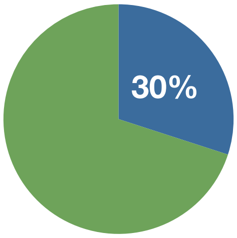
Community and state partnerships in the program have been key to the success of Wellness Works Utah™ . Examples of these collaborative efforts include donation of cholesterol testing from the local health clinic, donation of professional time and expertise for blood pressure, heart rate and BMI evaluation, and event organization. In-kind donations were obtained for incentive awards from state and local restaurants and hotels, and businesses. For example, St. George, Utah Visitors Bureau donated a two-night stay including dinner and tickets to Tuchan Theater.

Findings

The Wellness Works Utah™ program has had two pilot sessions in Extension agent's county. Percentage of the population in participating county was 10.6%, and 10.8% respectively.

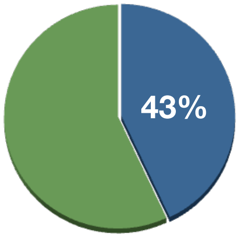
Results from behavior surveys show a change in behavior after participating in the Wellness Works Utah™ program. Participants completed a pre and post survey in which they were asked to recall daily intake of fruit and vegetables (fresh and frozen) and their amount of television viewing time daily.

Results show 30 % of reporting participants increased their daily fruit intake and 26% reported increase in vegetable intake daily. An increase in daily activity time was reported by 43% of participants, while 26% of those reporting decreased their daily television viewing time.



Wellness Works Utah

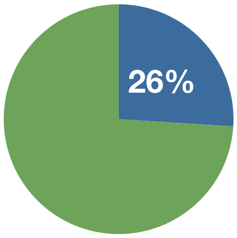
Adults reporting *decrease* in video/tv viewing time**:** **30%**



Wellness Works Utah

Adults reporting *increase* in activity time**:**

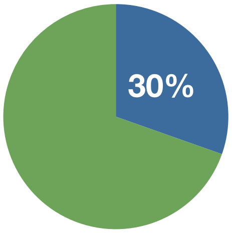
43%



Wellness Works Utah

Adults reporting *increase* in daily vegetable intake:

26%



Wellness Works Utah

Adults reporting *increase* in daily fruit intake: **30%**

Wellness Works Utah™ anticipates seeing substantial growth in the coming years. It has been adopted by the following organizations across Utah: SNAC (State Nutrition Action Coalition), Food Sense/Snap-Ed Utah, Wayne Middle School, Circleville Elementary, Piute County Extension, Wayne County Extension, Aspen Achievement Academy, Passages to Recovery, Utah County 4-H Afterschool.

Summary

Wellness Works Utah™ is an inspirational, motivational tool that helps individuals adopt healthy behavioral changes through nutrition education and physical activity opportunities. It is designed for use with groups in communities, schools, families, and work sites. It provides educational tools for group leaders in these areas, and supports them with methods to provide education and opportunities for physical activities and events for all ages.

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Giving Foster Youth a Chance: Independent Life Skill Education

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Introduction

Foster care is a service that is required when children are seriously abused or neglected by parents or other family members. According to Adoption and Foster Care Analysis and Reporting System (AFCARS) data, there are over 510,000 youth in the foster care system in the United States (AFCARS, 2006). More than 26,000 left the system in 2006 and an all time high of 29,000 youth left the system in 2008 and attempted to live independently. They generally come from high-risk families and are likely to have experienced serious disruptions both in their living situations and in schooling while in the care of the child welfare system.

It is generally understood in most situations that at age 18 youth are not fully prepared to live independently without some level of support. Functional, stable families often help their young adult children move into adulthood by providing a safety net, helping with small financial emergencies, and often fund the largest part of post-high school education. Older foster care youth approach adulthood and independent living without the ongoing emotional, financial and educational assistance and support that most young adults receive who come from stable homes, families and communities. Research has shown that all youth are taking longer to transition to adulthood, longer than at any time in the history of the United States (Furstenberg, 2004).

There is little research on foster care youth who have aged out of the system, but research that has been done shows they are ill prepared for transition into adulthood. They are more likely to have limited education and employment experience, poorer mental and physical health, more likely to have been involved with the legal system and at higher risk of illegal drug abuse (Wertheimer, 2002).

Compared to the general population, a Casey Family Program study found 23% of foster youth did not have a high school diploma or GED, and about 1.8% complete college compared to 24% of other non-foster care youth, and that these youth struggle to achieve financial independence and often end up in poverty. They move frequently and are periodically homeless, more likely to have children out of wedlock, and have children with health and behavior problems.

Aged out foster youth are strong and resilient in their own way, but too often they must face life-changing decisions without the resources, knowledge and support from family, schools and agencies to make these decisions. In addition, there are social and economic implications of not providing effective transitional education, i.e. life skill training, to youth in foster care. These older children growing up in foster care have the greatest need for stability, care, education, and training.

The findings released in the preliminary report from the Midwest Evaluation done in Iowa, Illinois and Wisconsin (1998) looked at 732 youth aging out of the foster care system. The study reviewed services provided such as educational and employment support, housing services, budget management and youth development. It was found that between one-third and one-half of youth approaching discharge had not received services aimed at training for independent living. Nearly three-quarters of the youth interviewed had not received any career counseling, over one-half had not received training in job interviewing skills, almost two-thirds had no help in learning how to budget, and over three-quarters had not received training about tenants' rights and responsibilities (Bost, Courtney and Terao, 2004).

It is essential to provide foster care youth with these and other skills which will help them become responsible, self-sufficient adults. Results from the Casey National Alumni Study indicate that knowledge is the leading predictor of adult success (Downs, 2003).

Objectives

According to the Utah Division of Child and Family Services (DCFS), Utah has a high rate of youth in the foster care system. The rural counties of Carbon and Emery have small populations (Emery 10,651 and Carbon 19,764, Census 2003), but have a substantial number of youth in the foster care system. Because of this situation the Division of Child and Family Services approached Utah State University Extension to form a partnership to teach the older youth vital life skills.

Methods and Procedures

A 12-week life skills course was developed by Carbon and Emery County Family and Consumer Science Agents in partnership with DCFS. The course targets youth aged 16-18 that are aging out of the state system. This course helps to fulfill the federal mandate for foster youth in transition to receive life skill training.

Life skills training enables foster youth to be better prepared to make the transition from foster care to independent living. These skills are taught by the Emery County and Carbon County Family and Consumer Sciences Agents on a rotating basis. Subject matter is taught in weekly two hour sessions and includes values/goals/self esteem, communication/anger management, decision making/problem solving, money management, job seeking, renting an apartment: rights and responsibilities, substance abuse, human sexuality, laundry, first aid, and personal health and nutrition. The instructors use a variety of teaching methods including experiential learning, demonstrations, videos and lecture. Of the twelve subjects only two (substance abuse and Human Sexuality) had required materials that were used from the Department of Child and Family Services.

The participants assembled a notebook which includes class handouts, notes, homework assignments and key emergency and agency numbers. Contents are designed to be used as a future reference when they are faced with similar life decisions or situations. For example, the notebook provides step-by-step instructions on how to locate and rent an apartment and suggestions and examples of how to write a resume. The foster youth participants in this 12-week course of study were assigned by case workers to attend the all weekly two hour *Life Skills: Leavin' and Livin'* classes. Participants were 16-18 years of age and had been in foster care at least six months. The participants were from foster care agencies in both Carbon and Emery Counties.

Findings

A pre-post evaluation was completed at the end of each 12-week session as illustrated in table 1; significant improvement was accomplished in the 12 areas evaluated.

Table 1.

Life Skill Participant Improvement Summary

LIFE SKILL	% OF PARTICIPANTS THAT IMPROVED
Goal Setting	17%
Effective Communication	17%
Decision Making	50%
Personal Health Care/Hygiene	25%
Drug or Alcohol Resistance	8%
Sexually Transmitted Disease Education	9%
Laundry Principles	17%
Meal Planning	66%
Budgeting Wisely	50%
Effective Resume Writing	8%
Apartment Renting	41%
Basic First Aid	25%

Discussion

What is the role that the Cooperative Extension Service (CES) can play in this growing need? CES has had a long history of providing educational programming for youth and families. The overall goal of Extension is to encourage self-reliance and improve the quality of life for all Extension clientele. Extension personnel use research-based programs that address a broad range of issues and needs, including character development, youth science and technology skill development, youth and family resiliency skills, child care and parenting skills, as well as prevention programs addressing teen pregnancy, child abuse, community crime and violence, drug and alcohol abuse, and academic underachievement (Hobbs, 1994).

Summary

Currently there is no established standard for programs for youth aging out of the foster care system**.** This is an excellent opportunity for Extension to provide education for agencies seeking assistance in teaching life skills to foster youth. The Foster Care Independence Act of 1999 created the John Chafee Foster Care Independence Program (CFCIP). Under this program, states can use federal funding and matching state dollars to provide support to youth transitioning from foster care to independent living but there is no uniform curriculum or pattern to the program.

The Cooperative Extension Service can be a valuable link between community groups and agencies to enable collaborative prevention efforts. (Molgard, 1997; Smith, Hill, Matranga, & Good, 1995; Smith, Hill & Bandera, 1997). By providing vital life skill classes in cooperation with the Utah Division of Child and Family Services, Utah State University Extension offers a basis to help foster youth prepare for their future of successful independent living. Youth who have received life skill training will have an easier transition to independent living and a better understanding of skills needed to achieve a more stable lifestyle. Studies have shown that youth leaving foster care have a tendency to regress into bad habits learned from previous homes (Wertheimer, 2002). If the home of foster youth were unstable and dysfunctional, the youth will be more likely to return to the previously learned habits. With the incorporation of life skill training by Extension we can anticipate a brighter future for these youth.

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Immediate Annuities:

A Behavioral Finance Approach to Address Longevity Risk

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Introduction

> Retirement is the great financial riddle. Think of the uncertainties. You don't know how long you will live. You don't know what investment returns you will earn. You have only a limited sum of money. And there are no second chances (Clements, 2000, p. C1).

