Journal of Youth Development

Editor's Comments:

Welcome to our Fall Issue of the *Journal of Youth Development.* We begin with the thought provoking article by Dr. Kirk Astroth who highlights the eight critical elements currently used as 4-H's foundation for positive youth development and proposes "Interdependence" be included as a 9ᵗʰ critical element. Life skill influence of consumer decision making is examined by authors Olson, Croymans and Ji while the influence of healthy lifestyles relative to career maturity is discussed by Dodd, Odom and Boleman. This issue also continues our examination of technology's impact on youth development including "Effective Efficient Online Training in Cooperative Extension" and Jan Scholl's historic review of 4-H in motion pictures. Additional articles focus on Bullying, Intergenerational Service and Adolescent Obesity programs. Please consider participating in JYD as an author or Peer Reviewer. Details are available by contacting patricia.dawson@oregonstate.edu.

Manuscripts for the Spring 2015 and Summer 2015 issues are now being accepted in the following areas:

- **Feature Articles** ~ informational, explanatory, or critical analysis and interpretation of major trends in the field or comprehensive reviews. Include clear implications for youth development research, practice and programming. 2,000-5,000 words
- **Program Articles** ~ discuss programs and outcomes or describe promising programs and pilot projects that have clear implications for youth development research, practice and programming. 1,500-4,000 words
- **Research and Evaluation Strategies** ~ describe innovative methodologies and strategies in the collection and analysis of quantitative or qualitative research and evaluation data.
1,500-4,500 words
- **Resource Reviews** ~ present analyses of materials, such as books, curricula or videos.
300-800 words

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Feature Articles

Addressing the Issue: Bullying and LGBTQ Youth

Allen, Kimberly

Each day, thousands of youth experience bullying and as many of 70% of all youth report having experienced bullying, either directly or indirectly (Cantor, 2005). For Gay, Lesbian, Bi-sexual, Transgender and Questioning (LGBTQ) youth, the chances of experiencing bullying are much higher than for youth in the general population (Russell, Horn, Kosciw, & Saewyc, 2010). Although many youth serving organizations have begun to address the issue of bullying with bullying prevention programs, there is a deficit of information and a lack of inclusion of prevention efforts that specifically address LGBTQ youth. This article addresses the role of youth organizations in creating safe and inclusive environments for all youth, with specific attention paid to resources and strategies for inclusive environments for LGBTQ youth.

Program Articles

Intergenerational Service Learning Program Improves Aging Knowledge and Expectations and Reduces Ageism in Younger Adults

Francis, Sarah L.; Margrett, Jennifer A.; Hoerr, Kara; Peterson, Marc J.; Scott, Abbie; Franke, Warren D.

This article discusses a study which evaluated the effects of an intergenerational service-learning exergaming program for older adults on younger adults' aging knowledge, expectations, and perceptions. Eighteen college students (ages 19-26 years) served as trainers for an 8-week exergaming physical activity program for older adults (12 contact hours). Questionnaires assessing aging knowledge, ageist attitudes and aging expectations were completed at Weeks 1, 8, and 25 (follow-up); program evaluations were completed at Weeks 8 and 25. Significant improvement from Week 1 to Week 25 was found for: Aging knowledge scores ($p<0.03$), positive aging expectations regarding mental health ($p<.02$), positive aging expectations regarding cognitive health ($p=.043$), overall aging expectations ($p<.05$), ageism (stereotypes) ($p<.02$) and ageism (separation) ($p=.000$). All trainers ranked their experience as "good to excellent." This intergenerational service learning program is effective in improving aging knowledge, expectations and perceptions.

Effective, Efficient Online Training in Cooperative Extension

Young, Jane Chin; Manton, Linda Marie; Worker, Steven M.; Martin, Anna C.

In order to keep pace with media and communications trends in education, Cooperative Extension (CE) faces the need to shift from traditional face-to-face delivery to online alternatives. This exploratory study focused on evaluating the effectiveness of on-demand, interactive online training compared to its face-to-face counterpart. Targeted for CE staff and volunteers whose work impacts youth, families and communities, the design centered on the university's cost-effective in-house technology tools. The study results make the case for online delivery as effective and efficient. Strategies for developing a process for online delivery in CE are also offered.

4-H and 4-H Members in Motion Pictures

Scholl, Jan

Youth involved in Extension activities were portrayed on film as early as 1913. This paper provides a summary of the earliest motion pictures in which 4-H and 4-H members were a part. From the more than 400 early Extension films made by USDA, 22 4-H films were located and described. Hollywood films, with 4-H themes, were found. Reflections on film preservation and availability are addressed as well as the role of film and other media in the early twentieth century.

Bernetich, Meghan; Patterson, Jennifer A.

Adolescent obesity is a growing national healthcare concern. Barriers to effective treatment, such as limited time for office visits and limited reimbursement for obesity counseling, leave both patient and practitioner feeling frustrated and unsupported. This article will discuss the adolescent weight management program, *Triple E: Eat, Exercise, and Enjoy.* This program was created in collaboration with a pediatric primary care practice, a local university, an affiliated pediatric practice within the health system, the local middle school, and the community. *Triple E* was developed, with minimal funding, to combat the adolescent obesity epidemic occurring in a primary care practice.

Dawson, Patricia A.

The State of Girls: Unfinished Business is an extensive report published by the Girl Scout Research Institute. The 156 page publication examines girls' health and well-being in the United States with a focus on key issues including health, educational achievement, demographic trends and safety. The report includes excellent charts, tables and diagrams and an appendix of state-level sources of data to support research findings. Youth professionals will appreciate this well documented, easy to comprehend resource as they engage in positive youth development programming.

Interdependence: Ninth and Newest Critical Element for 4-H Positive Youth Development

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Interdependence: Ninth and Newest Critical Element for 4-H Positive Youth Development

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Abstract: For the past 15 years, a list of eight critical elements has provided a strong foundation for articulating the positive youth development focus of 4-H programs and efforts. Now it is time to revisit this list and update the critical elements for positive youth development. Interdependence is proposed as a 9th critical element that should be included. Research is cited for the importance of this element that was not included in the original list in 1998, and a call is made for a national think tank to update the critical elements.

Introduction

More than 15 years ago, a group of researchers was called together and assembled in Tucson at the University of Arizona to begin a process which would have major impacts on the 4-H program both nationally and locally. In December 1997, forty-five people from twenty-three states met in Tucson, Arizona, to discuss and design a National Impact Assessment of the 4-H Youth Development Program (National 4-H Impact Assessment Project, 2001, p. 8). The purpose of this work was to clearly identify the critical elements of positive youth development as supported by research that could be measured and quantified. It was exciting work, and the energy in the room was palpable because for the first time as a system, we were embarked on an effort to distill out the essential and critical aspects that led to positive youth development outcomes.

Out of this meeting, several working groups were appointed to conduct additional ground-setting work before a national assessment could be conducted. As a result, a smaller group of Extension specialists met in Kansas City in 1998 to identify the most important elements of positive youth development. Called the "Critical Elements Working Group,"

> …this group's task was framed in the research question "What positive outcomes in youth, adults, and communities result from the presence of critical elements in a 4-H experience." The group reviewed the basic and applied research on characteristics of effective programs for youth development. Emphasis was placed on using existing empirical research on what impacts positive youth development. Another criterion used by the group was relevancy to 4-H

that could be communicated to colleagues, researchers and volunteers. From this process, eight elements critical to youth development emerged (p. 8):

The eight elements identified at this time were:
- A positive relationship with a caring adult
- A safe environment—physically and emotionally
- Opportunity for mastery
- Opportunity to value and practice service to others
- Opportunity for self determination
- An inclusive environment
- Opportunity to see oneself as an active participant in the future
- Engagement in learning

The Critical Elements Working Group was chaired by Stephen Carlson of the University of Minnesota, and included Kirk A. Astroth of Montana State University; Laura Merek, University of Connecticut; Ina Lynn McClain (Linville) of the University of Missouri; Anne Rumsey of the University of Idaho; and Gary Gerhard of Kansas State University. The task of this group was to "collect research on critical elements of 4-H and to decide which to include" in a possible national impact study. The second task "was to look for measures of these elements. This group made their findings available to the Outcomes Group in March 1998" (National 4-H Impact Assessment Project, 2001, p. 53).

In 2002, the National Research Council and Institute for Medicine came out with their now well-known "blue book" titled *Community Programs to Promote Youth Development* (Eccles, & Gootman, 2002)*.* This report was the result of a 2-year project to integrate and evaluate a wide range of science related to adolescent development. From their work, they identified 8 features of positive youth development settings (p. 117):
- Physical and psychological safety
- Appropriate structure
- Supportive relationships
- Opportunities to belong
- Positive social norms
- Support for efficacy and mattering
- Opportunities for skill building
- Integration of family, school and community efforts

Obviously, the 4-H Critical Elements and the National Research Council's features of positive youth development settings share some similarities. In fact, the National 4-H Leadership Trust worked to help the youth development field understand the underlying alignment of these elements by comparing them as shown in Table 1.

Table 1
A comparison between 4-H Critical Elements of Positive Youth Development and the
National Research Council's Features of Positive Youth Development Settings

Critical Elements Essential to Positive Growth and Development—4-H	Features of Settings That Help Facilitate Positive Development –National Research Council
A positive relationship with a caring adult.	Opportunities to experience supportive relationships and to have good emotional and moral support.
Safe physical and emotional environment.	Physical and psychological safety and security. Structure and limits that are developmentally appropriate and that recognize adolescents' increasing social maturity and expertise. Opportunities to be exposed to positive morals, values, and positive social norms.
Opportunities to master skills and content.	Opportunities for skill building, including learning how to form close, durable human relations with peers that support and reinforce healthy behaviors, as well as to acquire the skills necessary for school success and successful transition into adulthood.
Opportunities for self-determination, decision-making and goal setting.	Opportunities to be efficacious, to do things that make a real difference and to play an active role in the organizations themselves.
Opportunities to be an active, engaged learner.	Opportunities to be efficacious, to do things that make a real difference and to play an active role in the organizations themselves
An inclusive atmosphere.	Opportunities to feel a sense of belonging.
Opportunities to practice service for others.	
A positive connection with the future.	
	Strong links between families, schools, and broader community resources.

Each of these lists was derived from an extensive review of essentially the same youth development research literature, although the "Critical Elements" list was done three years earlier than the "Features of Settings" list. While the language differs slightly, the content is substantially the same. As you can see from the table above, the "Critical Elements" list generated by 4-H includes two items not included in the National Research Council "Features of Settings" list:

- Opportunities to practice service for others
- A positive connection with the future

The "Features of Settings" list includes one item that was not part of the National 4-H Impact Study:

- Strong links between families, schools, and broader community resources.

Further Revisons

In 2005, 4-H National Headquarters director of youth development, Cathann Kress, distilled the eight **critical** elements defined by 4-H into just four **essential** elements—Belonging, Independence, Generosity and Mastery—or what is often referred in short-hand as BIG-M. The simplification of the 8 critical elements was one way to help people remember the core components of positive youth

development without having to remember all eight critical elements, although the 8 are still subsumed under the 4 essential elements (Kress, 2009).

Table 2
Essential Elements (Kress, 2009)

Belonging
• Positive relationship with a caring adult
• An inclusive environment
• A safe environment
Mastery
• Engagement in Learning
• Opportunities for Mastery
Independence
• Opportunity to see oneself as an active participant in the future
• Opportunity for self-determination
Generosity
• Opportunity to value and practice service for others

Updating the Critical Elements

In my view, it is time to revisit and update the list of critical elements for positive youth development. Like Howard Gardner's "multiple intelligences" that have expanded from the original 7 to now include 8 forms of learning, based on what we continue to learn about human development (Armstrong, 2003; Gardener, 2012), it is time for us to re-consider our list. We should ask if we have fully captured the requisite skills young people need to transition for the second decade of life into adulthood As Gardener observed, his work was iterative and constantly evolving as he re-visited his own work every so often. He was fortunate, he says, to have had an opportunity to lay out his theory and "revisit the chessboard at decade intervals" (p. 13).

Those of us who are faculty at the land-grant universities should take the same approach with 4-H's critical elements. In fact, I believe it is time to add a ninth element—interdependence. Let me try and make the case here for why interdependence needs to be included in our list of critical elements of positive youth development.

As a member of the National Recognition Task Force in the mid-1990's, I advocated hard for expanding our traditional model of recognition to include cooperation as a 5th way to recognize the achievements of young people. In 1996, that 5-part model was released to the National 4-H system and has been used ever since as a guide for local educators and program directors (National 4-H Council, 1996).

Interestingly enough, Fetsch and Yang found only two articles in the *Journal of Extension* referencing empirical data on children related to cooperation from 1975 to 2001. In addition, these studies included only small numbers of participants. At the same time, though, they referenced a meta-analysis of 122 studies (Johnson, Maruyama, Johnson, Nelson, & Skon, 1981) which found that cooperation often resulted in superior end results:

> Cooperation is considerably more effective than interpersonal competition and individualistic efforts in promoting achievement and productivity, and; cooperation without intergroup

competition seems to promote higher achievement and productivity than cooperation with intergroup competition (p. 53).

Reporting on their own study with 4-H and non-4-H members, the authors found that cooperation was a better strategy for building self-concept than competition and that 4-H programs needed to include more cooperative learning strategies in the future (Fetsch, & Yang, 2002). While young people liked both competition and cooperation, the latter was more effective at developing personal strengths.

The importance of interdependence and associational relationships also goes back much further in our history and culture. Alexis de Tocqueville, that astute observer of early American life, in particular noted American's tendency to work together and form groups. De Tocqueville was especially intrigued by the number of associations and community groups in American as compared to Europe. In his book about his trip to the U.S. called *Democracy in America*, de Tocqueville credited our sense of community and mutual support as a key distinguishing feature for why democracy flourished in America. "In no country in the world has greater advantage been derived from association nor has this powerful instrument of action been applied to a wider variety of objectives than in America" (2003, p. 220).

Wallace Stegner, one of the giants of American and Western literature was one of the first people to argue that our past was built, not upon rugged individualism, but rather on mutual interdependence. In *The Sound of Mountain Water*, Stegner observed that: "When it (the West) fully learns that cooperation, not rugged individualism, is the quality that most characterizes and preserves it, then it will have achieved itself and outlived its origins. Then it has a chance to create a society to match its scenery" (1980, p. 38).

Later, Robert Putnam, in his seminal work called *Bowling Alone* (2000), observed that "Community has warred incessantly with individualism for preeminence in our political hagiology" (p. 24). As Putnam persuasively presents in chapter after chapter, social bonds are one of the most important predictors of happiness and well-being, and when a community loses these connections, the community becomes impoverished and weakened. Without strong social bonds, a community's quality of life is lowered, crime rates increase, social maladies increase and health declines.

Moreover, Putnam argues, our myth of rugged independence as a foundation for the development of the nation are just that—myths. "Our national myths often exaggerate the role of individual heroes and understate the importance of collective effort….Paul Revere's alarm was successful only because of networks of civic engagement in the Middlesex villages. Towns without well-organized local militia, no matter how patriotic their inhabitants, were AWOL from Lexington and Concord" (p. 24).

Meg Wheatley (1999) described the three components of self-organizing capacity of organizations— organizational identity, information flow and interdependent relationships. Allen and Morton (2006) further delineated the skills set for interdependent relationships to include building teamwork, building partnerships and managing conflict. As Wheatley points out, "Order emerges as elements of the system work together, discovering each other and together inventing new capacities" (p. 111). Organizational development requires nurturing interdependent relationships.

Despite the importance of interpersonal relationships, Sue Johnson, author of *Hold Me Tight* (2008), describes a 2006 National Science Foundation study that found that the number of individuals in people's circle of confidants was declining. To Johnson, this is disturbing news because close personal relationships, ones in which people are interdependent, are so critical to physical and emotional health. She noted that "science for all fields is telling us very clearly that we are not only social

animals, but animals who need a special kind of close connection with others, and we deny this at our peril" (p. 24).

"We need emotional attachments with a few irreplaceable others to be physically and mentally healthy—to survive" (p. 15). According to her research, "Today it is widely accepted that children have an absolute requirement for safe, on-going physical and emotional closeness and that we ignore this only at great cost" (p. 20). Yet, "our culture's established social and psychological ideas of adulthood: that maturity means being independent and self-sufficient" (p. 21).

While all of these previous works persuasively make the case for the importance of interdependence, there is also a plethora of research which supports the evidence cited above. Over 750 research studies (Johnson, 2003) conducted during the past 11 decades on the relative merits of cooperative, competitive, and individualistic efforts have demonstrated that superior performance and achievement results from cooperative strategies which stress the importance of mutual interdependence (your success=my success).

In addition, a group of researchers used meta-analysis to review 148 independent studies comparing the effectiveness of different goal structures for supporting early adolescents' achievement and positive peer relationships (Roseth, Johnson, & Johnson, 2008). Spanning more than 80 years of research and involving more than 17,000 early adolescents in more than 10 countries, the results are a persuasive argument for the positive effects of mutual interdependence. Higher achievement and more positive peer relationships were positively associated with cooperative rather than competitive or individualistic goal structures. In addition, though, cooperative goal structures correlated with a positive relation between achievement and positive peer relationships.

Interdependence: the 9th Critical Element

Let's be clear—interdependence is not just the critical element of "belonging" dressed up in different clothes. Belonging is about group identity and having a feeling of a group or member affiliation. Like a uniform, insignia, handshakes, or lore, belonging is more about a badge of group identity—such as "we are all Rotarians." But it is not about mutual interdependence. Belonging does not begin to scratch the surface of the critical interdependence of people to work toward common goals or purposes.

While there is much to be said for cultivating a sense of autonomy in young people, there are equally persuasive reasons for fostering a sense of mutual interdependence and mutual reliance. Interdependence, unlike belonging, is about how our fates and futures are inextricably intertwined. Interdependence is an expression of how we produce better results and greater outcomes when we share expertise and work together in cooperative and collaborative ways. It encompasses the synergy that can occur when multiple minds get together and face an issue or problem so that the end result is better than anything anyone could have accomplished alone.

In a 4-H context, what are some examples of interdependence? What does interdependence look like?

An easy example is the 4-H club. Clubs can only succeed when they figure out that their success depends on everyone working together toward the same goal—fund-raising, doing community service, sharing leadership or through civic action. Much of what goes on in the 4-H environment is actually far more about interdependence than it is about independence. Project clubs, camps, field trips, even team demonstrations and something as basic as livestock judging which takes the best scores of 3 individuals for a team score. Individual scores are used but so are team scores. Once

one starts to look closely at the 4-H experience, interdependence seems intuitive and a natural element of positive youth development. Upon reflection, it is surprising that this element of positive youth development settings was overlooked in the initial review of research.

The late Dr. Martin Luther King, Jr. understood this concept of interdependence quite well and spoke about it in his "I've Been to the Mountaintop" speech given the day before he was shot in Memphis, Tennessee. King recalled the story of the Good Samaritan and challenged us to think about why the priest and the Levite did not stop along the Jericho road to help a seriously injured man while the Good Samaritan did. Certainly the road was dangerous and robberies were common. There were a lot of reasons not to stop and provide aid to the injured man—after all, he may be faking it or he may have accomplices hiding nearby who would rob the travelers. Both the priest and the Levite asked themselves: "If I stop, what will happen to me?" But when the Good Samaritan came along, King recalled, he reversed the question and asked himself: "If I do not stop to help this man, what will happen to him?"

Now that is an example of interdependence.

Next Steps

Without a doubt, interdependence is a critical element in positive youth development. It is time to update our list of critical elements. And who knows? There may be others. Land-grant university faculty and researchers are in an ideal position to help us keep this work current and up-to-date. No one else can take on this task.

Given the strong research base for including interdependence as the ninth critical element of 4-H positive youth development, what is next? The author suggests several steps.
1. A national think tank should be convened to re-examine the latest research and review the current list of critical elements to determine if they need updating and expansion.
2. State 4-H Program leaders should establish a standing committee on research to ensure a focus on emerging research related to positive youth development. This committee should meet during the regular annual face-to-face meeting of the 4-H program leaders, and by conference call at other times.
3. A new model of 4-H positive youth development should be disseminated, based on this work, to ensure that the new information is promulgated far and wide.
4. Training should be conducted to help 4-H professionals and volunteers understand the importance of interdependence as a critical element of positive youth development.

With these efforts, we can ensure that our focus on the essential elements of positive youth development remains up-to-date and inclusive of the latest research and knowledge about human development.

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Life Skill Influence of Consumer Decision Making Program: Intensity and Breadth

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Life Skill Influence of Consumer Decision Making Program: Intensity and Breadth

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Abstract: The study presented in this paper focuses on an important aspect of life-event decision making: Consumer Decision Making. The purpose of the reported research was to ascertain if there is correlation between participating in the 4-H Consumer Decision Making (CDM) Program and life skill development. The study identified twelve life skills. The research hypothesis was that participants involved in multiple opportunities of the CDM program will report higher levels of positive life skill development than individuals reporting minimal involvement. Participants reported the 4-H CDM Program influenced development of decision making, critical thinking, and useful/ marketable life skills. The study investigated the relationship between member participation in eight core CDM program opportunities in Minnesota 4-H and life skill development. The study found that county fair project exhibit, county day camp, state consumer decision making educational activity/field trip, and consumer decision making judging contests have significant influence on life skills. It was determined that participants involved in more opportunities (6-8) reported greater influence on life skill development than participants in only 1-2 program opportunities.

Introduction

The mission of 4-H is to "empower youth to reach their full potential, working and learning in partnership with caring adults" (National 4-H Council, 2011). Over the years, numerous studies have been conducted to determine the impact of 4-H on participants and it has been found that active participation in 4-H programs contribute to improved quality of life in family, community and various life skills (Astroth, & Haynes, 2002; Goodwin, et al., 2005; McKinley, 1999; Mulroy, & Kraimer-Rickaby, 2006). Additional studies have evaluated specific 4-H programming efforts to identify life skill development, including service learning programs (Stafford, Boyd, & Linder, 2003), camping programs (Klem, & Nicholson, 2008), livestock projects and judging programs (Boleman, Cummings,

& Briers, 2004; Lange, 2004; Nash, & Sant, 2005; Rusk, Martin, Talbert, & Balschweid, 2002; Ward, 1996); and consumer decision making programs (Olson, & Croymans, 2008). In addition, some studies have compared life skill development gained through 4-H and other youth development organizations (Maass, Wilken, Jordan, Culen, & Place, 2006; Miller, & Bowen, 1993).

Researchers have become increasingly interested in identifying the link between specific life skills development and participation in specific elements within a program. Some examined life skills including decision making, leadership, team work, public speaking, problem solving, and critical thinking. Most studies have suggested a positive correlation between participating in 4-H youth development programs and a growth in the development of participants' life skills. (Boyd, Herring, & Briers, 1992; Cantrell, Heinsohn, & Doebler, 1989; Diem, 2004; Fitzpatrick, Gagne, Jones, Lobley, & Phelps 2005; Fox, Schroeder, & Lodl, 2003; Mincemoyer, & Perkins, 2003; Mincemoyer, & Perkins, 2005; Pennington, & Edwards, 2006; Radhakrishna, & Sinasky, 2005; Seevers, & Dormody, 1994). What these studies do not tell us is the impact on participants over time.

Among all the life skills, judgment and decision-making have received extensive research attention (Albert, & Steinberg, 2011). The ability to make sensible decisions is one of the key characteristics of the mature adolescent. In addition, since many of the decisions made during adolescence serve to shape, expand or limit the life course (Mann, Harmoni, & Power, 1989), it is critical to help youth build competence in decision making. Educators agree upon the fact that the decision making process can be taught through special programs or school curriculum. Dybal and Sondag (2000), for example, described a teaching technique that takes students through the steps of a decision making model. The steps include describing the problem, checking influences, identifying alternatives, checking risks and consequences, decision action, and evaluation. The technique advocates for the use of pre-written scenarios and worksheets as teaching aids (Dybdal, & Sondag, 2000).

The study presented in this article focuses on an important aspect of life-event decision making: consumer decision making. This study will explore the correlation of life skill development of the 4-H Consumer Decision Making (CDM) program participants over time. It is believed that making purchases, either big or small, involves a process parallel to the decision making process. Consumer decision making requires life skills that enables consumers to make wise decisions utilizing a dual-process involving analytical and experiential cognition. The skills needed can be taught and developed through programs tailored to train wise consumers. Olson and Croymans (2008) reported that as a result of participating in the 4-H CDM program, youth are more competent and confident in making consumer decisions. Participants also are more skilled in learning to reason, recognize quality products, and to make decisions based on a given situation.

Program Design

The 4-H Consumer Decision Making (CDM) program conducted by the University of Minnesota Extension provides a venue for youth to learn and practice the cross-cutting life skill of decision making. The program also incorporates the experiential learning theory "whereby knowledge is created through the transformation of experience," (Kolb, 1984) by bridging the youth's newly acquired knowledge and skills to an awareness and response to local needs. The CDM program continuum includes team practice on the county level with a volunteer coach, regional and state contests, and a state service learning activity which culminates in community service in their local county. Additional opportunities include day camps, field trips and project exhibits. At a minimum, participants experience the county judging team practice and may advance to the state contest. Counties with a more comprehensive program have supplemental short term consumer education skill building opportunities such as day camps and field trips that may support and recruit participants to the county judging team practice and multiple levels of contests. Each opportunity is defined below.

County Judging Team Practice – small group youth experience with a volunteer adult relationship, duration varies from site to site, but usually involves multiple sessions starting with learning the decision making judging process and then practicing utilizing real-life scenarios in a judging format.

County Consumer Day Camp – short term site-based day camp experience focusing on consumer skills with age appropriate individual and group work guided by volunteer adult.

County Consumer Education Field Trips – short term experience in the real world of the community with age appropriate individual and group work guided by volunteer adult. The field trip may include a tour of a retail store to learn how stores are laid out and products are marketed, a scavenger hunt, an assigned shopping assignment, or similar activity.

County Fair Consumer Education Project Exhibit – usually an individually developed project representing what the youth has learned about consumerism during the past year of project work that is conference judged and displayed at a county fair.

Consumer Decision Making Judging Contests (County, Regional or State) – a short term experience where individuals typically participate in county judging team practices and then participate in a county, regional, and/or state judging contest which involves individual judging of consumer classes that include a written scenario, criteria, and four options to rank, present oral reasons to defend the decisions made, and participate in a group process activity to demonstrate team decision making skills.

State Consumer Decision Making Educational Activity/Field Trip – a short term experience where individuals learn about issues in our Minnesota communities (such as family food costs, shelter, and clothing), purchasing strategies, and participate in a related shopping or educational experience. Upon completion of the experience the teams defend their purchasing decisions to the large group based on the given criteria and upon return to their home community donate any purchased items to a local non-profit organization.

Purpose

The purpose of this research project was to determine if there is a correlation between participating in the 4-H CDM Program and participants' life skill development. Our research question was: What impact does participation in the 4-H Consumer Decision Making Program have on the subject's life skill development related to consumerism, over time? Findings may indicate the optimal participant dosage for maximum life skill development… so how much programming is necessary to impact positive influence on life skill development?

Our hypothesis was that participants who were involved as youth in multiple opportunities of the CDM program would report a higher level of positive influence on their life skill development than individuals reporting only minimal involvement in the program.

Methodology

Participants
The target population for the study was alumni of the Minnesota 4-H CDM program. The investigators contacted Extension staff in all 87 Minnesota counties and volunteer 4-H CDM judging coaches for a list of current and past participants of the program. The contact information provided

influenced the age range of the respondents. Three hundred and ninety four names were submitted from counties with only 256 having complete contact information. The survey tool and consent materials were mailed in 2008 through the United States Postal Service inviting these individuals to participate in the study. The original hard copy invitation was followed by three postcard reminders and a final hard copy invitation. Twenty five mailings were returned that were non-forward able. Seventy surveys were completed either online or through the mail, resulting in a 30.3% return rate (N=70). According to Russ-Eft and Preskill, at least 65 subjects are needed from a 200-people population (32.5%) to ensure a confidence interval of 90%. The authors accept the 30.3% response rate as acceptable.