With the rapid decline of the defined benefit pension, the financial risk of retirement has shifted to the individual worker who may be ill prepared to make complex financial and investment decisions. With defined benefit pensions, the employer takes the responsibility and risk to provide the promised benefits. However, in defined contribution plans, the worker must make the decision of how much to contribute, how to invest the funds and then manage them to provide income in retirement, thus assuming virtually all the risk previously held by employers.

As 78 million American baby boomers approach retirement, concern about the adequacy of their financial preparation grows (Congressional Budget Office, 2003; Fore, 2003; Munnell, Webb, & Golub-Sass, 2009). Boomers are the first generation of workers to depend primarily on defined contribution (401k) plans, where the employee (consumer) assumes all the investment responsibility and risk. Compounded by increased life expectancy, high debt and low saving rates, the large baby boomer cohort will stress all aspects of retirement supports (Meschede, Shapiro, & Wheary, 2009). The global recession, which began in fall 2008, cast a shadow over their retirement plans. These macro level problems are exacerbated by evidence of suboptimal financial decision making (Benton, Meier, & Sprenger, 2007) and widespread financial illiteracy (Lusardi, 2008), questioning the assumption that retirees can successfully manage their retirement assets in light of the longevity risk. Educating boomers on how to invest for retirement has been emphasized to the exclusion of how to make money last in retirement.

Even before the Great Recession, the long term financial security prospects of the largest generation were tenuous at best. According to the National Retirement Risk Index, "even if households work to age 65 and annuitize all their financial assets, including the receipts from reverse mortgages on their homes," 51% of households face the risk of a lower level of living in retirement (Munnell, Webb, & Golub-Sass, 2009, p. 1). Combined with working longer (Munnell & Sass 2008), this position paper proposes that part of the solution to prevent outliving one's retirement assets is to combine immediate annuities with a moderately aggressive investment strategy. While deferred annuities are designed to build value for retirement, immediate annuities are designed to provide income immediately in retirement.

Purposes

The goals of this position paper are to:

- encourage adult educators to teach pre-retirees and retired persons about immediate annuities as a tool to help avoid outliving retirement assets,
- explain the use of annuities to maximize retirement income security, and
- describe behavioral finance principles (especially positive framing of the issue) to encourage the purchase of immediate annuities to address longevity risk.

This position paper provides an overview of the financial dilemma facing the baby boom generation, the pitfalls of the traditional 4% withdrawal strategy, the role of immediate annuities in addressing longevity risk, a description of the behavioral finance hurdle that must be overcome, and financial management strategies for educators based on behavioral economics.

Traditional Decumulation Strategy

According to the life cycle saving theory (Ando & Modigliani, 1963), individuals smooth consumption by using credit during family and career formation years, by saving for retirement during midlife and then by living on the accumulated assets. The dilemma facing many boomers is that individuals who invested prudently in a diversified portfolio assumed they were on track to retire during their sixties… and then the bottom fell out of the housing and investment markets. This global event challenges the traditional decumulation strategy.

The traditional approach is to limit nest egg withdrawals to no more than 4- 4.5% of assets in the first year, increasing withdrawals with inflation in subsequent years (Ameriks, Veres, & Warshawsky, 2001). While this strategy may succeed during extended periods of stable investment returns, asset volatility in the real world poses a challenge. Investment losses, such as those experienced in 2008-2009, are devastating if they occur early in retirement, which affected baby boomers. Managing investments, determining how much to withdraw, and coping with uncertainty is beyond the investment management skills of most retirees (e.g., Lusardi, 2008).

Deterministic retirement planning models provide an unrealistic sense of certainty and security, overstating the likelihood of success (not running out of money before death). Probabilistic models based on Monte Carlo analysis (a computer technique used to approximate the probabilities of certain outcomes) provide a range of likelihoods of attaining success.

Ameriks, et al., (2001) used historical returns and Monte Carlo analysis to determine the sustainability of investment portfolio withdrawal rates in four portfolios ranging from conservative to aggressive. Using a 4.5% withdrawal rate, only aggressive portfolios, far more volatile than most retirees could tolerate, provided sufficient likelihood of lasting for 30 years. Also, the 4% rule provides too meager an income stream for many retirees. The complex investment environment suggests few retirees will have the inclination and expertise to successfully manage their portfolio and win the longevity game. In sum, the 4% withdrawal strategy depends too heavily on average rates of return and investment price stability. Recent experience confirms that financial markets refuse to be predicatable.

The Annuity Solution

A financial product does exist that is designed to prevent outliving one's assets; it is called an annuity (meaning a yearly allowance). It is essential to distinguish between (a) deferred annuities, which are designed to accumulate assets during working years and (b) immediate annuities, which are designed to provide income for life. Joint and survivor annuities provide income for a couple until the death of the second to die. Insurance companies have added many options but each comes at the cost of lower monthly payments. While basic life annuities are not indexed to inflation, this option can be added with the tradeoff being lower payments in initial years. An immediate annuity (hereinafter "annuity") creates a "synthetic pension" (Chu & Whitehouse, 2002, p. R4) designed to shift the risk of outliving assets to an insurance company.

This position paper focuses solely on an immediate annuity as a means to insure against outliving one's assets. Funds from annuity purchasers who die early help ensure payments to those who live longer. With an immediate annuity, an insurance company makes regular monthly payments to the annuitant until death. Using this product, a retiree, especially one without a company pension, can create his or her own pension.

Although immediate annuities hedge the longevity risk, they alone are not the answer. Many retirees have a bequest motive. Income from an annuity depletes that money. Annuities are especially beneficial to people with low to moderate risk tolerance and modest nest eggs. The primary advantage of an annuity is never outliving one's assets; the principal drawback is that nothing is left to pass on to heirs because payments cease at death.

Balancing the desire to leave a bequest must be weighed against the need to ensure an acceptable level of living (Babbell & Merrill, 2007). It is important to maintain reserves for large, unpredictable expenses such as health care. Adult children should be part of these financial decisions because they benefit from not having to worry about their parent(s) running out of money. If sufficient income is guaranteed through annuitization, heirs may benefit from gifts while the retiree is alive rather than waiting for death. Insurance can be purchased to cover the unpredictable risks related to health and long term care costs.

Recognizing the value of annuities and the limitations of traditional asset decumulation strategies noted earlier, researchers have explored ways to combine the two approaches to overcome the limitations of each. Ameriks, et al., (2001) demonstrated the value of combining a fixed income annuity with a stock investment portfolio as the most effective strategy for "making retirement income last a lifetime" (p. 60). Immediate fixed annuities are a powerful hedge for longevity risk. "For all time periods and for all portfolios, the addition of the annuity leads to a decline in the portfolio failure rates" (p. 72).

Incorporating a variety of scenarios (ages, marital status, risk tolerance, bequest desire, and amount of wealth), Babbell and Merrill (2007) conducted analyses to illustrate the benefits of annuitization. They recommend that retirees should annuitize enough assets (combined with Social Security and any pension) to provide for 100% of minimum monthly expenses. Their analysis found that, unless future stock returns exceed twice the expected rates of return, it is beneficial to annuitize most of one's wealth while investing the 'excess' assets for growth.

Applying Behavioral Finance Principles to the Annuity Puzzle

As logical and effective as immediate annuities are in dealing with longevity risk, retirees have been reluctant to purchase annuities (AARP & American Council of Life Insurers, 2007). Dubbed the "annuity puzzle," various explanations have been proposed, including fear of an early death, reluctance to relinquish control over their nest egg, and the assumption that they can do better by investing on their own. Although retirees who are most concerned about depleting their savings are most receptive to the annuity concept, inexplicably, the most risk-averse retirees are the least receptive. The biggest psychological obstacle to annuitization may be the inability to bequeath the asset to heirs but life insurance can fulfill this bequest motive. Lack of knowledge about annuities and confusing terminology may also deter purchase (AARP & ACLI).

Behavioral finance helps address the reluctance to annuitize. Loss aversion (Kahneman & Tversky, 1979), the tendency to weigh losses twice as heavily as gains, applies to annuities. Consumers focus on the potential for 'losing' by dying early. This problem is compounded by the fear of regret, another behavioral finance principle, which holds that people focus much more on possible loss than on likely gain. Another important principle of behavioral finance is how a decision is presented or "framed." With this in mind, Agnew, Anderson, Gerlach, and Szykman (2008) conducted an experiment to help understand the "annuity puzzle." They concluded that negative framing is very powerful with financial decisions.

Positive Framing of Annuities

Retirees were more satisfied when they had guaranteed sources of income (Drinkwater & Sondergeld, 2004; Panis, 2004). Also, retirees with annuity income were more satisfied and remained more satisfied during retirement compared to retirees who had to manage their own investments. A reliable income stream improved retiree satisfaction as much as a higher income (Panis). Educators could draw upon this research to emphasize the benefits of annuities.

A guaranteed, reliable income provides freedom from worry about outliving assets. "It would take from 25% to 40% more of your wealth to achieve the same secure level of income throughout your possible lifetime that you can get through annuitization" (Babbell & Merrill, 2007, p. 8). For retirees with a bequest motive, an annuity that guarantees payments for up to 20 years will continue to pay heirs if the annuitant dies before the term ends. A life insurance policy can also fulfill a bequest desire. Couples could purchase a joint and survivor annuity to ensure that the second to die receives sufficient income (Drinkwater & Sondergeld, 2004). These approaches reinforce positive framing of annuities. By annuitizing enough assets to assure a minimum income, retirees can afford to give gifts to heirs while the retirees are alive so the heirs can enjoy the recipients' pleasure. Following another behavioral finance principle, a positive framing of annuities is possible if retirees can be made to appreciate that children and grandchildren (or charitable institutions) will appreciate receiving gifts now rather than later, after the retiree has died (Babbell & Merrill).