The participants of the study were 70 current and past Minnesota 4-H CDM participants from 16 counties who were involved in the program as youth. The mean age of respondents was 19 with a range of 12 to 39 years of age. All participants were youth at the time of participation in CDM. Eighty three percent of the participants were female and 17% were male. Eight (11.4%) of the participants had been enrolled in the 4-H program for 5 years or less; 23 (32.9%) of the participants had been enrolled between 5 and 10 years; and 39 (55.7%) of the participants had been enrolled for 10 or more years. The average number of years individuals participated in each of the eight CDM program opportunities is listed in Table 1.

Table 1
Number of years of participation in CDM program opportunities (N=70)

CDM program opportunities	Mean	SD
County Judging Team Practice	3.42	2.02
County Consumer Day Camp	2.89	1.27
County Consumer Education Field Trip	3.19	2.37
County Fair Consumer Education Project Exhibit	2.84	1.82
County CDM Judging Contest	3.67	2.37
Regional CDM Judging Contest	3.30	1.99
State CDM Judging Contest	2.88	1.74
State CDM Educational Activity/Field Trip	2.54	1.58

Instrument
The survey consisted of eleven items. Participants were asked to provide demographic information, including age, gender, county of 4-H membership, number of years enrolled in 4-H, and the project areas they were enrolled in. Participants were also asked the number of years they participated in each of the eight 4-H CDM program opportunities. The survey had four Likert-scale questions, which were designed based on the Ak-Sar-Ben 4-H Exhibitor Alumni Survey (Lange, 2004) and Targeting Life Skills Model (Hendricks, 2006). The Likert-scale questions measured the participants' perceptions about their development of twelve life skills, how they gather information prior to making purchases, how often they use the steps of the consumer decision making process when making larger purchases, and the level of influence the program had on positive youth development outcomes (Lerner, et al., 2005; Roth & Brooks-Gunn, 2003). The investigators identified twelve life skills from the Targeted Life Skills Model (Hendricks, 2003) that could be influenced by participation in the CDM

program. The survey also had four open-ended questions to expand on the Likert-scale question responses. Participants were asked to share the process they use when making a significant and small purchase; the life skills they developed or enhanced through the 4-H CDM program; and the impact the program has had on their life.

The survey was reviewed by the state 4-H CDM committee, state Extension evaluation specialists, and an associate professor of education. The survey was field tested with four program participants to determine readability and usability of the tool. Adjustments to question terminology were made in the pilot survey tool based on the feedback and recommendations of the review team and field test. The study was approved by the Institutional Review Board - Human Subjects Committee, University of Minnesota (project #0802S26023).

Analysis
All survey responses were inputted into Survey Monkey and coded using the REMARK program. The present analysis focuses on the relationship of the participants' depth of involvement in the program and their perceived influence of life skill development.

One of the Likert-scale questions asked participants to indicate the level of influence participation in the 4-H CDM program had on development of the twelve life skills, using a scale of 1 (no influence) to 4 (major influence). Quantitative data, gathered through the question, was analyzed using the SPSS Statistics version 19.

A separate data set was made for each 4-H CDM program opportunity: the first group being respondents who answered "no" to having participated in the listed opportunity and the second group being respondents who answered "yes" to having participated in the opportunity. Qualitative data, gathered through open-ended questions was analyzed using a theme mapping process. The theme mapping included reviewing all data for common language, then grouping via higher level.

<div align="center">

Results

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The self-reported level of influence that participation in the 4-H CDM program had on the development of specific life skills was positive for most of the life skills. The majority of participants reported the program had a "moderate" to "major" influence upon their life skill development in all of the life skills except for "Empathy/Concern for Others." Approximately a third of the participants identified decision making (35.71%), critical thinking (31.43%), and useful/marketable skills (30%) as life skills that the program had a "major influence."   Approximately 50% of the respondents believed the program had at least a "moderate influence" on their life skill development in the areas of: critical thinking, decision making, cooperation/teamwork/contribution to group effort, leadership, planning/organizing, wise use of resources, communication, useful/marketable skills, learning to learn, service learning, and accepting differences. Empathy/concern for others was the only skill that the majority of respondents reported "no" or "minor" influence (Table 2).

Table 2
Reported level of influence CDM program had life skill development (N=70)

Life Skill	No Influence	Minor Influence	Moderate Influence	Major Influence	Mean (SD)
Critical Thinking	0	n=4 (5.71%)	n=44 (62.86%)	n=22 (31.43%)	3.26 (0.56)
Decision Making	0	n=5 (7.14%)	n=40 (57.14%)	n=25 (35.71%)	3.29 (0.59)
Cooperation, Teamwork, Contribution to Group Effort	n=3 (4.29%)	n=9 (12.86%)	n=38 (54.29%)	n=20 (28.57%)	3.07 (0.77)
Leadership	n=2 (2.86%)	n=11 (15.71%)	n=43 (61.43%)	n=14 (20.0%)	2.99 (0.69)
Planning/Organizing	n=4 (5.71%)	n=11 (15.71%)	n=38 (54.29%)	n=17 (24.29%)	2.97 (0.80)
Wise Use of Resources	n=4 (5.71%)	n=11 (15.71%)	n=36 (51.43%)	n=19 (27.14%)	3.00 (0.82)
Communication	n=1 (1.43%)	n=17 (24.29%)	n=35 (50.0%)	n=17 (24.29%)	2.97 (0.74)
Useful/Marketable Skills	n=6 (8.57%)	n=12 (17.14%)	n=31 (44.29%)	n=21 (30.0%)	2.96 (0.91)
Learning to Learn	n=2 (2.86%)	n=18 (25.71%)	n=41 (58.57%)	n=9 (12.86%)	2.81 (0.69)
Service Learning	n=11 (15.71%)	n=20 (28.57%)	n=31 (44.29%)	n=8 (11.43%)	2.51 (0.90)
Accepting Difference	n=8 (11.43%)	n=25 (35.71%)	n=29 (41.43%)	n=8 (11.43%)	2.53 (0.85)
Empathy/Concern for Others	n=14 (20.0%)	n=25 (35.71%)	n=26 (37.14%)	n=5 (7.14%)	2.31 (0.88)

Non-parametric tests for two independent samples were used to analyze the relationship between participation in the CDM program opportunities and self-reported level of influence their participation had on life skill development. The one program opportunity that appears to have influenced the most life skills is the County Fair Consumer Education Project Exhibit. The results indicate that those participating in this opportunity reported a statistically significant influence on the development of a number of life skills, including critical thinking, decision making, leadership, planning/organizing, communication, and accepting differences.

Participation in a County Consumer Day Camp significantly influenced the development of the service learning and accepting differences life skills. Respondents indicated participation in the State CDM

Educational Activity/Field Trip had a significant influence on the life skills of cooperation, service learning, and empathy/concern for others. County Consumer Educational Field Trip, County CDM Judging Contest and Regional CDM Judging Contest had a significant influence on limited areas of life skills development, namely, wise use of resources, accepting differences and critical thinking, respectfully. Opportunities such as County Judging Team Practice and State CDM Judging Contest did not show a significant influence on the development of any life skills (Table 3).

Table 3
Reported level of influence CDM program opportunities had on life skill development (N=70)

Life Skill	County Judging Team Practice		County Consumer Day Camp		County Consumer Education Field Trip		County Fair Consumer Education Project Exhibit		County Judging Contest		Regional Judging Contest		State Judging Contest		State Educational Activity/ Field Trip	
p value	Yes n=52	No n=18	Yes n=9	No n=61	Yes n=16	No n=54	Yes n=25	No n=45	Yes n=43	No n=27	Yes n=30	No n=40	Yes n=64	No n=6	Yes n=26	No n=44
Critical Thinking	.476		.083		.299		.001*		.147		.007*		.182		.169	
Decision Making	.266		.881		.473		.016*		.449		.973		.151		.136	
Cooperation	.704		.276		.154		.052		.597		.645		.270		.010*	
Leadership	.610		.276		.234		.027*		.862		.179		.469		.273	
Planning/ Organizing	.894		.051		.064		.015*		.088		.432		.480		.338	
Use of Resources	.122		.190		.012*		.306		.128		.117		.723		.107	
Communi-cation	.314		.281		.362		.003*		.689		.387		.600		.459	
Useful/ Marketable Skills	.487		.525		.087		.205		.496		.258		.336		.103	
Learning to Learn	.721		.371		.433		.579		.707		.173		.168		.397	
Service Learning	.407		.029*		.727		.243		.445		.520		.332		.024*	
Accepting Differences	.402		.008*		.251		.042*		.034*		.245		.893		.111	
Empathy/ Concern for Others	.915		.128		.947		.943		.601		.900		.363		.028*	

*$p < 0.05$ (statistically significant)

To determine the amount of dosage that has the most influence on life skill development a non-parametric analysis was used to examine the differences between four groups of individuals who participated in different numbers of opportunities. Individuals that reported participating in a multiple number of CDM program opportunities ranging from 3, 4-5, and 6-8 were compared to individuals participating in a minimum of 1-2 opportunities. It was found that those who participated in more opportunities (4-5 and 6-8) reported a significant influence in the development of more life skills than those with minimal participation in only 1-2 opportunities.

All participants with a higher level of participation (3, 4-5 and 6-8 opportunities) reported participation had a significant influence on the life skill of accepting differences, while participation in 4-8 opportunities had a significant influence on critical thinking. Involvement in 3 opportunities compared to only 1-2 opportunities also showed a significant influence on the leadership life skill. Individuals in 4-5 opportunities also reported decision making and communication life skills were significantly influenced by participation. Participation in 6-8 opportunities compared to 1-2 opportunities had the greatest impact with significance reported for 6 life skills; critical thinking, leadership, planning/organizing, wise use of resources, useful/marketable skills, and accepting differences.

Table 4
Reported influence of life skill development at varying levels of participation

Life Skill	Comparison between participation in 1-2 opportunities (n=18) and 3 opportunities (n=16) p-value	Comparison between participation in 1-2 opportunities (n=18) and 4-5 opportunities (n=27) p-value	Comparison between participation in 1-2 opportunities (n=18) and 6-8 opportunities (n= 9) p-value
Critical Thinking	1.00	.008*	.004*
Decision Making	.707	.017*	.088
Cooperation, Teamwork, Contribution to Group Effort	.104	.098	.068
Leadership	.041*	.156	.003*
Planning/Organizing	.068	.170	.003*
Wise Use of Resources	.984	.717	.016*
Communication	.272	.026*	.083
Useful/Marketable Skills	.272	.712	.011*
Learning to Learn	.712	.778	.466
Service Learning	.627	.760	.187
Accepting Difference	.020*	.030*	.002*
Empathy/Concern for Others	.247	.554	.219

* $P < 0.05$ (statistically significant)

Age of participants at the time of the survey indicated a difference in reported level of life skill development. Data comparing participants age 18 and under with those 19 and older at time of reporting, indicated that the CDM program significantly influenced four life skills; critical thinking, learning to learn, service learning, and empathy/concern for others. When participants age 21 & under were compared with those ages 22 & over at time of reporting, a significant difference on

influence on life skill development was found in only two areas: service learning and empathy/concern for others.

Table 5
Reported influence of life skill development by age

Life Skill	Comparison between participants 18 & under (n=27) and those who 19 & older (n=43) at time of reporting p-value	Comparison between participants 21 & under (n=38) and those 22 & older (n=32) at time of reporting p-value
Critical Thinking	.032 *	.708
Decision Making	.654	.638
Cooperation, Teamwork, Contribution to Group Effort	.626	.138
Leadership	.901	.326
Planning/Organizing	.868	.721
Wise Use of Resources	.371	.802
Communication	.533	.427
Useful/Marketable Skills	.295	.353
Learning to Learn	.039 *	.131
Service Learning	.005 *	.001 *
Accepting Difference	.822	.156
Empathy/Concern for Others	.004 *	.001 *

*P < 0.05 (statistically significant)

There were 69 responses to the open-ended question "what life skills did you develop or enhance as a result of your participation in the 4-H CDM program?" The responses can be grouped into four categories. There were 32 comments indicating the participants have developed the skills and strategies to make better decisions when making purchases. Participants also identified several life skills that were developed or enhanced through the CDM program, such as critical thinking; the ability to prioritize and compare items before; and public speaking, communication and teamwork skills. Individuals report participation in the CDM program has equipped them with the skills to think through their needs and make informed decisions about their purchases (Table 6).

Table 6

Life skill development through CDM program

Category	Examples of Quotes
The ability to making better or wiser decisions (n=32)	"I learned to look at products closer so I make the best choice." "I tend to think things through more thoroughly when I make purchases now. And find myself asking is this the best choice." "To make wiser decisions in cost, quality, quantity, etc. whenever I purchase something."
Critical thinking, reasoning, analyzing skills (n=19)	"I learned about analyzing the products I may buy and how to choose the best one." "I developed skills for evaluating different consumer products with regards to cost, quality, purpose, etc." "I tend to think things through more thoroughly when I make purchases now."
The ability to prioritize, comparing items before the purchase (n=16)	"I learned how to compare items when buying a product and how to rank them in regards to my needs." "I am able to compare and contrast many different products and services that I purchase throughout the day/month." "Systematic decision making - using pen and paper - writing a priority list of criteria."
Public speaking, communication, team work skills, confidence (n=12)	"Public Speaking - confidence, organizational skills, timelines" "My communication skills improved from my participation in the CDM program."

Discussion

Participation in select CDM program opportunities resulted in statistically significant levels of influence in particular life skills. Exhibiting a county fair consumer education project had significant influence on the most life skills; critical thinking, decision making, leadership, plan/ organizing, communication and accepting differences life skills. Participating in the state educational activity/field trip or the county day camp also resulted in influencing more than one life skill. The ability to critically think and make decisions is a desired outcome of a consumer education program.