With current interest rates near historic lows, it may be appealing to wait until rates rise so that annuity payments will be higher; however, Babbell and Merrill (2007) warned of the perils of delay. Consider a worker who retired in 2007 at the stock market peak. If she had chosen to delay annuitization, her investments would have declined along with interest rates. From a behavioral finance perspective, it is better to present the positive scenario of a person who retired at the same time and immediately annuitized; imagine her relief at receiving the dependable annuity income as the value of her remaining investments declined.

To counter the impact of inflation on a fixed annuity, a retiree could be advised to adopt a laddered approach to purchasing annuities from their investment portfolio. For example, a retiree could purchase an additional annuity every 5-10 years during retirement, using their investments, which continue to grow. Risk-averse retirees could be encouraged to view their Social Security and annuity income as stable and predictable income, with the annuity acting in place of a pension. A psychological benefit includes reducing stress over financial market volatility.

In sum, the key to an annuity strategy is to purchase sufficient income to cover living expenses while investing remaining assets moderately aggressively. While annuitization is beneficial for most retirees, the additional income it produces, compared to returns from investments, makes this strategy beneficial to low asset retirees (Babbell & Merrill, 2007).

On a final note, Wiener and Doescher (2008) emphasized the behavioral finance concept of invoking social norms to encourage people to do what is best, not just for them, but for society. Educators could frame the purchase of annuities as a reflection of love and concern for one's spouse, consideration for one's children and other relatives, and responsible citizenship by avoiding "becoming a burden on society." Encouraging the baby boomers to annuitize part of their retirement assets would benefit society by reducing the number of dependent elderly.

Summary and Conclusions

Annuitization is one of the few concepts upon which economists agree (Babbel & Merrill, 2007). A powerful strategy for ensuring that a retiree will not outlive his or her assets is to combine an immediate annuity with a moderately aggressive portfolio to ensure that assets last a lifetime. This strategy is more powerful and secure than the 4% withdrawal rate alone.

By pooling longevity risk with the insurance offered by an annuity, the retiree eliminates the prospect of outliving assets. Overcoming reluctance to annuitize is a challenge for educators. Research revealed that retirees are happier and more satisfied if their income is predictable and reliable. Educational programs based on behavioral economic principles should focus on the positive framing of a predictable income, having assets that match life expectancy, and being financially independent. Additional resources are listed in the Appendix.

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Appendix: Annuity Resources for Educators

National Association of Insurance Commissioners. (n.d.). *Buyer's Guide to Fixed Deferred Annuities*. http://www.insurance.state.gov/annuity/buyersguideannuities.html

Annuity 101: http://www.annuity.net/

Immediate Annuities.com: http://www.immediateannuities.com

To comparison shop: free annuity quote instantly on-line Comparative Annuity Reports: to compare SPDAs & SPIAs (single-premium deferred and immediate annuities); includes AM Best's insurance company ratings and effective annual yields, etc. Calculates how much you need to invest in an annuity in order to get a specific monthly income for life.

Since the steady income from an annuity depends on the financial stability of the issuing insurance company, buyers should select only the highest rated companies. Consult ratings by A.M. Best Company, Fitch Ratings, Moody's Investors Service, Standard & Poor's, and Weiss Ratings.

If an insurance company becomes insolvent and unable to pay claims, each state has a guaranty pool to cover claims. The amount of coverage varies by state. For maximum safety, consumers should not purchase an annuity from one insurance company for more than the maximum coverage for their state. State's maximum is $200,000. Additional information is available at State Life & Health Insurance Guaranty Association: http://www.utlifega.org/home.cfm

Your Do-It-Yourself Pension. 26 minute Kiplinger's video explains immediate annuity strategy. http://www.kiplinger.com/video/index.html?bcpid=35148674001&bclid=1437076064&bctid=37227685001

Life expectancy can be estimated with online calculators: http://www.livingto100.com/

Module 1b in Planning for a Secure Retirement: http://www.ces.purdue.edu/retirement/

DVD Multimedia Nutrition Education Curriculum for Self-Study

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Introduction

The State of Utah has one of the highest food insecurity rates in the nation. It is ranked in the top 4% in the nation of being food insecure and 34% of the state is considered low-income, defined as at or below 185% of poverty level (LeBlanc, Christofferson, & Christensen, 2008). These trends place Utah's low-income population at increased risk of obesity and chronic disease. The Center of Hunger and Poverty reported a high rate of obesity among low-income individuals, with hunger, poverty, and obesity frequently occurring at the same time (USDA, 2009). With limited income, quantity is often more important than quality of food. Lower cost coupled with increased quantity foods usually equals foods that are higher in calories, fats, and sugars (Food Research and Action Center, 2006).

The National Supplemental Nutrition Assistance Program (SNAP) provides food assistance. The program formerly known as The Food Stamp program provides benefits to low income individuals and has been described as "the cornerstone of the nation's nutrition safety net" (Landers, 2007). The acronym of SNAP-Ed refers to the nutrition education component of the program. Its purpose is to teach youth and adults to make healthy food choices and to maximize their food dollar. The SNAP-Ed program in Utah is called the Food $ense Nutrition Education program.

Research indicates that participants in the SNAP program have minimal nutrition knowledge (Cason, Cox, Burney, Poole, & Wenrich, 2002) and participation in the SNAP program alone does not appear to change dietary behaviors (Fey-Yensan, English, Pacheco, Belyea, & Schuler, 2003). In 2004, Cason, Cox, Wenrich, Poole and Barney compared dietary changes after Expanded Food and Nutrition Program training in 2,182 SNAP participants and 1,939 non-SNAP participants. Results showed increased intakes of key components to a healthy diet as well as improved desirable responses on the food behavior checklist in both groups, strengthening the position that nutrition education is an important factor in changing dietary intake and behaviors regardless of the participants' monetary resources.

Participants in the SNAP-Ed or Utah Food $ense Nutrition program have limited income, however, the skills the participants learn from Food $ense can help them create nutritious, low-cost, and safe meals. This education has traditionally been taught through one-on-one counseling, which has been shown to be an effective method in previous studies (Arnold & Sobal, 2000; Burney & Haughton, 2002; Emmons, Macario, Sorensen, Hunt, & Rudd, 1999; Rajgopal, Cox, Lambur & Lewis, 2002) however, it has a limited ability to impact large numbers of participants due to distance, time and financial constraints.

To increase participation in the Food $ense program while respecting the constraints of limited resources, multimedia education methods have been found to be effective (Bouman, Maas, & Kok, 1998; Cox, White, & Gaylord, 2003; Lewis, Pantell, & Sharp, 1991; Meade, McKinney,& Barnas,1994). Distance learning relies heavily on multimedia education methods and it is growing in popularity, especially among adult learners (Harper, Chen & Yen 2004). Distance multimedia students noted the access to formerly unavailable courses, greater control over schedule and learning, and more personal responsibility as some of the advantages to distance learning (Webster & Hackley, 1999; Schum, 2002). The pedagogy of distance learning is different than traditional, face-to- face learning as students must be independent learners who are motivated to learn, are able progress through the lessons quickly, and feel comfortable with the technology used (Schum, 2002). As such, distance multimedia courses should ensure that learning goals are clear, create continuous evaluation methods for student learning, and provide opportunities for interactive learning (Schum, 2002). Attention to the quality of the media is also vital as a study by Webster and Hackley,1999 discovered that the richness or quality of the media was the most significant factor in successful distance multimedia learning.

This study reports on the development and implementation of a DVD self study curriculum for use as a distance education alternative to traditional face-to-face learning. In addition to the DVD instructional videos, participants had contact from nutrition education assistants (NEAs) individually in their homes at the beginning and end of the study, and by telephone throughout the duration of the study. The multimedia curriculum allowed the Food $ense program to provide education even when distance, travel, and time were an issue for either the participants or the NEA.

Research Questions

The primary objective of developing and implementing a technology supported self-study component to the Food Sense program was to reach as many qualified participants as possible and to enable them to make permanent, healthy lifestyle changes in the most cost effective manner possible. A secondary objective was to provide NEAs with additional curriculum resources. A pilot study was developed to investigate the following research questions:

1. Can participants receive the same level of education through a self study program supported by DVD instructional videos as through personal training visits from an NEA?
2. Is there a difference in the participants' reported behavior change between the DVD self study program and the traditional one-on-one instruction?
3. Can the DVD self study delivery method produce a cost-savings to the program?

Method

The Utah Food $ense Nutrition program conducted a pilot study in Cache County, Utah, over a six month period from July 2008-January 2009. A convenience sample was selected by an NEA, who used flyers to recruit 30 current Food $ense participants willing to take part in the study. All who were recruited accepted participation in the study and completion rate for the study was 100%. Using a quasi-experimental design, the 30 participants were assigned to receive the same education through either the traditional, one-on-one counseling method (n= 15) or the new DVD self study curriculum (n=15). The final sample (n=30) consisted of 73% female, 27% male and 93% white and 6% Hispanic. . All participants lived within five minutes of the Food $ense office.

Traditional Group Methods

The 15 participants in the traditional, one-on-one group received one lesson at a time from the same NEA in a planned, in-home visit. The NEA spent a total of four hours (approximately one hour each lesson) with each traditional participant. Included in the four hours was travel time to and from their home, teaching the four lessons, questions, and paperwork.

DVD Self-Study Group Methods

Four lessons were scripted, filmed and produced onto a DVD which was distributed to the self-study group to watch at their convenience. The NEAs visited each participant in this group individually in their home to deliver the DVDs and collect baseline data. After their four DVD lessons, the NEA met individually for post data collection. No education was provided at the home visits. The NEAs made follow-up phone calls to the DVD self-study participants between the first and last contact to ask and answer questions. The NEA spent an average of 45 minutes total time with each DVD participant including the initial and exit meeting in the home, paperwork, and phone calls.

Both Groups Methods:

Participants in both groups completed the same pre and post- intervention knowledge tests and a satisfaction survey, both validated by 12 nutrition faculty or Extension Agents with nutrition background. Along with this, a multiple lesson behavior checklist adapted by F$NE for physical activity from the national Expanded Food and Nutrition Behavioral Checklist, was completed by each participant. Data were analyzed in Excel 2007 using paired and group T-tests with statistical significance set at a p value of <0.05.