This study suggests that while basic participation in the CDM program (1-2 opportunities) influences the development of the critical thinking and decision making life skills, participating in multiple program opportunities (6-8) significantly increased the program's level of influence on development of these life skills in addition to leadership, planning/organization, wise use of resources, useful/ marketable skills, and accepting differences. This strongly supports building the breadth of the program to maximize the cumulative effect on the development of the identified life skills with significant relationships. Opportunities for progressive learning are important because they allow youth to maintain their interest and continue their involvement as they get older (Walker, 2006). The county consumer day camp and county consumer education field trip are two entry level, short term opportunities with reported significant influence on life skills. Although participants of such opportunities have no obligation to continue with the CDM program, participation may increase interest in the topic and of other opportunities in the program. The county consumer field trip was the only opportunity that had a significant influence on the development of the wise use of resources life skill, which may imply that the hands-on nature of a field trip in the real-life community context helps to build this skill.

For some, awareness of the CDM program is followed by interest in individual exploration of and enrollment in the 4-H Consumer Education project. Study findings of significance on the program's influence of county fair consumer education project exhibits in the development of critical thinking, decision making, and communication life skills match the objectives of the CDM program as well known elements of mastery in individual project work success. Exhibiting a project at the county fair allows one to not only share knowledge, but at higher levels of learning, allows one to synthesize their comprehension and application of knowledge gained and express this through a new product/exhibit. Connecting multiple learning opportunities within a program to a 4-H project supports higher level of cognitive learning.

Life skills are learned by being involved with a specific 4-H project over time (Fitzpatrick, et al., 2005). This study's respondents' reported being enrolled in the 4-H program for an average of 8 years. The CDM program participants report being involved in county CDM judging team practices for an average of 3.42 years and in the state consumer contest for an average of 2.88 years. Such data suggests that multiple progressive learning opportunities exist for some participants in the CDM program. The significant findings found for participants of these multiple progressive learning opportunities encourage the development of such a full program model to reach a higher level of influence upon life skill development.

This study finds promising results for life skill building through CDM yet caution is required since there was not a control group to compare to youth who did not participate in 4-H programming. Also, alumni can control for their additional life experiences and opportunities that would have built their life skills in other ways.

To ensure the greatest impact on life skill development, this study supports the creation of a program delivery model with multiple opportunities for participation. Key opportunities that support positive youth development include encouraging participants to continue their exploration of a topic and their mastery through developing related county fair exhibits. The authors feel both of these findings can apply to the vast range of 4-H youth development program topics.   Youth development programs that do not have a county fair venue for youth to exhibit a project are encouraged to identify showcase opportunities for youth to develop, share and display projects that represents what they have learned about consumerism. Such venues might include sharing their learning at a parent night, displaying an exhibit or poster at the local library, or communicating what they have learned through traditional or social media, including radio, newspaper or newsletter article, You Tube, Facebook, or Twitter.

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The Career Maturity of 4-H Healthy Lifestyles Program Participants

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The Career Maturity of 4-H Healthy Lifestyles Program Participants

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Abstract: This study examined the readiness of youth involved in the 4-H healthy lifestyles program to make career decisions, identified as career maturity. A random sample of youth involved in the 4-H healthy lifestyles program was used to participate in the research study, which entailed the completion of an online survey. The findings indicate that youth in the 4-H healthy lifestyles program have a high level of career maturity with some significant differences found based upon age; however, no significant differences were found based upon gender or years of involvement in the 4-H program.

Introduction

Young people need to be connected to programs, services, activities, and a support system that helps them learn about the various options available after completing school. Such career preparation and work-based learning experiences are essential for youth to develop aspirations and make informed choices about careers (Department of Labor, 2013a). According to the United States Department of Labor (2013b), all youth need information on career options, including:
- Career assessments to help identify youths' school and post-school preferences and interests
- Structured exposure to post-secondary education and other life-long learning opportunities
- Exposure to career opportunities, including information about educational and entry requirements
- Training designed to improve job-seeking skills and work-place basic skills.

Exposure to career options is a major component of the Texas 4-H Youth Development Program and can help youth develop career maturity.

4-H and Career Development
The Texas 4-H Youth Development Program gives youth the opportunity to explore a wide variety of project areas. Within the positive learning experiences offered through each 4-H project youth are

also given the opportunity to explore higher education and career opportunities which may influence future life decisions.

Various studies have identified the positive impact 4-H involvement has had on the choice of and success with one's career. Williams, et al. (2010) discovered that long-term participation in the 4-H Youth Development Program, such as 4-H community clubs and after-school programming, has a positive impact on the career choice of youth ages 14-19. Their findings indicated that 4-H exposes youth to specific careers and occupational experiences. However, the results also demonstrate that youth in 4-H learn about careers not only through participation in 4-H but also through non-4-H activities.

 In another research study, alumni perceived the greatest impact of 4-H to be general career awareness concerning recognition of interests and abilities leading to a career, knowledge of career exploration resources, career considerations, and a sense of need to make a career choice (Matulis, Hedges, Barrick, & Smith, 1988).

Rockwell, Stohler and Rudman (1984) studied a sample of Nebraska 4-H alumni to determine how they felt 4-H helped them select a career and assume adulthood roles 10 to 20 years after their 4-H experiences. It was found that 4-H activities and people involved with leading the 4-H program, including 4-H leaders and Extension Agents, influenced their choice of a career. As youth remained in 4-H over a longer period of years, they were more likely to indicate that 4-H influenced their choice of an area of study or their selection of an institution of higher education.

Career Maturity

Career exploration has been noted as a prerequisite to achieving career maturity (Ochs, & Roessler, 2004), which is one aspect of career development (Super, 1990). Being career mature implies that an individual is able to accomplish the tasks that are appropriate for his or her age and stage of development (Brown, & Lent, 2005).

According to Super (1990), career maturity is defined as "an individual's readiness to cope with the developmental tasks for that stage of development" (p. 213). It involves an individual's ability to make appropriate career choices, including awareness of what is required to make a career decision and the degree to which one's choices are both realistic and consistent over time (King, 1989; Ohler, Levinson, & Hays, 1996).

Career maturity has also been referred to as the extent to which an individual has acquired the necessary knowledge and skills to make intelligent, realistic career choices. It is the readiness of an individual to make an informed, age-appropriate career decision and cope with appropriate career development tasks (Luzzo, 1993; Savickas, 1984).

Career maturity can be broken down into stages, along a continuum, classified as exploratory, establishment, maintenance, and decline stages. Adolescents are in what is called an exploratory stage of career maturity, which is made up of sub-stages, including and described by Super (1955) and Crites (1973) as:

- Orientation to vocational choice: This stage involves one being concerned with making a choice and developing awareness that a choice needs to be made and what factors may influence the choice.
- Information and planning about preferred occupation: Within this sub-stage, adolescents are acquiring specific information about their preferred occupation, such as the requirements,

duties, work conditions and opportunities. Mapping out a plan for what needs to be accomplished in high school, post-high school and entry into the profession is also explored.

- Increasing consistency of vocational preferences: Adolescents within this sub-stage are developing consistency with their preferences over time. Their vocational preferences are also becoming more consistent within an occupational field.
- Crystallization of traits relevant to vocational choices: Adolescents developing career maturity will begin to more clearly define their interests and accept the responsibility they have to make a career choice.
- Increasing wisdom of vocational preferences: In this sub-stage, viewed as the most complex and difficult to manage yet most satisfying, a relationship among one's activities, abilities, interests and preferences is formed as the adolescent gains knowledge of his or her accessibility of their preferred occupation.

A variety of research studies have focused on the numerous correlates of career maturity, including age (Stern, Norman, & Zevon, 1991) and gender (King, 1989; King, 1990; Patton, & Creed, 2001), as well as personal characteristics, such as self-esteem (Ohler, Levinson, & Sanders, 1995). While various researchers have discovered girls to show more career maturity at a given age than boys (Omvig, & Thomas, 1977; Westbrook, Cutts, Madison, & Arcia, 1980), Erol and Orth (2011) found male adolescents to have higher self-esteem than female adolescents.

Patton and Creed (2001) found developmental differences with 15-17 year olds scoring higher on career maturity attitude and knowledge than the 12-14 year olds. King (1989) found that while age was the most important determinant of career maturity for boys, a sense of family cohesion and an internal locus of control were the main determinants for girls.

Because of the role the 4-H Youth Development Program plays in the career development of youth, it is important to examine the impact if any, involvement in the 4-H program has on the development of youths' career maturity.

Purpose and Objectives

The purpose of this study was to examine the readiness of youth involved in the 4-H healthy lifestyles program to make career decisions, identified as career maturity. The study was guided by the following objectives:
1. Determine the career maturity level of youth involved in the 4-H healthy lifestyles program.
2. Explore gender differences in career maturity of youth involved in the 4-H healthy lifestyles program.
3. Compare the career maturity of youth involved in the 4-H healthy lifestyles program based upon age.
4. Assess if there is a relationship between the career maturity of youth involved in the 4-H healthy lifestyles program based upon the number of years in 4-H.

Methodology

Healthy living has been a part of the 4-H and Youth Development Program since its inception in 1902 (4-H National Headquarters, 2011). On the national level, the 4-H Healthy Living Mission Mandate "engages youth and families through access and opportunities to achieve physical, social, and emotional well-being" (4-H National Headquarters, 2011, p. 1). In Texas, the healthy lifestyles program encompasses the food and nutrition, health and safety projects (Texas 4-H & Youth

Development, 2013b). Through involvement in these projects, youth are given the opportunity to participate in educational activities, career camps, contests, and serve in leadership positions.

Population and Sample
The target audience for this study was youth who met the following criteria
- Member of the Texas 4-H Youth Development Program in the current (2012-2013) year;
- Classified as a senior 4-H member (at least 14 years of age, but not 19 at the start of the 2012-2013 4-H year);
- Enrolled in at least one of the 4-H healthy lifestyles-related projects; and
- Have an e-mail address.

The online 4-H registration and enrollment management system used by the Texas 4-H program was used to determine 4-H members that met the criteria for the research study. The system stores contact information, demographics, as well as program involvement for each 4-H member.

From the sampling frame of 2,590 youth, a random sample of 350 4-H members was selected to participate in the research study, representing 155 counties.

Instrumentation
The Career Maturity Inventory (CMI) Counseling Form C was used to assess the maturity of 4-H members enrolled in the 4-H healthy lifestyles program. The original CMI was developed to assess career attitudes and competencies of children and adolescents in grades 5-12 and was the first paper-and-pencil measure of vocational development used to measure a student's readiness to make occupational choices (Savickas, & Porfeli, 2011). Savickas and Porfeli (2011) point out that pertaining to the CMI as youths' ability to adapt increases, so too does their general readiness to make realistic occupational choices.

The instrument consists of 24 statements about choosing the kind of job or work one will probably do when they finish school, to which respondents either agree or disagree, earning a point for each statement answered correctly. The instrument is made up of four sub-scales, each consisting of six statements, and produces five different scores:
- CCC score: This total score for career maturity is based on the 18 items in the concern, curiosity and confidence scales.
- Concern: The extent to which an individual is oriented to and involved in the process of making career decisions. Becoming aware of choices that must be made in the immediate and intermediate future is the first step in the career decision-making process.
- Curiosity: The extent to which an individual is exploring the work world and seeking information about occupations and their requirements. Confusion about the career decision-making process can be minimized when one explores their own abilities and interests along with occupations that fit the individual's personality and talents.
- Confidence: The extent to which an individual has faith in his or her ability to make wise career decisions and realistic occupation choices. When one is confident in the career decision-making process it means he or she can anticipate being successful in overcoming challenges and problems he or she may encounter.
- Consultation: This score measures the extent to which an individual seeks assistance in career decision-making by requesting information or advice from others. The score for these six questions are not included in the total adaptability score in recognition of one's preference to consult significant people in their lives while others choose to make decisions on their own (Savickas, & Porfeli, 2011).

In a research study conducted by Savickas and Porfeli (2011), the coefficient alpha for the CMI Form C total score was .86. The authors of this research study ran a Cronbach Coefficient Alpha reliability coefficient, which was calculated to be .82.

Data Collection and Analysis

Data collection was performed using an online instrument with the researcher following the guidelines for web survey implementation proposed by Dillman, Smyth, and Christian (2009). This included recruitment and follow-up e-mails delivered to participants after one, two and three weeks, which included a link to the online survey. Since the responses were anonymous, the researcher could not follow-up solely with non-respondents. After three weeks, an e-mail was sent by the state 4-H leader, endorsing the research study and encouraging participation. A final reminder was sent to all participants one week later, notifying them of the final day to complete the survey and provide feedback. The survey was closed after being open for four and one-half weeks.

Due to a low response rate (28.5%) after four and one-half weeks, additional measures were taken to increase participation. The researcher used procedures outlined by Lindner, Murphy, and Briers (2001), specifically using method three to compare early respondents with late-respondents. Phone calls were made to all participants in the random sample to introduce and remind youth about the research study and asked if they had completed the survey. After phone calls were placed, one final reminder was e-mailed to all participants about the survey with one final opportunity to complete it. This process resulted in an additional 70 (20%) participants responding to the online survey, which is greater than the minimum of 30 responses recommended by Lindner, et al. (2001).

The results of an independent samples t-test did not reveal any significant differences between early respondents and late respondents at the $p<.05$ level.

Findings

Profile of Participants

Of the 127 complete and usable responses, 91 (71.1%) were female and 36 (28.3%) were male. The mean age of participants was 15.91 years (*SD=1.21*) with ages ranging from 14 to 18 years and grades nine through 12 represented. The average years in 4-H among the 127 participants was 7.43 years with responses ranging from one year to 10 years with the most frequented response being eight years.

Objective One

The first objective was to determine the career maturity level of youth involved in the 4-H healthy lifestyles program. The overall mean score on the CMI was calculated at 17.94 (*SD=4.21, n=127*). Career maturity scores were calculated for each of the sub-scales of the CMI, as well as the CCC score, which is based on the sum of the concern, curiosity and confidence sub-scales, as noted by Savickas and Porfeli (2011). Participants ranked highest for the sub-scale of concern, which is the first step in the career decision-making process (Savickas, & Porfeli, 2011). Although the lowest sub-scale was confidence, the participants still outscored the high school norm.

When compared to the study provided by Savickas and Porfeli (2011). More to the point, it is evident that the 4-H members scored higher on three of the four sub-scales. Participants scored lower than the high school norm on the consultation construct. Career Maturity Inventory scores are presented and compared to the high school norms in Table 1.

Table 1

Rank Order of Career Maturity Inventory Sub-Scale Mean Scores (N=127)

Sub-Scale	Mean	SD	Norm Mean[c]	Norm SD[c]
CCC[a]	13.65	4.01	9.88	1.28
Concern[b]	5.39	1.13	4.6	1.4
Curiosity[b]	4.79	1.72	2.72	2.56
Consultation[b]	4.31	1.50	4.94	1.4
Confidence[b]	3.46	1.96	2.56	1.97

[a]Score range was 0 to 18.
[b]Scores for each sub-scale ranged from 0 to 6.
[c]Mean scores and standard deviations provided by Savickas and Porfeli (2011).

Objective Two

To meet objective two, the researchers explored gender differences in career maturity of youth involved in the 4-H healthy lifestyles program. A *t*-test was calculated to determine if any significant differences existed between males and females for the scores associated with the CMI. Mean scores that were compared for gender include the total score, CCC, and then each of the four sub-scales.

The results are displayed in Table 2 and indicate that males outscored females on all scores except the concern sub-scale. Overall, the *t*-test did not reveal a significant difference ($p<.05$) among males and females for any of the mean scores calculated.

Table 2

Comparison of Career Maturity Inventory Scores by Gender

Scale	Males		Females		*t*-value	df	Sig.[c]
	Mean[a]	SD	Mean[b]	SD			
CMI Total[d]	18.53	4.58	17.73	4.06	.968	125	.335
CCC[e]	14.08	4.21	13.47	3.94	.963	125	.442
Concern[f]	5.28	1.23	5.43	1.09	-.678	125	.499
Curiosity[f]	4.86	1.79	4.77	1.69	.271	125	.787
Confidence[f]	3.94	1.85	3.27	1.97	1.754	125	.082
Consultation[f]	4.44	1.16	4.25	1.62	.646	125	.520

[a]n=36.
[b]n=91.
[c]Significant at p<.05.
[d]Score range was 0 to 24.
[e]Score range was 0 to 18.
[f]Score range was 0 to 6.

Objective Three

The third objective involved the comparison of the career maturity of youth involved in the 4-H healthy lifestyles program based upon age. Analyses of variance (ANOVAs) were calculated with the dependent variable being the CMI mean scores and the independent variable being age, with a range of 14 to 19. The results of the analyses are displayed in Table 3. The highest total mean score was the 18 year olds, followed by the 14 year olds. The lowest total mean score was for the 15 years olds, which indicates a drop in career maturity after age 14.

The ANOVA also revealed a significant difference ($p<.05$) between age groups for the total score, CCC score, and the curiosity and confidence sub-scales. A REGWF post hoc analysis revealed that 18 year olds scored significantly higher than 15 year olds for the total score of the CMI. For the CCC score, as well as the curiosity and confidence constructs, the 15 and 16 year old participants scored significantly lower than 18 year olds at the $p<.05$ level.

Table 3

Analysis of Variance for Career Maturity by Age

	Mean Score by Age						
	14 years	**15 years**	**16 years**	**17 years**	**18 years**	**F**	**Sig.**
	n=16	n=37	n=31	n=29	n=14		
CMI Total[c]	18.88[ab]	16.46[a]	17.52[ab]	18.45[ab]	20.79[b]	3.357	.012
CCC[d]	13.88[ab]	12.43[a]	12.90[a]	14.48[ab]	16.50[b]	3.461	.010
Concern[e]	5.19[a]	5.16[a]	5.52[a]	5.41[a]	5.86[a]	1.216	.307
Curiosity[e]	5.00[ab]	4.41[a]	4.35[a]	5.14[ab]	5.86[b]	2.832	.027
Confidence[e]	3.69[ab]	2.86[a]	3.03[a]	3.93[ab]	4.79[b]	3.584	.008
Consultation[e]	5.00[a]	4.03[a]	4.61[a]	3.97[a]	4.29[a]	1.919	.111

[ab]Means in rows having letter designations in common are not significantly different at the .05 level using Ryan-Einot-Gabriel-Welsch F (REGWF) post hoc analysis method.
[c]Scores rnage from 0 to 24.
[d]Scores range from 0 to 18.
[e]Scores range from 0 to 6.

Objective Four

For the final objective, the researchers sought to assess if there was a relationship between the career maturity of youth involved in the 4-H healthy lifestyles program based upon their number of years in 4-H. A Pearson product-moment correlation coefficient (r) was calculated to determine the relationship between career maturity and years in 4-H, with results displayed in Table 4. Very low, positive correlations were found for the CMI total score and four of the five sub-scales that were not significant at the .05 level. A low, negative relationship was found for the consultation sub-scale, which also was not significant at the .05 level.

Table 4

Pearson Product Moment Correlation Coefficients for
Career Maturity Inventory Scores and Years in 4-H

Career Maturity	r	p*
CMI Total	.094	.29
CCC	.159	.08
Concern	.076	.40
Curiosity	.075	.40
Confidence	.132	.14
Consultation	-.050	.57

*Significant at the .05 level.

Conclusions

In this study, the CMI was used to measure the readiness of youth involved in the 4-H healthy lifestyles program to make decisions about career choices. The participants' CMI scores were also compared based upon gender, age, and years of involvement in the 4-H program.

Based upon the findings of this study, the researchers concluded that the duration of youths' involvement in the Texas 4-H healthy lifestyles program does not have an impact on their career maturity. Aside from the years in 4-H, the results revealed that the youth involved in this study were career mature.

Differences in career maturity based upon gender also lacked significance. Males outscoring females on all scores except the concern sub-scale is consistent with research indicating adolescent males have higher self-esteem than females (Erol, & Orth, 2011). This is important for youth development professionals to know, realizing what factors are most important in the development of career maturity based upon gender, especially the varying levels of self-esteem among males and females (King, 1989).

Researchers discovered a significant difference in career maturity between 18 and 15 year olds for the total score of the CMI. Fifteen and 16 year olds also scored significantly lower than 18 years olds for the CCC score and the curiosity and confidence sub-scales, which was consistent with trends in adolescent self-esteem found by Erol and Orth (2011). Understanding the development of career maturity based upon age can help understand at what age youth require the most support in acquiring the knowledge and skills needed to develop career maturity.

Although most analyses lacked significance, it is important to note that participants in this research study exceeded the high school norms for career maturity. The CMI scores revealed higher scores than the high school norms (Savickas, & Porfeli, 2011) for the CCC score and three of the four sub-scales. The lower scores on the consultation sub-scale indicate a preference to make career choices with an independent relational style (Savickas, & Porfeli, 2011). These higher scores reflect more advanced development among youth in the 4-H healthy lifestyles program and lead the researchers to conclude that the youth are indeed career mature, indicating a readiness to make informed career decisions and cope with career development tasks.

Even though results of this study lead researchers to conclude that youth in the Texas 4-H healthy lifestyles program are, indeed, career mature, further research can be conducted to expand beyond this one program area. The findings of this current study were limited by the population of youth involved in the Texas healthy lifestyles program and, therefore, cannot be generalized to youth involved in other programs within the Texas 4-H Youth Development Program. However, this study does provide evidence that the 4-H members involved in the 4-H healthy lifestyles program have the knowledge and skills to make intelligent, realistic career choices.

Youth are often involved in multiple organizations beyond 4-H, some of which also strive to foster career readiness. Additionally, previous research has found that youth in 4-H learn about careers not only through participation in 4-H but also through non-4-H activities (Williams, et al., 2010). Therefore, it may be of value for future research to assess the career maturity of youth involved in other organizations. Future research that involves 4-H members as well as youth not involved in the 4-H program may also be of benefit to show the impact 4-H involvement may have on youths' career maturity.

Implications for Practice

Although the researchers found the youth involved in the 4-H healthy lifestyles program to be career mature, there are some key recommendations that practitioners should keep in mind as they continue to foster career development among youth.

- Ensure career development is integrated into each 4-H project. Not only the healthy lifestyles program, but each 4-H project should give youth the opportunity to explore careers through various methods including activities, interactions, and special programs.
- Expand career exploration experiences. Lippman and Keith (2009) suggested youth are more likely to succeed in the workplace when they are given the opportunity to explore different careers. Albion and Fogarty (2002) also pointed out that career decision-making difficulties can be effectively relieved by providing access to relevant, up-to-date resources and information. Therefore, the 4-H program should give consideration to incorporating various career exploration experiences, such as career fairs and career camps, into the program.

Train adult volunteers to help in career choices, goal setting and interests. Training 4-H volunteers at the local level on how to promote careers related to 4-H projects areas, methods of fostering career exploration, and the positive impact they can make by serving as a role model will benefit youth career development.

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Addressing the Issue:
Bullying and LGBTQ Youth

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Addressing the Issue:
Bullying and LGBTQ Youth

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Abstract: Each day, thousands of youth experience bullying and as many of 70% of all youth report having experienced bullying, either directly or indirectly (Cantor, 2005). For Gay, Lesbian, Bi-sexual, Transgender and Questioning (LGBTQ) youth, the chances of experiencing bullying are much higher than for youth in the general population (Russell, Horn, Kosciw, & Saewyc, 2010). Although many youth serving organizations have begun to address the issue of bullying with bullying prevention programs, there is a deficit of information and a lack of inclusion of prevention efforts that specifically address LGBTQ youth. This article addresses the role of youth organizations in creating safe and inclusive environments for all youth, with specific attention paid to resources and strategies for inclusive environments for LGBTQ youth.

Introduction
Bullying and the Role of Youth Organizations

Bullying is a timely topic that is gaining increased attention from main-stream media, legislators and parents alike. Convinced that bullying is not an education problem or a health problem – but a community problem – President Obama & the First Lady hosted a White House Conference on Bullying Prevention in March, 2011. Since then, the U.S. Department of Education has released an analysis of State Bullying Laws and Policies. Out of the 46 states with anti-bullying laws in place, 36 have provisions that prohibit cyber bullying and 13 have statutes that grant schools the authority to address off-campus behavior that creates a hostile school environment. There are two proposed federal education laws, The Safe Schools Improvement Act (introduced in 2010) and the Student Non-Discrimination Act (introduced in 2011) that would provide protection to populations most at risk of being targeted for bullying (Russell, Horn, Kosciw, & Saewyc, 2010).

In addition to federal laws and policies, youth organizations, schools, and communities are also working to create more inclusive environments. Although bullying impacts all youth, there are subsets of youth that are more vulnerable for being targets of bullying (Allen, Roper & Lewis, 2012). Youth that are different tend to be the most vulnerable--this includes youth with disabilities or physical

characteristics outside the norm, religious minority youth, and sexual minority youth. In fact, LGBT youth report regular experience with school violence (Kosciw, Greytak, Diaz & Bartkiewicz, 2010). Reports show that Gay, Lesbian, Bi-sexual, Transgender and Questioning (LGBTQ) youth are much more likely to be targets of bullying, and the results of those negative experiences can lead to negative outcomes such as lower academic success (Murdock & Bolch, 2005) and poor mental health outcomes (Hershberger & D'Augelli, 1995).

Laws and policies are not enough; youth development organizations and youth professionals must come together and create a culture of inclusion and acceptance. Youth development leaders, particularly leaders in out of school youth development organizations, can and should consider creating and implementing bully prevention policies and programs within their organizations, and those organizations need to connect with other organizations, parents, community members to create a comprehensive approach to bully prevention. Unfortunately, however, there is a major gap of information for youth serving professionals on how to help vulnerable youth.

Positive Youth Development (PYD)

Youth development programs offer many protective factors for youth, but there is still work to be done, particularly on the issue of bullying and vulnerable audiences. Programs that utilize PYD already have an infrastructure that puts them in a great place to implement bullying prevention strategies for all youth, including LGBTQ youth. For example, PYD Programs typically use the Five Cs model of youth development-- competence, confidence, connection, character & compassion with the sixth c of contribution which has started to be included as well (Lerner, 2004). These Five Cs can be found in a variety of out of school youth serving organizations, such as 4-H, Boys and Girls Clubs, and Scouts.

The Five Cs could be the very components needed to reduce the amount of bullying behaviors in youth organizations. Imagine an organization where youth gain **competence** in bullying prevention strategies, **confidence** enough to be more than a bystander—to be a leader that has **character** and **compassion** that leads to bullying prevention. Being in an inclusive Positive Youth Development organization that focuses on inclusion will help youth **connect** with those different from them, igniting the passion for **contribution** in creating a kinder, braver world.

Bullying Prevention Programs and LGBTQ Youth

Youth professionals and youth serving organizations can and are making a difference. Bullying prevention programs have now been in existence enough to have been rigorously evaluated and research on the issue of bullying prevention programs has exploded in the past decade (Allen, Roper & Lewis, 2012b). It is now clear that particular elements are needed to create a comprehensive bullying prevention program. In a recent comprehensive review of bullying prevention research, five critical components of bullying prevention programs were identified. (Allen, Roper & Lewis, 2012a). The 5 most critical elements in prevention programs include:
- **Multi-tiered prevention approaches**
- **Community-based, multi-environment prevention activities**
- **Involving families**
- **Integrating and sustaining prevention efforts**
- **Creating or fortifying programs with prevention components for vulnerable targets**

Although each of the these critical components can be found in many evidence based programs, there is a special need for information on how to fortify programs for audiences most likely to be targeted for bulling, including religious minorities, youth with disabilities, and LGBTQ youth (Allen, et al., 2013). Although all youth are at risk for being targets of bullying behaviors, children who are unique in one way or another within a peer group may be more vulnerable to bullying. Youth that are

"different" are most likely to be targeted and least likely to be specifically included in bully prevention efforts. Professionals need special training and information to address the most vulnerable youth (Bradshaw, Waasdorp, O'Brennan, & Gulemetova, 2011).

Ideally, youth organizations would implement bullying prevention programs that include interventions and examples based specifically on youth from vulnerable populations, yet in a comprehensive review of bullying prevention programs, Allen, Roper and Lewis (2012) found that only four curricula exist that address vulnerable populations. Of those, only one addresses the specific vulnerable population of LGBTQ youth.