Findings

There were no statistical differences between the DVD self-study and Traditional groups pre-intervention. In Table 1 the percentage of desirable responses to the behavior questionnaire are compared between the DVD self-study and Traditional groups. Results indicate that before intervention, 70% or more of participants demonstrated desirable behavior in 11 of 20 behaviors measured for the DVD self-study group and 10 of 20 for the Traditional group. Post-intervention test scores showed that 70% or more of all participants in both groups had adopted desirable behaviors in all but one of the behaviors measured (19 of 20), indicating that both delivery methods resulted in similar intent to change behavior.

While nearly all reported behaviors showed improvement, some reflected higher percentage increases than others. This likely reflects the fact that the behavior checklist asked more questions than were taught in the four lessons. The one behavior that didn’t increase in the traditional teaching method group was “eating as a family”, which showed no change (85% for both pre-test and post-test scores). The traditional teaching group had a higher rate than the DVD group that started at 57% and increased positive behavior to 71%. Despite the small sample size, the data in Table 1 is encouraging in that most behaviors increased. These findings resonate with those of Cason and colleagues (2004) who found 70% or more of both study groups had developed desirable behavior in all but two behaviors (Cason et al., 2004).

Table 2 is a comparison of DVD self-study and traditional lesson groups at post intervention on the satisfaction survey questionnaire. Seven out of the eight questions (88%) were statistically significant that the traditional method was preferred. These results were surprising as it was assumed that the DVD self-study group participants might have a higher satisfaction rate based on the convenience of the program.

Cost analysis data reveal that the increased time spent in delivering traditional lessons resulted in dramatically higher costs (see Table 3). The overall cost of the DVD self-study method was only 32% of the cost of traditional lessons. Table 3 also lists the relative costs of delivering a 4-lesson DVD series and a 4-lesson traditional lesson series. All resources are outlined, including: travel time, mileage, phone discussion time, handouts and DVD replication. The DVD production cost was not calculated into the costs after the $2,500 initial investment. Only duplication costs were calculated as this is a sustainable program.

Summary and Discussion

This pilot study provided valuable insight for future program planning. First, it indicated that the reported change in behavior was similar for the DVD self-study group and the traditional group. Similar results were found in a study by Cox et al. (2003) who established that both traditional and video lessons were effective in promoting dietary and other behavior change, with the video lessons positively affecting more dietary factors than the traditional lessons. As these studies seem to indicate, participants may be able to receive similar motivation to change through the DVD self-study curriculum as through a traditional method of education, making the DVD self-study curriculum a cost-effective and feasible means of delivering nutrition education.

There was also a cost savings to the program resulting from less mileage and less NEA time (25% of the traditional method). The DVD self-study lessons were 32% the cost of the traditional lessons, echoing the cost savings found by Cox et al (2003) who found similar cost savings to their program the Expanded Food and Nutrition Education Program (EFNEP), when using the self-administered video lessons versus the traditional one-on-one lessons. These data suggest that larger caseloads for the same cost may be possible with the DVD self-study method. This pilot study was completed on a small scale and all the participants lived within five minutes of the Food $ense office. It is anticipated that a larger scale or even a statewide study might reaffirm the cost savings nature of the DVD self-study mode of delivery from reduced travel time and mileage costs. The expected impact to the Food $ense program would be an increase in the number of low-income participants who would receive nutrition education at a reduced cost and an increase in reported healthy behaviors.

The pilot study also provided insights for future research and program implementation. Anecdotal reports indicated that DVD quality was a concern to many participants and the lack of human contact in DVD lesson method was a concern to some. To address these issues, efforts are being made to improve the quality of the DVDs and it is recommended that participants should be allowed to choose which method they would prefer, where distance or travel time is not a limiting factor. With these improvements in design, it is expected that satisfaction will improve for the DVD self-study method and that intent to change behavior will more likely translate to actual behavior modification.

Some possible limitations of this pilot study warrant mention. The NEA who taught all the one-on-one lessons administered the satisfaction surveys leading to potential bias in the survey results. Another possible limitation was that the NEA recruited the participants for the study from participants whom she already knew. This study was conducted during the day from Monday-Friday; thus the populations of full-time working adults were excluded from this study. This aspect of program delivery should be modified in future studies to assess the impact of work status on intent to change behavior.

After reviewing the data, the authors felt that if this study were to be repeated the following recommendations should be considered:

1) Allow participants to choose which type of education fits their needs; either the DVD self-study curriculum or the one-on-one classes. This choice may complicate the process of recruiting participants. However, if they are put into the group that better fits their perceived needs, the participants may be more satisfied. This proposed change may complicate the research process as well. Thus it is recommended that future researchers attempt to randomly assign the participants to either the DVD self-study group or the traditional group. However, researcher should make adjustments when strong delivery preferences are given.
2) All participants in the study need to be new Food $ense participants to limit bias towards the delivery method. Thus, recruitment for any further studies should occur during the enrollment process for the Food $ense program.
3) Employ one NEA to administer all of the education but have a different NEA administer the study evaluations to limit potential bias.
4) Re-evaluate the participants one month, three months, and six months after the education intervention in order to better evaluate the long term intent to change behavior.
5) Obtain a more diverse sample for the study to better represent the general population.

6) Increase sample size in order to obtain more accurate cost savings on program delivery.

With mounting evidence that nutrition education can promote positive dietary behavior changes and in the face of rising obesity among an increasing population of low-income individuals, it is essential to find cost effective methods for nutrition education delivery. Multimedia education methods are improving and have been shown to equal the effectiveness of more traditional, one-on-one methods. They may provide a cost effective solution to the problem of providing education to more Food $ense participants despite limited NEA resources.

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Tables

Table 1 *Comparison of change in the percentage of desirable response on the behavior checklist*

	DVD Group (n = 15)			**Traditional Group (n = 15)**		
Behavior Checklist Questions	**pre %**	**post %**	**change %**	**pre %**	**post %**	**change %**
Plan meals ahead of time	47	100	+53	40	93	+53
Compare prices before buying food	87	100	+13	73	100	+27
Do not have enough food through the end of the month	53	60	+7	60	73	+13
Shop with a grocery list	80	100	+20	67	100	+33
Refrigerate meat and dairy within two hours of shopping	93	100	+7	93	100	+7
Do not thaw frozen foods at room temperature	67	80	+13	93	73	-20
Make food purchases based on healthy choices	93	100	+7	73	100	+27
Prepare foods without adding salt	67	100	+33	73	93	+20
Read food labels before purchasing	53	100	+47	53	80	+27
Children in household eat something within two hours of waking	62	77	+15	62	69	+7
Wash hands before preparation or eating	93	100	+7	80	93	+13
Prepare raw foods separately from other foods	93	100	+7	87	93	+6
I am physically active, at least 30 minutes 5 days a week	73	87	+14	53	80	+27
I choose to walk, take the stairs, or be active in other ways	93	100	+7	80	87	+7
Prepare supper at home at least three times a week	80	100	+20	87	100	+13
Eat meals together as a family at least three times a week	57	71	+14	85	85	no change
Eat at least three servings of vegetables a day	73	100	+27	67	87	+20
Eat at least two servings of fruits a day	67	100	+33	67	100	+33
Eat at least two servings of dairy a day	87	100	+13	60	87	+27
Replace saturated and trans-fats with mono and poly unsaturated fats	67	93	+26	47	87	+40

Note: Desirable responses included scoring 3 or more on positive practices and 2 or less on negative practices on the behavior checklist.

Table 2

Comparison of study groups at post-intervention on satisfaction survey questionnaire

Satisfaction Survey Questions	**DVD group (mean ± SD)**	**traditional group (mean ± SD)**	**p value**
The content was useful	3.67 ± 0.24	3.53 ± 1.12	0.3314
The instructional method was effective	3.13 ± 0.98	3.53 ± 1.12	0.1474
Lesson 1: Fruits and Vegetables Presented material clearly	3.67 ± 0.24	3.93 ± 0.07	0.0377
Lesson 1: Fruits and Vegetables Presented material concisely	3.33 ± 1.1	3.87 ± 0.27	0.046
Lesson 2: Menu Planning Presented material clearly	3.67 ± 0.24	3.8 ± 0.17	0.2134
Lesson 2: Menu Planning Presented material concisely	3.4 ± 1.11	3.93 ± 0.07	0.0378
Lesson 3: Quick Meals Presented material clearly	3.2 ± 0.74	3.8 ± 0.17	0.0123
Lesson 3: Quick Meals Presented material concisely	3.13 ± 1.12	3.87 ± 0.12	0.0105
Lesson 4: Dietary Guidelines Presented material clearly	3.2 ± 0.74	3.93 ± 0.07	0.0031
Lesson 4: Dietary Guidelines Presented material concisely	2.93 ± 1.35	3.93 ± 0.07	0.0027

Note: 1 = strongly disagree; 2 = disagree; 3 = agree; 4 = strongly agree; p value < 0.05

Table 3

Comparison of costs of the traditional lessons to the DVD lessons

Cost	**Traditional Lessons**	**DVD Lessons**
Nutrition Education Assistant Time Phone discussions, travel time, and/or home visits	$527	$99
Mileage	$146	$73
Lesson Materials Handouts/ DVD cost/ Telephone service	$30/ NA/ NA	$30/ $0.50/ $12
TOTAL	$703	$214.50

What Attracts Teens in a Computerized Food Frequency Questionnaire?

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INTRODUCTION

Food frequency questionnaires (FFQs) are dietary surveys designed to assess mid- or long-term, retrospective energy and/or nutrient intakes of large populations. The purpose of using a FFQ is to rank people according to their dietary intakes. FFQs are designed to be self-administered, therefore, are usually low-cost (Subar 2004).