An additional problem that has been identified is a need for training of adults on how to address bullying of LGBTQ youth. Youth professionals report feeling discomfort and a lack of information about how to intervene when the bullying behaviors are specific to groups most at risk for being targeted, such as LGBTQ youth (Bradshaw, Waasdorp, O'Brennan & Gulemetova, 2011). These youth need extra protection, but the youth organizations simply do not have adults in charge with the skills or comfort level to intervene.

Many evidence-based curricula provide an impact in preventing bullying behaviors in youth. However, there is a significant gap in youth organizations that address prevention components for LGBTQ youth. Now is the time for youth organizations to take a stand to address bullying behaviors for vulnerable youth. Although there is a deficit of curricula that address these vulnerable populations, there are promising practices and resources that youth professionals can use to help these youth.

Best practices in bullying prevention for Gay, Lesbian, Bisexual, Transgender and Questioning (LGBTQ) Youth

Youth organizations first need to help their employees understand the experience of vulnerable youth. Even without being a direct target of homophobic bullying, LGBTQ students report feeling isolated from friends and teachers because of the anti-gay attitudes and behaviors present in some organizations. A recent nationwide survey of LGBT youth reports that 84.6% of LGBT students reported being verbally harassed, and 40.1% reported being physically assaulted at school in the past year because of their sexual orientation (Kosciw, Greytak, Diaz & Bartkiewicz, 2010). Furthermore, LGBTQ frequently hear homophobic remarks in school, such as "faggot," "dyke," or "queer" from students, faculty or school staff. These acts of bullying, and in some cases acts of harassment, are harmful and cause a variety of risk factors for youth.

There are steps that youth serving organizations can take to help all youth live in a kinder and braver environment. The first step in creating a more inclusive environment is to create a formal policy in which any and all incidents of harassment or bullying are documented and parents are notified. Too often, families learn of bullying incidents well after they occur. Youth often feel hesitant to tell their parents about incidents of bullying. Clear policies and procedures are important for students, as their families may not otherwise become aware of incidents. Reporting requirements should be part of a universal policy because part of the nature of bullying is that a youth that has been targeted for bullying may blame him or her self or be too ashamed to report what happened.

Equally important is to teach youth to respect others without judgment. Children can begin to learn at an early age to resist bias and to value the differences and similarities between people. The Office for Civil Rights (OCR) and the Department of Justice (DOJ) have made a public effort to share that bullying may also be considered harassment when it is based on a student's race, color, national origin, sex, disability, or religion. Youth leaders should make sure all youth in their care understand that harassing behaviors may include:

- Unwelcome conduct such as verbal abuse, name-calling, epithets, or slurs
- Graphic or written statements
- Threats
- Physical assault
- Other conduct that may be physically threatening, harmful, or humiliating

GLSEN (Gay, Lesbian and Straight Education Network), a leading national education organization focused on ensuring safe schools for all students, recommends four approaches to address bullying behaviors specifically directed at LGBTQ youth based on the work of Russell, Kosciw, Horn and Saewyc (2010).

1. Youth organizations must create bullying prevention policies and procedures that specifically include language about LGBTQ youth. Research shows that youth organizations with such policies are better for LGBTQ youth. When youth are in an environment with a clear anti-LGBTQ policy, they experience fewer homophobic remarks, lower levels of harassment and assault and ultimately, they had fewer suicidal attempts (Goodenow, Szalacha, & Westheimer, 2006; Kosciw, et al., 2010).
2. Train all adults that have contact with youth (youth leaders, teachers, bus drivers, parent volunteers, etc) on how to intervene when homophobic teasing or harassment occurs. Again, research shows that students feel safer when the adults in their environment intervene to stop harassment (O'Shaughnessy, Russell, Heck, Calhoun, & Laub, 2004). Youth professionals are much more likely to intervene if they have had training specifically on LGBTQ bullying prevention (Greytak, & Kosciw, 2010).
3. Create youth organized-based support groups or clubs (e.g., gay-straight alliances (GSAs). Youth in organizations with GSAs were more supportive and LGBTQ youth reported fewer sexuality related insults. GSA were also related to school attendance; youth were less likely to miss school because of feeling unsafe (Kosciw, et al., 2008). This step also fits well with the five Cs of positive youth development; students that participate in GSA groups gain competence, confidence, connection, character & compassion. Building gay/straight relationships is critical as heterosexual youth that report having a homosexual friend were less likely to tolerate unfair treatment toward LGBTQ peers (Heinze, & Horn, 2009).
4. Include LGBTQ role models and examples in training and instruction resources for adults and youth. Research shows that youth feel safer when they know where to get information and resources for LGBTQ or when they know who they can talk to about these issues (O'Shaughnessy, et al., 2004).

Additional programs, networks, and resources:

The research and resources for programs for building inclusive environments for LGBTQ youth are growing. These following websites can be used to gain more information about working with and serving LGBTQ youth.

- Welcoming Schools ⊡ is a program for administrators, educators, and parents/guardians who want to strengthen their organization's approach to family diversity, gender stereotyping and bullying, and help prepare this and future generations of children to live in an increasingly diverse society.

- **COLAG⊡E** is a national movement of children, youth, and adults with one or more LGBTQ parent/s to promote social justice through youth empowerment, leadership development, education, and advocacy.

- **Gay, Lesbian and Straight Education Network (GLSEN)** ⬚ seeks to develop school climates where difference is valued for the positive contribution it makes to create a more vibrant and diverse community.

- **It Gets Better Project** ⬚ - is an Internet-based project which works to prevent suicide among LGBTQ youth by having gay adults convey the message that these teens' lives will improve.

- **Matthew Shepard Foundation** offers varied educational, outreach and, advocacy programs.

- **Parents, Families and Friends of Lesbians and Gays (PFLAG)** ⬚ is a national grassroots program with resources for supporters of LGBTQ youth.

- **The Trevor Project** ⬚ provides crisis intervention and suicide prevention services to lesbian, gay, bisexual, transgender, and questioning youth.

- **Kids Included Together (KIT)** provides best practices for inclusion trainings for youth organizations

Implications

Youth development organizations have a rich history of providing positive youth development programs that benefit youth. However, recently there has been some debate in the press about inclusion of LGBTQ youth and adults in youth programming. If youth development organizations are going to support youth, they need to have policies and procedures in place for all youth, especially youth most vulnerable for negative experiences. Youth professions need to familiarize themselves with the laws and policies of student non-discrimination in their state. Many states have policies that specifically prohibit discrimination on the basis of sexual orientation.

Creating inclusive environments for vulnerable youth help in the protection of all youth from bullying and harassment (Russell, Horn, Kosciw, & Saewyc, 2010). Taking steps to ensure that youth are safe will require time, effort and training. Many adults report that they have limited knowledge or experience with preventing or intervening on bullying issues for specific audiences such as LGBTQ youth (Bradshaw, Waasdorp, O'Brennan, & Gulemetova, 2011), but there are resources available to help train staff and students so that they can work together to create a safe environment (Allen, Lewis, & Roper, 2012b). Inclusive policies help create supportive environments, which helps build youth wellbeing. In essence, creating bullying prevention programs that are specifically inclusive of LGBTQ youth will foster positive youth development for all youth.

Conclusion

Youth Development organization are great for kids; they act as protective factors for a whole host of negative risk behaviors, yet there is a deficit of information and resources specifically for working with LGBTQ youth. Youth development professionals can and must work together to help reduce bullying against LGBTQ communities, but they first need promising practices to do so. In order to create safe and inclusive environments for LGBTQ youth, organizations must have policies and procedures, training for adults and youth, and supportive groups for youth. Inclusion of LGBTQ youth and resources are important for the youth and adults. With the inclusion of efforts outlined in this paper, youth serving organizations can go one step further, and can be the difference for all youth, including LGBTQ youth.

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Intergenerational Service Learning Program Improves Aging Knowledge and Expectations and Reduces Ageism in Younger Adults

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Intergenerational Service Learning Program Improves Aging Knowledge and Expectations and Reduces Ageism in Younger Adults

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Abstract: This article discusses a study which evaluated the effects of an intergenerational service-learning exergaming program for older adults on younger adults' aging knowledge, expectations, and perceptions. Eighteen college students (ages 19-26 years) served as trainers for an 8-week exergaming physical activity program for older adults (12 contact hours). Questionnaires assessing aging knowledge, ageist attitudes and aging expectations were completed at Weeks 1, 8, and 25 (follow-up); program evaluations were completed at Weeks 8 and 25. Significant improvement from Week 1 to Week 25 was found for: Aging knowledge scores ($p<0.03$), positive aging expectations regarding mental health ($p<.02$), positive aging expectations regarding cognitive health ($p=.043$), overall aging expectations ($p<.05$), ageism (stereotypes) ($p<.02$) and ageism (separation) ($p=.000$). All trainers ranked their experience as "good to excellent." This intergenerational service learning program is effective in improving aging knowledge, expectations and perceptions.

Introduction

"Ageism" is a multi-faceted problem that perpetuates negative stereotypes toward older adults through actions, attitudes and beliefs (Butler, 1969; Palmore, 1999). Ageism can stem from a lack of knowledge about aging, limited contact with older adults, and fear of aging, leading to distancing oneself from older adults (Ory, Hoffman, Hawkins, Sanner, & Mockenhaupt, 2003). The awareness of ageism alone, without education or programming, does not affect reductions in this form of discrimination (Schwalb, & Sedlacek, 1990). Providing opportunities for younger adults to engage in meaningful intergenerational interactions which allow them to learn about aging and develop positive attitudes toward the aging process can contribute significantly to reducing ageism. One means of doing this is through intergenerational service-learning programs.

Service learning programs provide younger adults with the opportunity to apply what they have learned in an "academic setting" to a "real world setting." Service learning differs from traditional community-based volunteering opportunities in that it is intended to foster younger adult learning while meeting the service needs of a community via blending learning and hands-on experience (Karasik, & Wallingford, 2007; Long, Larsen, Hussey, & Travis, 2001).

Intergenerational programs allow both generations to build personal relationships and learn new skills through interactions with each other (Kaplan, Liu, & Radhakrishna, 2003). Younger adults, when given the chance to interact with older adults, have a sense of purpose in what they are doing, feel more like they belong, and perform better in school than peers who have limited to no interaction with older adults (Butts, & Chana, 2007). Thus intergenerational programs can be an effective strategy to sensitize younger adults to their attitudes regarding aging and to promote better understanding about the aging process.

The purpose of this pilot study was to evaluate the effects of the Living (well through) Intergenerational Fitness and Exercise (LIFE) Program, an intergenerational service-learning exergaming-based physical activity program for older adults, on younger adults' aging knowledge and expectations, and ageist viewpoints.

Methods

Program Design. The LIFE Program, a service learning intergenerational program designed to be delivered through Extension, uses a reverse intergenerational approach wherein the younger adults (trainers) took on the role of "mentor" rather than a "mentee."

The theoretical base for the LIFE Program is the Whole Person Wellness Model which is comprised of six wellness dimensions encompassing holistic health including physical, emotional, spiritual, intellectual, vocational, and social wellness (Montague, Piazza, Peters, Eippert, & Poggiali, 2002). The wellness dimensions applicable to the LIFE Program trainers were:
- Social wellness, stresses the development and maintenance of healthy relationships;
- Intellectual wellness, encourages the use of one's mind to form a better appreciation and understanding of oneself and others;
- Emotional wellness, encompasses awareness and recognition of one's feelings and reveals the degree to which individuals feel optimistic and excited about themselves and life;
- Vocational wellness, highlights the process of defining and attaining personal and professional interest through meaningful activities (Montague, et al., 2002).

Prior to serving as a LIFE Program trainer, all trainers participated in an eight-hour workshop where they were taught myths and facts about aging, learned how to facilitate interactive games, received safety training for older adult physical activity and first aid training, and took part in a Wii[®] practicum.

The LIFE Program took place over a 24-week period at five congregate meal sites and two low-income senior apartment buildings in rural towns in central Iowa (Table 1). Trainers facilitated the eight week onsite exergaming program where they had approximately 12 hours of contact time (1.5 hours/week x 8 weeks) with older adults (participants). During this time, trainers established a relationship with participants by their personal interactions during the exergaming sessions and learning more about the participants during the interactive games.

Table 1

LIFE Program Description

Program Component	Description	Wellness Dimension

Onsite Program (8 Weeks)	**Exergaming Intervention (60 minutes weekly)**
	• Led by trainers
	  o offered participants encouragement during the exergaming activities
	  o demonstrated correct ways to perform activity as needed
	  o watched for any potential safety issues related to the participants
	• Low impact, age-appropriate Wii® EA Active activities (e.g. aerobic, strength training, and fundamental of sports (e.g., basketball) activities
	• Met twice weekly for 8 weeks
	
	Interactive Games Component (30 minutes weekly)
	• Facilitated by trainers
	• Designed to enhance communication between participants and trainers through team building, storytelling, and problem-solving activities.
	
	Training of Onsite Leaders
	• Led by trainers
	• Sustainable feature of the LIFE Program
	• Trainers encouraged the more "outgoing" older adult participants to take a leadership role after the eight week onsite program
	• Trainers provided up to 6 hours of in-person training to onsite leaders
	
	General
	• Attendance recorded daily
	• Research team members were onsite for data collection and to observe trainers for first four to six sessions
	• Trainers assisted with fitness assessment (received training)
	• Pre and post assessments completed at Weeks 1 and 8.
		• Physical (participants only)
		• Intellectual
		• Social
		• Emotional
		• Vocational

Newsletter Intervention(16 weeks) *Trainers not involved*	• Participants received eight wellness newsletters (4 physical wellness, 4 social and emotional wellness) • Onsite leaders continued exergaming component of the LIFE Program **General:** • Follow-up assessments were conducted at Week 25	• Physical • Social • Emotional • Intellectual

Recruitment. High school and college students were recruited using convenience sampling methods including e-mails sent to university student list-serves, word of mouth, flyers, and in-person presentations (e.g. 4-H meetings, youth groups). Eighteen students (ages 19-26 years) volunteered to serve as trainers with the majority being undergraduate females who had occasional contact with older adults. Participants were community-residing older adults (age 60+); these data have been reported elsewhere (Strand, Francis, Margrett, Franke, & Petersen, in press). Each LIFE Program site had 3-17 participants with 2-3 trainers. The study protocol was approved by the university's Institutional Review Board. All trainers signed informed consent.