A typical FFQ consists of a foodlist and intake frequencies. The number of food items on a foodlist ranges from less than 10 to 200 items. Food items can be single foods or a group of foods. Shorter FFQs are often preferred by the respondents, and can be as effective, or more effective, than the longer version in estimating mean caloric and nutrient intakes (Warneke et al. 2001). However, it may not be as sensitive as longer FFQs in distinguihing between subpopulations (e.g., different socioeconomic and race/ethnic groups) (Molag et al. 2007). Watson (2003) reported that a FFQ completed by school-aged children and youth within 15 and 30 minutes are more practical to administer. There are usually four to five intake frequency options per food item. When frequency options decreased, mean intake for certain food groups increased by 3 to 11% (Wolk et al. 1994).

Each FFQ food item may come with a specific portion size. Suitor et al. (1989) concluded that self-administered FFQs with portion sizes actually confused respondents. Willet (1994) reported that collecting information about portion sizes only provided minimal information about dietary intake. However, a recent review conducted by Molag et al. (2007) to examine the design characteristics of FFQs in relation to their validity reported that FFQs with standard portion size correlated better with protein and energy-adjusted vitamin C intakes.

With technology advancement, younger generations today are computer-savvy, and are very much familiar and oriented to completing assessments electronically. Many researchers are transitioning to develop dietary assessments tools that are sensitive and accurate yet appealing and fun to the respondents. Because preferences towards a computerized survey are different from that of paper survey, there is great need to identify these preferences among different subpopulations.

OBJECTIVE

Purpose

The purpose of this study was to find out what characteristics of a computerized FFQ do Asian, Hispanic, and non-Hispanic White youth like and dislike.

Hypotheses

1. Youth ages 11 to 18 prefer to have more flexibilities and interactions in a computerized FFQ.
2. Food photos aid the comprehension of the cFFQ among youth ages 11-18 years old.

METHOD

This smaller study was part of a larger study conducted to validate the first computerized food frequency questionnaire designed to estimate preadolescent's calcium intake.

Computerized Food Frequency Questionnaire (cFFQ)

The cFFQ was a validated, self-administered, computerized, interactive multimedia, calcium intake assessment tool, specifically designed to target 10 to 13 years old Asian, Hispanic, and non-Hispanic White preadolescents (Wong et al. 2008). The cFFQ contained 80 foods items, of those, 16 were identified as Asian foods and 14 as Latino/Hispanic foods. A detailed foodlist of the cFFQ was published by Jensen et al. (2004). Other features included color food photos that reflected actual portion size of individual food items, narrated prompts and reminders, questions and frequency responses ranging from "none or less than once a month" to "twice or more per day". At the very beginning, all participants received verbal instructions narrated through the cFFQ, followed by demonstration of how to answer the cFFQ, especially selecting one frequency per food item. Figure 1 shows a screenshot of the cFFQ. The display window was 576 pixels wide and 420 pixels tall, with 11- and 10-point, Arial, black fonts for headings and frequencies, respectively. Average completion time for the cFFQ among all participants was 15 minutes.

Participants

A convenience sample of 170 youth, aged 11-18 years, residing in north and central region of a state, were recruited through schools, churches, the Department of Nutrition, Dietetics, and Food Sciences dairy bar at a university, and youth clubs. Older participants were included to test the feasibility of expanding this cFFQ to cover older youth. Four participants withdrew (one Asian and three Hispanics). One hundred and sixty-six youth completed the study. The final study sample consisted of 84 males (50.6%) and 82 females (49.4%), of whom 29 % self-identified as Asian, 36% as Hispanic, and 35% as non-Hispanic White. Approximately half of all participants were 11 to 14 years old (n=85, 51% male and 49% female), and half were 15 to 18 years old (n=81, 51% male and 49% female). Table 1 shows the characteristics of the final study sample.

Summative Evaluation Questionnaire (SEQ)

The SEQ was a self-administered, one-time, paper survey consisting of open-ended (5 items) and close-ended (11 items) questions. Part 1 queried about the ease of use, overall enjoyment to complete, level of interaction, audio-visual quality, personal likes and dislikes of the cFFQ. Part 2 queried about the food photos. Part 3 queried about what features participants hoped to see in the next version of the cFFQ, e.g., change in narration and/or format of answering the cFFQ. Participants completed the SEQ in a computer lab on campus at a university as an exit survey of a larger study. One to two trained personnel were present to facilitate the entire survey session. Average completion time for the SEQ was 10 minutes.

Data Entry and Analyses

All participants were assigned an identification number. Responses to all close-ended questions were coded, entered, and verified through double data entry. All comments and suggestion of open-ended questions were entered once only and then verified by a different person. Frequency counts and percentages were calculated to compare differences between gender, age group, and race/ethnic group. All statistical analyses were accomplished using SPSS for Windows (version 18.0, 2010, SPSS Inc, Chicago, IL).

FINDINGS

Features Liked Most

The top three features participants liked most about the cFFQ were: 1) food photos, 2) ease of use, and 3) both the positive impact and enjoyment that resulted from answering the cFFQ. Participants commented that the food photos not only served as a good visual cue, but also helped them recognize foods that they consumed but could not remember the names. Ninety-nine percent of all participants considered the cFFQ very easy or easy to use, especially among 15-18 years old youth (85% vs. 67% 11-14 years old youth) and non-Hispanic White females (96%). Ninety-one percent participants reported understanding everything the narrator said. Male Hispanic youth aged 11-14 years most enjoyed the cFFQ. More females than males, particularly Hispanics youth aged 11-14 years, considered the cFFQ very interactive. Seventeen percent participants reported having positive impact from answering the cFFQ, such as becoming aware of own dietary intake, food choices, eating habits, and calcium intake, motivated to eat better, and/or learned new foods.

Features Liked Least

Table 2 shows what participants liked least about the cFFQ. Top three features participants liked least about the cFFQ were: 1) narration, 2) answering format, and 3) instruction format. More 15-18 years old youth (48%) than 11-14 years old youth (27%) reported getting bored during the cFFQ sessions. Male and female Hispanic youth consistently reported getting bored the least. Seventy-six percent of all participants (equal proportion of males and females, 11-14 and 15-18 years old) hoped to have a shorter narration in the next version of the cFFQ. Approximately half the participants, with males' preference greater than females' among all race/ethnic groups, hoped to have faster narration in the future. Ninety-seven percent participants considered the use of a female voice in all narrations gender-appropriate for both sexes. Regarding answering format, the version of cFFQ evaluated in this study did not provide an option for the participants to go backward to change or review their answer. As a result, seventy-five percent of all participants hoped see this change in the next version. For instruction format, about two-thirds of participants hoped to have an option to skip the instruction during the survey, especially when they repeat the same survey at a later time.

Suggestions for Improvements

When asked about what changes to make for improving the cFFQ, 42% said all was good. Among the other 58%, 16% hoped the next cFFQ will improve in audio, 15% in foodlist, 11% in overall computer program, 5% in instruction, 5% in answering format, 4% in visual, and 2% in computer processor speed, time of survey day, and type of snacks offered after the survey. Table 2 shows itemized feedbacks from 11-14 and 15-18 years old participants.

Conclusions and Implications

In addition to effectively assess dietary intakes among youth, either for one-time or multiple assessments, an attractive cFFQ design needs to be age-, gender-, and race/ethnic-specific. Summative evaluation was effective in identifying components to keep or to change for improvements. Although findings from this study focused on a calcium assessment cFFQ, findings from this study may provide further insights to developing cFFQs that are more acceptable and enjoyable to multiethnic youth.

SUMMARY

Participants best liked the food photos, ease of use, and positive impact. They least liked the long narration, format of answering, and how instructions was given. Summative evaluation was effective in identifying components to keep or to change for improvements.

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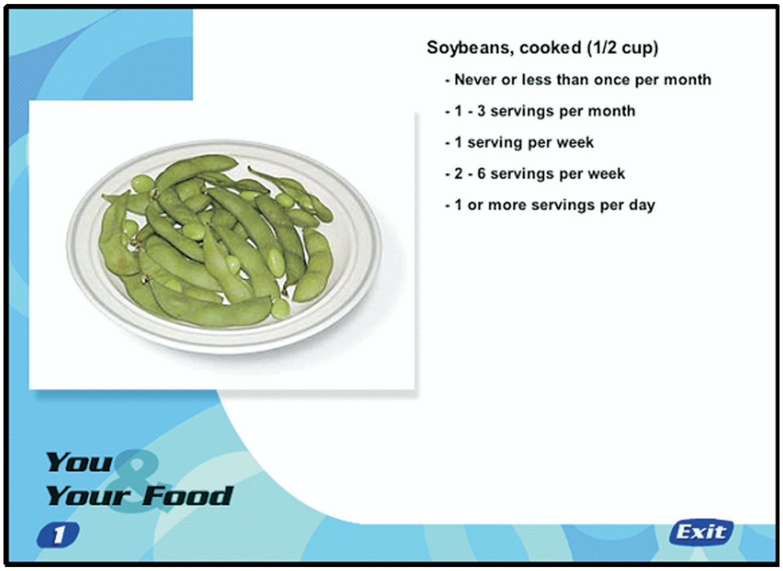

Soybeans, cooked (1/2 cup)

- Never or less than once per month
- 1 - 3 servings per month
- 1 serving per week
- 2 - 6 servings per week
- 1 or more servings per day

Figure 1. Layout of computer screen for the computerized food frequency questionnaire used to estimate calcium intake among Asian, Hispanic, and non-Hispanic White youth.

Table 1. Characteristics of the final study sample population.

Race/Ethnicity	**Male**		**Female**		**TOTAL**
	Ages 11-14	Ages 15-18	Ages 11-14	Ages 15-18	
Asian	11	12	15	10	48 (29%)
Hispanic	19	15	14	16	64 (38%)
White	13	14	13	14	54 (33%)
Subtotal	43	41	42	40	166
TOTAL	**84**		**80**		**166**

Table 2. Feedbacks from the summative evaluation questionnaire for improvement based on age groups.

Close-ended questions	**Yes (%)**	
	Ages 11-14 (n=85)	Ages 15-18 (n=81)
Answering Format		
• I would like to be able to move "Backward" and "Forward" to change or check my answer.	73	77
• I would like to remove the animation (of a pointer that keeps showing me how to choose a frequency of soda) given at the beginning of the cFFQ as part of the survey instruction.	39	36
• It would be faster to sort foods that I eat and don't eat first. Then, complete the cFFQ only for foods I eat.	21	19
Audio and Instructions		
• The instructions should be shorter.	76	76
• The instructions should be longer.	2	0
• The narration should be slower.	5	3
• The narration should be faster.	52	44
• There should be an option to skip the narration.	61	73
• Use a female voice only.	5	11
• Use a male voice only.	5	2
• Use a combination of female and male voices.	42	32
Open-ended questions *(Suggestions for changes in ______)*	**Yes (%)**	
Audio and Instructions 1. Talk less or use shorter narration. 2. Make instruction brief but concise. 3. Make instruction more entertaining. 4. Use proper inflection. 5. Add sound effects. 6. Add background music.	Audio (16%) + Instruction (4%)	
Foodlist 1. Reduce questions. 2. Include more ethnic foods. 3. Add more food variety.	Foodlist (15%)	
Overall Computer Program and Answering Format 1. Standardize intake frequency options. 2. Instead of using bullets, assign an alphabet series to each frequency. 3. Use shorter wording.	Overall Computer Program	

4. Add a dictionary button. 5. Prove an option to select which food section to answer first. 6. Survey by ethnic food category. 7. Separate 'never' from 'less than once per month'. 8. Prove an option to default all answers to 'never' if a food section was not consumed in the past month. 9. Add animation to make it more interesting, exciting, or fun.	(11%) + Answering Format (5%)
Visual 1. Display the FFQ in a larger window. 2. Improve some food photos. 3. Use more food photos. 4. Each food photo should show an exact serving size. 5. Add different graphics.	Visual (4%)

Measuring the Impact of a Savings Campaign on Enrollees

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Introduction

Utah Saves is a local campaign based on the national America Saves campaign, which is managed by the nonprofit Consumer Federation of America. Utah Saves was kicked off in 2005 with a media event and a push from the governor. Two non-profits, United Way and AAA Fair Credit Foundation, and Utah State University Extension took leadership of the campaign. A key component of the program is enrollment of individuals (referred to as Savers in the balance of this report) who develop a wealth-building goal and then work to achieve this goal.

America Saves is a nationwide campaign in which a broad coalition of nonprofit, corporate, and government groups help individuals and families save and build wealth. Through information, advice, and encouragement, we assist those who wish to pay down debt, build an emergency fund, save for a home, save for an education, or save for retirement. The goal of the campaign is to convince all Americans that they can build wealth and to assist them in doing so. (http://www.americasaves.org/about/)

Utah Saves closely follows the America Saves program model and uses a social marketing approach. Similar to health and safety campaigns to persuade people to buckle their seat belts and not drink before driving, Utah Saves combines broad public education and motivational forces to persuade individuals to select a savings and/or debt reduction goal, develop a plan to achieve the goal, and then persist until the goal has been achieved. (Cude, Cai, 2005, pg. 9)

Purpose

This was an exploratory study to evaluate the impact of a social marketing campaign, specifically the Utah Saves campaign, on the saving behavior of enrollees and to identify factors that were associated with successful Savers. We defined successful Savers as those individuals who had met or were still working toward their initial savings goal. This study was the first undertaken of the campaign, and the purpose was to develop baseline measures of its impact on Saves enrollees.

Method

An invitation to complete an online survey was electronically sent in September 2008 to 6,500 participants of the Utah Saves campaign. Savers were given two weeks to complete the survey with a reminder to take the survey sent the following week. An incentive to complete the survey and return it on time was offered with both correspondence. Those completing the survey had their names entered into a drawing for one of twenty $50 gas cards or one of twenty $20 gas cards. As an added bonus, the first 200 respondents would receive a Utah State University Extension compass key chain. The drawing was completely optional, as the Savers had to volunteer their names and contact information. There were 758 surveys completed, a response rate of 11.7%.

There were twenty-two questions overall, most pertaining to whether or not they have completed their savings goal, continued to write savings goals, what Utah Saves services they used, and what financial actions they have taken due to becoming a Saver. There were seven questions related to demographics, and two open-ended questions.

Findings

In general the respondents were female (76.8%), aged 19-44 (64.6%), and had met or were still working on their initial savings goal (88.8%). Respondents were asked to identify specific actions they had taken as a result of the information and programs provided by the campaign. Results indicate that successful Savers took the following actions: continued to write savings goals (87.8%), saved money (64.5%), paid down debt (56.2%), and had family discussion about money (53.2%).

Other actions taken less frequently by successful Savers were: developed spending plan (40.9%), requested credit report and/or organized financial papers (33.3%), consulted a financial planner (10.8%), and took other action (1.6%).

Also, 55.9% of respondents who took no additional actions beyond making a savings commitment upon registration for the campaign were successful Savers, as defined by the researchers. However, the percentage of successful Savers substantially increased with additional actions taken: 100% of those who took seven or more actions were successful Savers. (See Table 1.)

In addition to sending a monthly electronic newsletter to all participants who provided an email address, Utah Saves provides support and resources to Savers through a website, through free classes and workshops, no-fee or low-fee savings accounts, income tax assistance, and wealth coaching. The no-fee or low-fee savings accounts and the free classes and workshops had the greatest impact on respondents taking actions that were associated with successful Savers. (See Table 2.)

Summary

Overwhelmingly, Savers reported positive outcomes. Not only did most respondents meet their initial goal, almost 88% continued to record goals and make plans to meet those goals. This finding suggests a positive impact of the campaign as Savers independently continued to think about and manage their personal finances after their initial enrollment.

Other impacts are noteworthy. Over half of the respondents saved money or paid-down debt. Roughly half of respondents indicated that they had family discussions about money or developed a spending plan. One third of respondents requested a copy of their credit report and organized financial papers. Analyses indicated that those who took more actions reported more progress toward their personal savings goals.

There were, of course, limitations to the sample. These were self-selected enrollees into the campaign and self-selected respondents to the survey. No regression was conducted to see how age, income, gender, or education affected savings or debt-reduction. There can, and should, be a follow up analysis of the Utah Saves campaign. Another follow-up study should be made on the 1168 open-ended responses on how has the campaign has impacted financial behavior and how can Utah Saves be improved. The large sample size would yield much more information and give rich data. Finally, while more needs to be done to evaluate this campaign, initial results indicate that the social marketing campaign is accomplishing its purpose.

Social marketing is a process that applies marketing principles and techniques to create, communicate, and deliver value in order to influence target audience behaviors that benefit society (public health, safety, the environment and communities) as well as the target audience (Philip Kotler, Nancy Lee and Michael Rothschild, 2006). *In short, it is a methodology for creating behavior change*. Social marketing can help one influence the behavior of target audiences in order to improve the welfare of individuals and society.

Acknowledgments

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Table 1

Percentage and number who met or were still working toward savings goal by time in program and by action taken.

	Time in Program		
Action	Less than two years	Two or more years	All
Continued to write savings goals	88.5% (392)	87.2% (197)	87.8% (591)
Saved money	61.6 (273)	70.8 (160)	64.5 (434)
Paid down debt	53.5 (237)	61.5 (139)	56.2 (378)
Family discussion about money	53.7 (238)	53.1 (120)	53.2 (358)
Developed spending plan	41.8 (185)	39.8 (90)	40.9 (275)
Requested credit report	38.4 (170)	42.5 (96)	39.5 (266)
Organized financial papers	33.4 (148)	33.6 (76)	33.3 (224)
Consulted financial planner	11.1 (49)	10.6 (24)	10.8 (73)
Took other action	2.0 (9)	.9 (2)	1.6 (11)

Note. Values enclosed in parentheses represent number of respondents.

Table 2

Percentage and number who took specified action by additional program participation.

	Additional program					
Action	No- or low-fee savings account	Free seminars or workshops	Volunteer Income Tax Assistance (VITA)	Utah Individual Development Account (IDA)	Wealth coach	Other programs
Continued to write savings goals	32% (207)	22.2% (141)	9.1% (58)	7.4% (47)	5.2% (33)	3.9% (25)
Saved money	37.0 (168)	26.7 (121)	9.3 (42)	7.9 (36)	6.6 (30)	4.6 (21)
Paid down debt	36.6 (147)	22.9 (92)	8.7 (35)	5.5 (22)	6.7 (27)	5.2 (21)
Family discussion about money	39.1 (152)	24.2 (94)	10.0 (39)	8.5 (33)	6.2 (24)	4.9 (19)
Developed spending about money	37.9 (110)	23.1 (67)	11.0 (32)	10.3 (30)	6.9 (20)	5.5 (16)
Requested credit report	35.8 (88)	25.6 (75)	13.0 (38)	10.2 (30)	7.2 (22)	4.4 (13)
Organized financial papers	36.4 (88)	27.3 (66)	12.8 (31)	10.7 (26)	7.9 (19)	6.2 (15)
Consulted financial planner	36.8 (28)	30.3 (23)	11.8 (9)	6.6 (5)	18.4 (14)	7.9 (6)
Took other action	28.6 (4)	7.1 (1)	0.0 (0)	7.1 (1)	7.1 (1)	21.4 (3)

Note. Values enclosed in parentheses represent number of respondents.

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Utah Individual Development Account Financial Education for Low Income Populations

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Introduction

Personal saving enables individual households to withstand unforeseen expenses. Saving also helps households fund large expenditures, including buying a home or paying for college. In addition, saving helps ensure that households will have sufficient assets for retirement.

To assist low-income households to begin saving and to accumulate wealth and assets, the Individual Development Accounts (IDA) began in 1993 and has grown into a national program. When Utah saw a significant increase in poverty rates for 2001-2002, IDAs were opened in the state and eventually run by the AAA Fair Credit Foundation. The Utah Individual Development Account Network (UIDAN) creates opportunities for low-income Utahns to increase their assets through matched savings accounts used for homeownership, education, or microenterprise, and helps develop savings habits that will maintain financial security.