Program Evaluation. Trainers completed a questionnaire during Week 1 (start of the workshop), Week 8 (last day of the onsite program), and Week 25 (sent via mail one week after the program closed), comprised of three valid and reliable survey tools. Aging knowledge (measure of intellectual wellness) was assessed using the Facts on Aging Quiz ($\alpha=0.15$) which is comprised of 25 multiple-choice aging-related questions (Harris, Changas, & Palmore, 1996).

Ageism (measure of social and intellectual wellness) was measured with the Fabroni Scale on Ageism (FSA) which uses a Likert-type scale ranging from 1 (strongly disagree) to 4 (strongly agree) (Rupp, Vodanovich, & Credé, 2005). The 29 questions contained in the FSA ($\alpha=0.86$) assessed both affective and cognitive aspects of ageism and has three subscales: stereotypes (10 items, $\alpha=0.79$), separation (8 items, $\alpha=0.76$), affective attitudes (5 items, $\alpha=0.70$) (Rupp, Vodanovich, & Credé, 2005). Aging separation refers to the tendency to avoid older adults, while affective attitudes refer to discrimination.

Aging expectations (measure of emotional wellness) were determined using the 12-item Expectations Regarding Aging (ERA-12) scale ($\alpha=0.89$) which measures expectations individuals have about how their health and cognitive function will be when they have become an older adult (Sarkisian, Steers, Hays, & Mangione, 2005). This tool examines four areas of aging expectations: (1) physical health, (2) mental health, (3) cognitive function, and (4) global expectations. Each score is based on a 100 range scale and was calculated using the ERA-12 scoring instructions (Sarkisian, Steers, Hays, & Mangione, 2005).

Trainers also completed qualitative evaluations at Weeks 8 and Week 25 regarding their experience (measure of vocational wellness). Most (n=11) also participated in focus group discussions about their LIFE Program experience (6 as part of a "trainers only" focus group and 5 as part of a "participants and trainers" focus group). Trainers who participated in the focus group discussions received a wellness journal for their participation.

Data Analysis. Data were analyzed using the Statistical Package for Social Science for Windows (SPSS for Windows, version 18.0, 2010). Demographic information and qualitative data were analyzed using descriptive statistics. Paired sample *t*-tests were used to assess changes in variables over time. Focus group discussions were transcribed by an independent transcriptionist and analyzed for common themes by the researchers per common practice (Krueger & Casey, 2009).

All trainers completed the LIFE Program (Table 2). The most frequently reported reasons for serving as a trainer were "interested in older adult wellness," (n=17) and it was a "fun way to volunteer" (n=16).

Table 2
Trainer Characteristics

CHARACTERISTIC	NUMBER[a]	PERCENT
Sex		
Male	1	5.6
Female	17	94.4
Age		
$\leq$ 20 years	4	22.2
21-25 years	13	72.2
$\geq$ 26 years	1	5.6
Ethnicity		
White	15	83.3
Asian	3	16.7
Year of School		
1st Year College	1	5.6
2nd Year College	1	5.6
3rd Year College	7	38.9
4th Year College	7	38.9
Graduate Student	2	11.1
Daily Contact with Older Adults		
Never	4	22.2
Occasionally	11	61.1
Several times per day	3	16.7
Lived with older adult relative in last 5 years		
Yes	5	27.8
No	13	72.2

Note: [a] Total number of trainers is 18

Improvement was detected in aging knowledge, aging expectations for mental and cognitive function, as well as overall aging expectations (total ERA-12 score) and ageism (stereotype and separation) as shown in Table 3.

Table 3

Change in Aging Knowledge, Aging Expectations, and Ageism

Measure (max score)	Week 1 Mean (±SD)	Week 8 Mean (±SD)	Week 25 Mean (±SD)
Aging Knowledge (25)[a]	10.78 ± 2.73	12.33 ± 1.55 p=.027[a]	13.39 ± 2.62 p=.010[b] p=.001[c]
Aging Expectations			
Physical Health (100)	49.07±22.49	52.78±21.39 p=.492[a]	55.56±20.01 p=.489[b] p=.240[c]
Mental Health (100)	81.48 ± 12.61	89.35 ± 10.91 p=.017[a]	91.20 ± 12.86 p=.481[b] p=.005[c]
Cognitive Function (100)	50.46 ± 15.25	58.33 ± 18.58 p=.043[b]	59.72 ± 20.39 p=.755[b] p=.071[c]
Total ERA-12 Score (100)	60.34 ± 5.17	62.96 ± 11.86 p=.046[a]	68.83 ± 14.18 p=.051[b] p=.021[c]
Ageism			
Stereotype (40)[d]	30.22 ± 3.88	32.67 ± 2.4 p=.016[a]	33.47 ± 2.4 p=.105[b] p=.000[c]
Separation(32)	26.44 ± 2.68	25.33 ± 1.81 p=.096[a]	27.17 ± 2.77 p=.108[b] p=.012[c]
Affective Attitudes (20)	10.53 ± .717	10.12 ± 1.27 p=.186[a]	10.39±1.61 p=.641[b] p=.881[c]

Note: [a] Change from Week 1 to Week 8; [b] Change from Week 8 to Week 25; [c] Change from Week 1 to Week 25; [d] Increased stereotype score reflects a decrease in the number of ageist stereotypes believed

Trainers' aging knowledge scores continuously increased Week 1 (10.78) through Week 25 (13.39) with all increases being statistically significant (p<0.03). Expectations about aging and mental health improved significantly between Weeks 1 and 8 (p=.017) and Weeks 1 and 25 (p=.005). A significant increase in expectations about aging and cognitive function was detected from Week 1 to Week 8 (p=.043). Total ERA-12 scores significantly increased from Week 1 to Week 8 (p=.046) and Week 25 (p=.021).

Significant improvements (p=.016) in ageism stereotype scores were detected (increased score reflects decreased ageism stereotypes) from Week 1 to Weeks 8 (p=.016) and 25 (p=.000). The reduction in ageism stereotypes is articulated well by a trainer who commented *"I got to understand the older generation a bit more."* The ageism separation scores significantly improved from Week 1 to Week 25 (p=.000). The increased desire to have contact with older adults is best illustrated by a trainer who stated *"[I enjoyed] being able to get to know the participants and watching their physical and emotional changes."*

All trainers ranked their experience as "good to excellent" at both Weeks 8 and 25 as noted by the statement "*I really enjoyed all the participants, and they seemed like they [the participants] enjoyed it as well.*" Approximately 72% (13 out of 18) of trainers reported positive changes in how they perceive older adults with one reporting "*I underestimated their social and physical capabilities.*" Some were surprised at how enjoyable and social older adults can be with younger adults, as indicated by statements such as "*They [participants] really do enjoy the younger generation trying to help them*" and "*There is so much to learn from them.*"

At Week 8, a majority (n=12 out of 18, 67%) reported that the most enjoyable aspect of the LIFE Program was getting to know the participants, interacting with them weekly, and seeing the participants' physical improvements. One trainer commented, "*It was interesting to see them [participants] improve themselves and they [participants] often told us they could do more and they had more energy to do things or be more motivated.*"

Sixteen weeks following the onsite program, nearly all trainers (n=15) still reported that interacting with the participants was their favorite program attribute. All conveyed they felt they got to know the older adults by participating in the LIFE Program. Most (n=14 out of 18, 78%) reported viewing older adults in a more positive light as a result of the LIFE Program at Week 8; this decreased slightly at Week 25 (n=13 out of 18, 72%). The remaining 4 and 5 trainers reported no change, respectively.

Discussion

These results suggest the LIFE Program was effective in improving aging knowledge and aging expectations among younger adults; however, the generalizability of these results is limited due to the small sample size and predominately female group of trainers. The LIFE Program was also effective at lowering the number of ageist stereotypes and the tendency for younger adults to remain separate from older adults. These changes were maintained and/or continued to improve up to four months after the initial intergenerational interaction. Thus, our findings suggest that weekly, meaningful interaction between older and younger adults of as little as 12 hours of contact time over an 8-week period can result in sustained improvements in younger adults' aging knowledge, expectations and perceptions.

In designing the service learning component of the LIFE Program, many of the programming attributes recommended by Karasik and Wallingford (2007) were included:
1. Locations were within a reasonable travel time from campus (maximum time was 20 minutes one-way) and were safe and easily accessible,
2. The selected activities (e.g. interactive games) were beneficial to both participants and trainers,
3. Trainers received comprehensive training that clearly stated the LIFE Program goals and objectives, and
4. Protocols were put in place to limit trainer confusion and frustration

Additionally, the regular interaction each trainer had with participants likely contributed to the changes detected. Dauenhauer, Steitz, Aponte, and Faria (2010) reported that students who had frequent contact with older adults showed greater improvement in select gerocompetencies than those with less contact time. By including these recommended programming attributes and the regular intergenerational contact, the likelihood of seeing measurable change due to the LIFE Program was enhanced.

Aging Knowledge. While the improvement noted for aging knowledge was significant, the change detected from Week 1 (43% correct) to Week 25 (52% correct) was small at about 9 percent. The

modest change detected in our sample is similar to Scott, Minichiello, and Browning (1998) who found that younger adults participating in an older adult education program increased knowledge, as measured by the Facts on Aging Quiz, by about two percent after a nine hour intervention that spanned over a three week time frame. The larger, albeit modest, knowledge change detected as a result of participating in the LIFE Program may be attributable to the 12 hours of total contact time the trainers had with the participants. Scott and others (1998) found the more time students spent with older adults, the higher their aging knowledge.

Aging Expectations. These results also suggest the LIFE Program is effective in increasing the number of positive aging expectations for cognitive function and mental health, and overall general aging expectations held by college students. The improvement seen at Weeks 8 and 25 suggest that the 12 hours of substantive intergenerational interaction was adequate to improve aging expectations and that these changes were maintained and/or continued to improve even after the weekly interaction ceased.

Promoting more positive aging expectations not only helps encourage better understanding of the aging process and older adults but can also lead to improved health of younger adults, since positive aging expectations can positively affect health and wellness through the lifespan (Roters, Logan, Meisner, & Baker, 2009). The change in aging expectations for this group may also be explained by the education the trainers received during the training workshop, since being uninformed about aging may contribute to negative aging expectations (Sarkisian, et al., 2005).

Ageism. Frequent exposure to older adults reduces negative feelings or resistance to working with older adults (Allen, et al., 2009). Thus, the regular interaction between the trainers and participants likely contributed to the change detected in ageism (i.e., stereotype and separation).

The additional eight hours of training trainers received prior to implementing the LIFE Program may also have contributed to the reduction in ageism. Education about aging myths and realities has been suggested as one means of reducing ageism (Ory, et al., 2003).

Furthermore, the reduction in ageism (stereotypes) could also be due, in part, to the gender of most of the trainers. In other intergenerational programs, gender has been shown to influence attitudes toward aging, with females, ages 17 to 18 years holding less negative aging attitudes than males of the same age (Scott, Minichiello, & Browning, 1998; Yilmaz, Kisa, & Zyenelo, 2012). Similarly, in a study conducted by Kalavar (2010) ageism scores showed male college students displaying more negative attitudes than female college students.

Finally, the reduction detected in ageism for stereotypes may have been influenced by the LIFE Program's emphasis on physical activity. Ory and colleagues (2003) noted that one way to combat aging stereotypes was to provide networks for intergenerational interactions, in particular, recreational and fitness activities, which is what the LIFE Program did.

Conclusions

This pilot study demonstrated that the LIFE Program can be a successful strategy in increasing younger adults' aging knowledge and improving aging expectations while reducing ageist views. By implementing an intergenerational service learning program like the LIFE Program (program website address to be placed here after blinded review) through community organizations like Extension, the occurrence of ageism may decrease in younger adults, leading to more supportive and positive age-supporting behaviors toward themselves and others.

Key Messages for Youth Development Professionals

Based on the findings from the LIFE Program pilot study, when designing and implementing an intergenerational service-learning program that leads to increased aging knowledge, improved aging expectations, and reduced ageism in younger adults it is important to:

- Provide comprehensive training prior to the intergenerational program for the younger adults that discusses myths and realities about aging.
- Develop structured activities that promote meaningful intergenerational interaction and dialog.
- Allow for adequate intergenerational interaction time and program duration in order to facilitate positive relationship building between both younger and older adults.

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Effective, Efficient Online Training in Cooperative Extension

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Effective, Efficient Online Training in Cooperative Extension

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Abstract: In order to keep pace with media and communications trends in education, Cooperative Extension (CE) faces the need to shift from traditional face-to-face delivery to online alternatives. This exploratory study focused on evaluating the effectiveness of on-demand, interactive online training compared to its face-to-face counterpart. Targeted for CE staff and volunteers whose work impacts youth, families and communities, the design centered on the university's cost-effective in-house technology tools. The study results make the case for online delivery as effective and efficient. Strategies for developing a process for online delivery in CE are also offered.

Introduction

Technology is quickly changing the way the world communicates and accesses information. At the same time, the economy has shifted to one of significantly reduced resources for informal as well as formal education and outreach. As a result, organizations are tasked to become more efficient and effective as a standard rather than as an option. In response to the challenge for Cooperative Extension to keep pace with trends, work with less, reach new audiences, and remain relevant, this study integrated research, extension, and technology to explore online communications as an alternative for in-person programming. The study centered on the development of a web-based format using cost-effective internal resources, and comparing the effectiveness of the delivery to its traditional face-to-face, onsite counterpart. Outcomes support the online delivery as effective and efficient. The study resulted in a prototype for web-based delivery, with strategies that may enhance any type of online programming.

Background

The increased accessibility of information has caused a rapid change from experts providing information to people finding it for themselves. In addition, momentum for online education alternatives to classroom-based instruction has been building for the past few decades. Research on

online learning represents broad findings, the empirical literature is mixed, and at least two meta-analyses have concluded that there are few significant differences in academic outcomes between online and classroom education (e.g., Bernard, et al., 2004; U.S. Department of Education, 2010). This research has helped dispel the myth that online education is inferior to in-person education. Some studies of college courses support instructional structure as more significant than the delivery, and that similar controls with content, assessments, and demographics support reduces the variation between deliveries (Driscoll, 2012).