To qualify for the program, the potential saver must be at least 18 years of age, have an earned income, be at or below 200% of federal poverty guidelines, and cannot have over $10,000 in assets (minus one home and one car). After the required saving of one to three years, the saving is matched at 300% and the maximum amount of $6000 ($1500 from the saver and $4500 in matched funds) goes toward a first home, education or vocational training, or a small business. "The goal of IDA programs has been to increase savings rates for low-income families by providing matching funds for savings toward a specific purpose such as homeownership, higher education or to start a small business." (Lyons, Chang, & Scherpf, 2006. p. 29).

UIDAN partners with businesses for financial support and promotes the program. Utah State University Extension was recognized and sought after to provide the required personal financial education and homebuyer education components, as well as gather local community support. Extension also needed to create a financial management program that would meet the federally demanded financial topics.

Objective

The purpose of this study was to determine the effectiveness of the curriculum developed by USU Extension. The researchers wanted to know if there was a significant change in the understanding of basic financial principles by class attendees after receiving the course.

Method

IDAs have a specific educational component dealing with personal financial management. This includes income needs, money management techniques, savings and investing strategies, credit and debt management, asset protection, and consumer information. Since 8 to 10 hours are also required, IDA practitioners have suggested that financial literacy classes be taught by topic area and spread out throughout the month rather than be taught in a one or two day format. This way it matches the participant's budgeting cycle more closely. Participants are encouraged to use their own experience and existing money management knowledge to contribute to the class discussion. (Shockey, & Seiling, 2004. p.1).

There has been no national IDA curriculum available to the educators of the IDA program. When USU Extension partnered with UIDAN and began teaching the courses in 2005, materials were gathered and organized to assemble a formal standardized curriculum and delivery method. The final curriculum has four sections: (a) Budget Development, (b) Money Management, (c) the Wise Use of Credit, and (d) Consumer Information, each with handouts and activities. Additionally, a slide presentation, "Lessons for Life" from *John Hancock Funds* was added for a review and wrap-up, or a time-filler.

(http://mirusfinancialpartners.com/new/mirusfinancialpartners/JHSDLFLBR.pdf?advisorid=3000086). A pre-test was given at the beginning of the class and a post-test after the classes were completed.

Delivery Methods: The objective of financial education is to inspire change in behavior that will enable a person or a family to achieve their financial goals. Ideally, education provides tools that will help people accomplish these goals. However, implementing change in people is one of the most difficult tasks of an educator, and increased knowledge alone does not necessarily translate into changes in behavior.

For the most part, IDAs have active participants and are willing to change their financial behavior. A 3-to-1 match is a very persuasive incentive. Classes were conducted on Native American Reservations, at subsidized housing complexes, in community neighborhoods, at churches, at universities, and in our county office buildings. The four two-hour courses were taught on a weekday evening for four weeks, or twice a week for two weeks. Some of the lessons and handouts require "homework" (comparing banking services, downloading credit reports, etc) and were to be completed in-between classes. On occasion, classes were taught on two consecutive Saturdays using two two-hour lessons each time. This delivery worked well for the single mothers who preferred to leave their children only twice and not in the evenings.

Extension faculty know their community needs so it was possible to reach pocket demographics such as Latinos, Tongans, Goshutes, Paiutes, and Navajos. Extension also works with many community partners such as the Single Mom Foundation and the Salt Lake Housing Authority, so they were helpful in requiting IDA savers. When Extension faculty taught to these ethnic groups, such as Latinos and Tongans, translators or a native speaker were used to codeliver the lessons. At times, an esteemed member of that community sat in on the class to give their support. This, the authors believe, is crucial as different societies have differing views of money.

Materials Developed: Four PowerPoint slides were developed, putting the nationally required topics IDA participants must have into organized two-hour presentations. Since people learn by a variety of educational methods (Steinfelt, & Iams, 1985), the authors included more than PowerPoints to the course curriculum. To add to the lessons and fulfill our goal of a variety of learning methods, videos, pamphlets, games, and workbooks from various sources were sought after and used. These included Credit Cards What You Need to Know, from Consumer Action and Money Habitudes from Syble Solomon. Additionally, the authors created or adopted (for example, some Master Card & University of Minnesota Extension downloads from http://www.mastercard.com/us/company/en/corporategiving/debt_know_how.html?GP=OTC-RED_debtknowhow.com) 24 handouts to accompany the lessons.

Findings

Evaluation Methods: Pre and post evaluations were used to evaluate the effectiveness of the classes. The authors were interested in understanding the participants' financial knowledge and consumer savvy at the time they entered the savings and asset-building program. The authors then did a post-test to assess what the class attendees learned and which financial topics gained the most improvement. The greatest gains were in knowing how fringe banking works (e.g. pay-day loans), how to check credit reports, and investing for beginners. See Appendix A. Additionally, there was an open ended question on the post-test that asked how the attendee liked the class and what did they feel was the most powerful information they gained. This led to some exciting qualitative responses. See Appendix B.

Results/Impacts: Usually, Extension faculty give a presentation, the participants leave, and we hope that we have touched someone - that we have made a difference. With this program, the authors know we have made a difference in the lives of families and individuals. We see people change their behavior as they work to repair their credit reports, develop a spending plan and stick to it for the course of 1 to 3 years they are saving for their asset. We see the IDA savers again as they take Extension's Homebuyer Education classes or connect with Extension's rural development to learn about managing small businesses. Once they have saved their $1500 and it is matched with $4500, we rejoice with them as they purchase homes, set up businesses, or seek education. This can be the most gratifying component to educators.

Since our team began our partnership with UIDAN in 2005, we have taught dozens of classes and have helped nearly 400 individuals and families apply for the matched savings. Not everyone we teach applies for the IDA program due to various circumstances, but they have all seemed appreciative of the spending plans they make and of getting to know their credit reports which are downloaded as part of the curriculum. Of those who have applied, and have shown that they can budget and save a portion of their income for the 1 to 3 year period, we have had 45 graduates as of December 2008. Twenty-six class participants have purchased homes, fifteen have used the money for education or training, and four have started small businesses.

IDA research indicates that for every dollar invested, the program generates $5 – measured in new businesses and jobs, increased earnings, new and improved homes, higher tax receipts, reduced welfare expenditures, and increased educational achievements. Additionally, asset accumulation promotes economic household stability by increasing individual's confidence about the future, willingness to defer gratification, avoidance of risky behavior, and decreases the risk of intergenerational poverty transmission. IDAs are long-term solutions that go beyond traditional income-maintenance and emergency assistance approaches to poverty.

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Appendix A Course Understanding

Surveys of 100 participants show the outcomes below:

How would you describe your understanding of the following:	None (1)	Little (2)	Mod-erate (3)	Quite a bit (4)	Complete (5)
	Before Workshop		After Workshop		Difference
1. Ways to make sure my bills are paid on time	3.62		4.46		+0.84
2. Which papers or documents are important to my family's finances	2.94		4.28		+1.34
3. How to organize important financial papers	2.85		4.27		+1.42
4. The cost of credit	3.01		4.35		+1.34
5. Types of investments for beginners	2.17		3.80		+1.63
6. How to budget for emergencies	2.58		4.10		+1.52
7. How to budget for irregular expenses	2.77		4.16		+1.39
8. Why it is important to know where I'm spending my money	3.23		4.51		+1.28
9. The cost of payday loans and other forms of alternative credit	2.71		4.57		+1.86
10. How my emotions affect the way I spend money	3.19		4.22		+1.03
11. How to reduce my credit card debt	3.21		4.42		+1.21
12. Ways to prevent identity theft	2.89		4.44		+1.55
13. How to develop a savings plan	2.91		4.33		+1.42
14. How to make sure my credit report is accurate	2.45		4.27		+1.82
15. How to tell the difference between a "want" and a "need"	3.70		4.46		+0.76
16. Credit card terms and fees	2.77		4.12		+1.35

Appendix B Qualitative Outcomes

I would prefer this to be a 10 hour class instead of 8 hour, I would like to have more resources available like a list of web pages and other classes I can attend

- Very good and informative!
- The most important things I learned were saving, investing and paying down debt.
- Having test results from "The Color of Money Personality Test" verified what I believed about my own attitudes towards money
- An important thing I learned was how my emotions and attitudes about money affect my spending habits
- It was useful to learn about Emergency Savings and keeping things in a binder to refer to
- I learned the importance of keeping a game plan with specific goals, realistic ways to achieve them, sticking to it and following through
- I'm glad I learned about pre-paid credit cards
- All was very helpful, I'm going to make a financial organizing book!
- I learned how to develop a saving plan, how to save my money, when to spend, how to spend, not to by things that I don't need
- I learned how to get my credit report for free so that I can check on my credit and fix it
- The format and length of time were ideal for classes, I learned how my emotions affect the way I spend my money.
- The instructor was a really good, knowledgeable instructor, she was INTERESTING and NOT EGOTISTICAL
- The most important financial tool I learned in this class was developing a plan for finances beyond paying bills on time. Record spending, analyze, reduce spending and allocate for specific savings goals-being in control of the whole picture

Understanding Elder Abuse and How Extension Can Help Raise Awareness

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Introduction

Elder abuse is a serious social issue affecting communities without respect to gender, culture, race, or socioeconomic status. The U.S. National Academy of Sciences defines elder abuse as: "(a) intentional actions that cause harm or create a serious risk of harm (whether or not harm is intended), to a vulnerable elder by a caregiver or other person who stands in a trust relationship to the elder, or (b) failure by a caregiver to satisfy the elder's basic needs or to protect the elder from harm" (Bonnie & Wallace, 2003, p. 1). Harm may include physical, emotional, psychological, or sexual abuse, as well as financial exploitation, neglect, and/or discrimination.

Tracking elder abuse is challenging; there is no uniform reporting system, no scientific method for aggregating statistics, and no national database. Various studies in 2008 indicated that 2% to 10% of Americans ages 65 and older experienced abuse (Payne, 2008; Radensky & Parikh, 2008; Thobaben, 2008). Black (2008) found a wide disparity in estimates of elder abuse victims ranging from 500,000 to five million.

Although these numbers paint a bleak picture, researchers know that these numbers fail to demonstrate the full extent of elder abuse, due to underreporting. Researchers conducting random telephone interviews found that 4.6% of respondents (5,777 participants ages 60+) reported experiencing abuse within the past year (Acierno et al, 2010). In another national study of service providers from Adult Protective Services, findings indicated that only one-in-five of 449,924 identified victims of elder abuse actually reported the abuse to authorities (Tatara, 1997). Another early study of 2,000 adults ages 60 and over found that only one-in-fourteen victims notified authorities (Pillemer & Finkelhor, 1988).

Another critical trend impacting elder abuse is the current growth of aging populations. Contributing factors include Baby Boomers entering their sixties, advances in modern medicine, and improvements in lifestyle behaviors such as increased physical exercise and cessation of smoking. In 2004 only 12% of Americans were 65 and older, but by 2050, that number is expected to be 21% (Longley, n.d.). In 1994 one-in-eight Americans were over the age of 65, but analysts project one-in-five by 2030 (Hobbs, (n.d.); Sommers, 2007). Currently the fastest growing segment of the population is also the most vulnerable—those ages 80 and over (Hobbs). It is projected that 2.3 million older adults will become victims of elder abuse by 2030 (Baker, 2007; Fulmer, Guadagno, & Dyer, 2004; Straka & Montminy, 2006; Strasser & Fulmer, 2007). Simply stated, if current trends continue, elder abuse and exploitation will increase exponentially and remain a pervasive threat with troubling implications.

Objective

The purpose of this article is to increase understanding of the dynamics of elder abuse, inform and advance understanding of elder abuse in domestic and institutional settings, and suggest implications for Cooperative Extension. Extension educators have the skills, ingenuity, and expertise to promote awareness through community education and training programs that promote prevention of elder abuse.

Methods

For the most part, a solid base of scientific research on elder abuse is limited due to: (1) few validated research tools and no standardized survey measures (Buri, Daly, Hartz & Jogerst 2006; Cohen, Halevi-Levin, Gagin & Friedman, 2006; Fulmer et al, 2004); (2) no unified theories or perspectives (Laumann, Leitsch & Waite, 2008.); and (3) no uniform standard of care (Fulmer et al.). However, a new model was recently designed to “organize the existing knowledge, explain the relationships between different levels of variables, propose directionality of cause, and provide insights for how . . . positive change can occur” (Sev’er, 2009, p. 287). It will be interesting to see how well this instrument performs. Despite barriers identified above, this article seeks to provide a descriptive review of research exploring elder abuse and provide insights for Extension.

Findings

Elder abuse is a serious threat to the quality of life enjoyed by aging Americans (Strasser and Fulmer, 2007). Although mistreatment of elder populations has been recognized for three decades, research of elder abuse is still in the early stages (Laumann et al, 2008). In general, elder abuse has been described as intentional behaviors that cause harm (e.g., psychological abuse, physical abuse, sexual assault), and/or unintentional behaviors of neglect such as abandonment, failure to provide basic needs (e.g., proper nutrition, sanitation, safe environment), and/or failure to protect (Baker, 2007; Buri et al, 2006; Daly, Hartz & Jogerst, 2006; Cohen et al, 2006; Fulmer et al., 2004; Laumann et al., 2008; Payne, 2008; Radensky & Parikh, 2008; Spangler & Brandl, 2007). Elderly victims of abuse are three times more likely to suffer premature death as a result of the abuse (Baker, 2007; Black, 2008; Fulmer et al, 2004). Like domestic violence, elder abuse is often a hidden crime carried out in secrecy, and is most likely to occur in a domestic setting (e.g., the home or private dwelling where elders are cared for), or an institutional setting (e.g., nursing homes, long-term care, and assisted living facilities).

Elder Abuse in the Domestic Setting

According to a national Survey of State Protective Services (2004), 89.3% of all elder abuse occurred in a domestic setting (National Center on Elder Abuse, 2006). Mistreatment of elders with intact cognition followed patterns typical of domestic violence (i.e., violence against an intimate partner), while mistreatment of elders with lower cognition followed patterns similar to child abuse (Laumann et al., 2008). One study found that abuse was more likely to occur after a major change, such as a death in the family, serious illness, loss of a job, or remarriage; and the abuse may be a family member or a non-family caregiver (Zinc, Jacobson, Regan, Fisher, & Pabst, 2006). Characteristics found to increase vulnerability and potential for abuse included: (1) medical disease, dementia, depression, malnutrition (Fulmer et al., 2004); (2) inadequate social support, solitude, and inadequate financial resources (Buri et al., 2006); (3) cognitive impairment, mental illness, alcohol abuse, social isolation, and shared living arrangements (Baker, 2007); (4) isolation, lack of support, family problems, and emotional problems (Cohen et al., 2006); and (5) deteriorating conditions incident to age (Black, 2008).

According to a survey conducted by the National Center on Elder Abuse (2006), nearly two-thirds of victims over age 60 were women (n=253,426). Spangler and Brandl (2007) interviewed female victims ages 50 and older finding that abuse entailed power and control, threats, intimidation, isolation, and psychological abuse. These women reported more depression, anxiety, post-traumatic stress disorder, substance abuse, and suicide attempts than their counterparts who did not experience abuse. Spangler and Brandl also noted that elderly victims required longer recovery periods and experienced higher mortality rates attributable to the abuse.

Because there is a critical nexus between healthcare providers and victims of elder abuse (Cohen et al., 2006; Laumann et al., 2008), researchers found that when healthcare providers became trained in recognizing abuse, they presented a first line of defense for victims and were instrumental in identifying abuse by caregivers (Shugarman, Fries, Wolf, & Morris, 2007). Implementation of routine screening for elder abuse was strongly encouraged and resulted in increased health benefits for victims of abuse (Fulmer et al., 2004; Phelan, 2007). Additionally, referrals to local resources not only provided relief for victims, but also reduced further risk of abuse (Fulmer et al).

Elder Abuse in the Institutional Setting

Findings of the U.S. General Accounting Office (2002) indicated that approximately 1.5 to 1.6 million individuals resided in nursing homes, with one-million residing in residential care facilities. These populations were placed at increased risk of abuse or neglect due to chronic conditions and dependence on staff and healthcare workers (Baker, 2007). In the "Modernizing Older Americans Act Programs: 2006 Annual Report" (U.S. Administration on Aging, 2006), the most common complaints from residents and families were: unanswered requests for aid, disrespect towards residents, poor staff attitudes, accidents and improper physical handling of residents, inadequate notice for discharge or eviction of residents, and problems with resident assessment and care planning. Many of these complaints went unresolved and tended to recur. Physical violence, sexual abuse, and resident-to-resident abuse was also reported.

As with domestic abuse, it was difficult to identify how widespread abuse was due to underreporting by residents, families, and/or staff (U.S. General Accounting Office, 2002). Some reasons for not reporting included not viewing the situation as a criminal matter, being skeptical about whether the abuse really occurred, and/or fear of retaliation. When abuse was reported, it was often many days after the occurrence, making retrieval of evidence difficult. When cases did go to trial, victims often had difficulty recalling events, or did not survive long enough to testify, so cases were dropped and offenders were not held accountable.

Hawes (2002) suggested that high resident-to-staff ratios and staff shortages may be the root cause for abuse and neglect in institutions serving elderly populations. Staff generally developed high levels of stress, frustration, and burnout which led to negative behaviors or unintentional neglect. Organizations were urged by the U.S. General Accounting Office (2002) to remain vigilant in preventing abuse of vulnerable populations.

Summary

As elderly populations increase, the potential for abuse and exploitation will also increase. Radensky and Parick (2008) suggest careful study of the target population before starting any new program. Critical keys to success include identifying key partners and forming collaborative partnerships within the community. Extension professionals can help promote awareness of elder abuse by education, training, and evaluation. Members of elderly populations should be invited to participate in the process of defining social and cultural contexts for learning, especially in terms of gender, ethnicity, culture, race, religious beliefs, values, and family backgrounds of aging audiences and those providing services to elderly populations. Partnerships and coalitions should combine aging service agencies, domestic violence and mental health providers, adult protective services, senior citizen center directors and staff, public health nurses, and other professionals and nonprofessionals (Spangler & Brandl, 2007).

Payne (2008) identified a need for human service professionals to receive better training and resources. Radensky and Parikh (2008) stated that "providing additional support for the paraprofessional staff on the front lines can lead to improved early identification and better interventions and outcomes" (p. 259). Extension is perfectly poised to provide this type of training. One excellent program is available through Oregon State University Extension. "Elder Abuse in Oregon: Building Awareness and Encouraging Action" (Driscoll, 2006) provides online tools including: Pre-teaching Notes for Faculty, Leader's Guide, Teacher's Guide, and Evaluation. Although this program targets Oregon, these materials could be adapted for other states, especially after identifying community needs and areas of unmet need.

Many administrators of elder care facilities are moving towards training for staff focusing on worker stress, conflict management, safety behaviors, empathic listening, and intervention strategies, but not all healthcare workers have access to such programs (Menio & Keller, 2000; Phelan, 2007). Extension educators can step in and provide programming to fill the gap. Other opportunities include media campaigns, community workshops, training conferences, as well as education including displays, bulletins, and classes at hair salons, church gatherings, or community centers where elders and caregivers gather (Zinc et al., 2006). Be aware that the topic of abuse may evoke strong emotions in some participants and debriefing by counselors or advocates should always be available.

Community awareness improves when like-minded groups work together to address needs and identify solutions. Extension involvement can provide far reaching benefits and help diminish the incidence of elder abuse and exploitation.

Note

1. "Asking about abuse itself is a powerful intervention, as it communicates to older victims that their abuse experiences can be discussed with service providers. Kind supportive words of encouragement and referrals provide concrete options and support, even if the older victim does not take action immediately" (Spangler & Brandl, 2007, p. 328).

2. If someone you know is experiencing abuse, call the National Domestic Violence Hotline 1-800-799-SAFE for referrals to local victim service providers. All calls are confidential.

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