As a result of social, technological, and economic trends, Cooperative Extension has been confronted with re-identifying its role in this new distribution of knowledge (Seger, 2011). A major challenge for Cooperative Extension is advancing programming beyond its tradition of face-to-face interactions with clientele (Diem, Hino, Martin, & Meisenbach, 2011). Though Extension studies on online program delivery have been limited in size and scope, information has been collected that supports the common conception that younger people use technology more (Guenthner, & Swan, 2011). There have been studies with selective factors, such as recruitment targeted for clientele who sought online learning (Kaslon, Lodl, & Greve, 2005), and surveying clientele on their use of online resources for information (Stevenson, et al., 2011). In some cases, substantial funding to employ the services of experts was used to develop and test online sites (Zamora, et al., 2012). To expect Extension to stay ahead may be unrealistic, but an inevitable balance is needed between satisfying traditional clientele who prefer face-to-face interaction, with reaching out to new and future clientele online (Seger, 2011). What sets this study apart from others is its application of internal Cooperative Extension staff resources to pilot online delivery of a traditional face-to-face training. The result is a cost-effective and efficient alternative for staff and volunteer programming.

Method

The study centered on the development of a web-based, on-demand training program using internal management technology tools in combination with those publicly available. Tools developed by the university include a content management system for website design, and a survey tool for pre- and post-quizzes and evaluation. University contracted software included: Camtasia Relay and Adobe Presenter for recording narrated visuals. Common software included: PowerPoint for presentations, MP4 for video, and Word and PDF for downloadable worksheets and handouts.

Developed by nutrition education academics, the food safety education curriculum known as *Make It Safe, Keep It Safe* was identified as the subject topic. This selection was based on the curriculum's history of consistent content and onsite delivery for internal staff and volunteer training. In addition, food safety education is a common healthy living theme for youth, families and communities.

There were three phases to the study. Phase one was comprised of a series of onsite trainings with an updated version of the curriculum. Evaluation tools were developed for knowledge and delivery. In phase two, a parallel online version of the onsite training was developed, integrating a variety of technology tools. The approach applied considered site design, key concepts reflected in the quizzes, interactive components, diversity in visual images, and offline capabilities. In phase three, the site was field-tested with a sample of staff and volunteers, followed by piloting of an improved version with a cross-section of statewide participants. The result was a prototype site, with strategies for site development.

Both onsite and online trainings were open to all counties, with recruitment for a cross-representation that included the different regions of the state, and both rural and urban counties. Participants were staff, 4-H adult and teen volunteers, and master gardener volunteers that were required to meet an

internal training requirement during the pilot period. Participants for both deliveries were primarily White female. Half of the adult participants had less than four years of volunteer service.

The training site layout was designed with units structured as sequential lesson modules that can function as stand-alone as well as complementary components. For the core concepts, PowerPoint was selected for its familiar and prominent use in Extension (Johnson, 2011). The concepts were supported by interactive components including videos, online recordings, web links, and surveys.

Evaluation

For both onsite and online trainings, identical tools were used to gather participant knowledge and process opinions. Only data from adult participants were reported.

To assess knowledge gain, pre- and post-quizzes containing 11 multiple choice questions were administered. The instrument, "Food Safety Knowledge Quiz," was developed by Cooperative Extension food safety experts. Questions were scored dichotomously as either "correct" (1 point) or "incorrect" (0 points), and then summed for a final participant score. To collect process-related opinions, participants rated ten items on a five-point Likert scale ("Process"), plus responded to three open-ended questions on how the information acquired would be used. Due to the limitations of the technology, online participants could not be required to take the pre-test or evaluation in order to complete the training, resulting in lower response rates.

Results

Knowledge Outcomes

Participants improved their knowledge in both conditions calculated using a paired t-test of the means between pre and post-tests. The onsite pre-test mean was 9.0 (1.17 SD) and post-test mean was 10.4 (0.79 SD), demonstrating a statistically significant increase (n=39, $p<.001$) in knowledge gained from pre to post on the Food Safety Knowledge Quiz. The online pre-test mean was 9.3 (1.20 SD) and post-test mean was 10.9 (0.34 SD) which was also a statistically significant improvement (n=32, $p<.001$). An independent t-test of the post-test means between onsite and online revealed a significant difference ($p<.002$). This indicates that the online participants, on average, performed better on the post-test quiz than those in the face-to-face condition. (See Table 1)

Table 1

Pre/post Food Safety Knowledge Quiz results of percentage of questions answered correctly

Questions 1-2 and 5-11 Multiple choice with four answer choices	Face-to-Face (n=39)		Online (n=32)	
	Pre-Test	Post-Test	Pre-Test	Post-Test
1. What is the most common cause of foodborne illness?	100%	100%	96.8%	93.6%
2. Which group is the highest risk for foodborne illness?	100%	97.4%	93.6%	100%
3. True or False: Hand washing is the most effective way to stop the spread of illness.	89.7%	100%	100%	100%
4. Are chemical sanitizers an acceptable replacement for hand washing?	71.8%	94.9%	76.9%	100%
5. What is an example of cross-contamination that is high-risk for leading to foodborne illness?	97.4%	94.9%	93.6%	100%
6. What is the most accurate way to determine if food is adequately cooked?	97.4%	100%	93.6%	100%
7. Food should be chilled to reduce the speed of bacteria growth. What is the recommendation for the maximum time perishable food should be at room temperature (under 90F) before refrigeration?	53.9%	89.7%	51.6%	93.6%
8. What is the recommended safest and fastest way to chill large containers of food?	33.3%	69.2%	51.6%	100%
9. What is the safest way to thaw food?	92.3%	92.3%	90.3%	100%
10. What is the recommended temperature for the refrigerator?	84.6%	100%	96.8%	100%
11. To what temperature should leftovers be reheated?	74.4%	100%	80.7%	100%
Mean Correct Answers	81.4%	94.4%	84.1%	98.8%

Process Outcomes
Participant responses to the online format were very positive. Though the scores for the face-to-face delivery were higher, the scores for the online format were still very good. (See Charts 1 and 2) When considering issues of training-related expenses, in contrast to onsite delivery, the online format afforded significant savings in expenses to administer.

Chart 1
Adult participant opinions on information and delivery based on Likert rating scale.
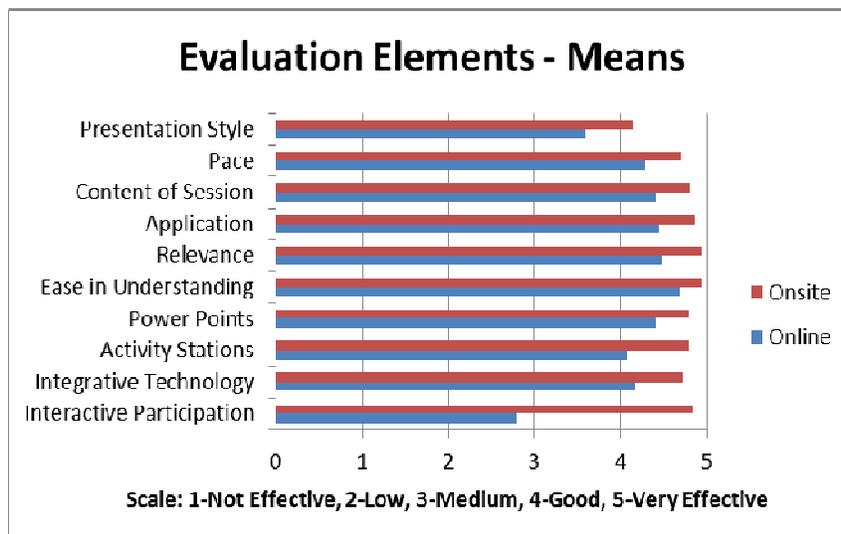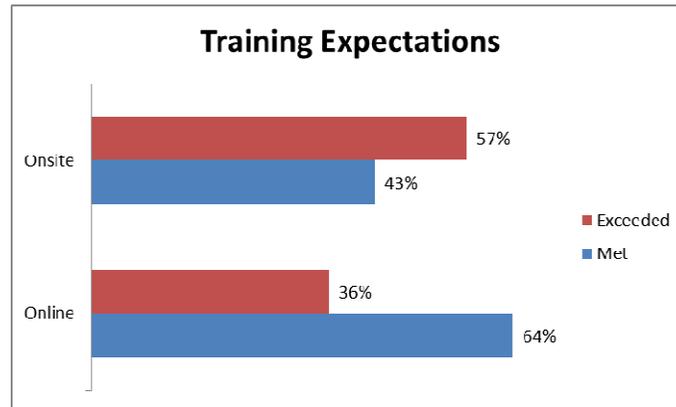
Chart 2
Training expectations for online and onsite participants

Discussion

Overall, data from the online training indicated that the delivery was effective and efficient. Participant feedback indicated that the information gained along with the option of an online format would be very beneficial for volunteers' program work.

In the twelve-month period following the conclusion of the pilot, three actions demonstrate the success of the project:

1. The pilot was represented by eleven counties. Since the completion of that study, 210 additional participants representing seven additional counties have taken the online training. These participants were comprised of 14% staff, 79% volunteers, and 7% others.

2. Cooperative Extension's Nutrition, Family & Consumer Science (NFCS) program is currently conducting a research project that builds upon and expands the pilot prototype. The new project is bilingual English/Spanish, and extends its reach to a broader audience that includes NFCS program clientele and the public.

3. Staff and volunteers continue to build their own tech capacity both as site developers and as training participants. The knowledge and skills acquired are transferrable to other training sites.

Conclusion

The key conclusion of the study is that online delivery is an effective and efficient delivery for staff and volunteer development. The study identified a process resulting in a prototype, one that combined the joint efforts of staff in subject content, policy, training and certification, and technology.

Though more research needs to be conducted on the topic of online delivery as an alternative for in-person programming, there are some strategies that can be taken from this pilot study for future consideration:

1. A framework that includes the following elements: target audience, tech requirements, data collection, desired outcomes, scoring, evaluation, and roles.

2. Site design that is easy to navigate and allows re-entry, and includes an introductory section with visual illustrations on how to use the site.

3. Pre- and post-knowledge quizzes to help participants to focus on key concepts during the training.

4. Interactive as well as view-only components, integrating observation, interpretation, prediction, problem-solving, and comparing.

5. Images and voices of staff, volunteers and teens that mirror face-to-face sessions, to lend authenticity as well as diversity.

6. Additional resources, such as web links, for supplemental and expanded learning.

7. Offline versions of all training components for use by trainers and/or participants in non-connected settings.

Participant feedback indicates clientele are positioned to receiving increased training through online formats, and can be active participants in the learning process. This study supports the case for staff adaptation and adoption for online training as one of an investment for the future.

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4-H and 4-H Members in Motion Pictures

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4-H and 4-H Members in Motion Pictures

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Abstract: Youth involved in Extension activities were portrayed on film as early as 1913. This paper provides a summary of the earliest motion pictures in which 4-H and 4-H members were a part. From the more than 400 early Extension films made by USDA, 22 4-H films were located and described. Hollywood films, with 4-H themes, were found. Reflections on film preservation and availability are addressed as well as the role of film and other media in the early twentieth century.

Introduction

It is difficult to think of anything that has changed more than media—at least in the last 70 years. Though radio had been popular with Cooperative Extension audiences since the 1926 (USDA) Aunt Sammy series, it was 1940 when Murphy conducted the first study on the use of radio in the 4-H program. Phonographic records were sent to the news media as public service announcements for national 4-H events in the 40s, 50s and 60s. Celebrities, such as Bob Hope and Donna Reed, provided endorsements.

Early 4-H songs were also "on vinyl." *A Place in the Sun,* composed by the famous orchestra leader Fred Waring (1950) for the 4-H Clubs of America, was one of many.

Television, as educational media, was studied in the 50s and 60s in conjunction with 4-H projects (Fanning, 1959; Woolman, 1967) and other Extension bulletins (Coolican, 1960; Eyestone, 1966). Educational media specifically designed for minority audiences was investigated by Pinnock (1964) and Koleade (1985). In the 1970s, USDA produced *Mulligan Stew*. This six-part series taught nutrition education in schools and was evaluated (Nolan, 1970; Shapiro, 1974) as were other educational 4-H television programs in Michigan (Deutschmann, & McNelly, 1958); Oklahoma (Godard, 1969); Wisconsin (Thompson, 1970), and Minnesota (Olien, Tichenor, & Donohue, 1972 & 1975).

About the same time, slide and cassette tape productions were used for presentations (Carey, 1967; Davis, 1979; Gale, 1984; Lotz 1974; Mortvedt, & Fain, 1978; Watson, 1975) and promotion (Cox,1983; Gehrs, 1982). Video tapes were also developed for 4-H use and evaluated in the late 1980s (Barkman, 1989 & 1991; Hall, 1988).

Computers were used to create software used to train 4-H volunteer leaders and staff (Coleman, 1986; Courson, 1999; Doebler, 1988; Ghods, 1979; Goode, 1990; Martin, 1998; Sexton, 2000) and develop 4-H curricula (Bakalar, 1985; Barkley, 1992; Duffey, 1985; Scholl, 1993, 1994, 2003; Vigna, Fairchild, & Donaldson-Fassett, 2006). The years, starting with 2000, involved 4-H staff and researchers and the use of CDs (Bryant, 2004), news (Boyd, 2010) and social media (Bowen, 2012; Sorenson, 2011; Zammit, 2012).

One of the few areas that have not been studied are the early films involving agricultural youth that were created by USDA and the Hollywood. As many people are interested in historical events and the historical background of the 4-H program, this study was conducted to locate and document these motion pictures.

Objectives

The purpose of this study was to locate the earliest Extension films (1900-1950) about 4-H youth in order to study the messages portrayed to 4-H members and the film production techniques that were used to depict these messages.

The second purpose of the study was to describe similar Hollywood films, comparing these with the early USDA/Extension developed films.

Methods

More than 400 Extension films were found in the National Archives (Archives II, College Park, MD) and the Library of Congress film libraries. These include a few created by the University of Georgia during the 1950s and 1960s. A total of 22 films contained content about 4-H members. These silent, black and white (1913-1935) and color films (1940-1970s) were duplicated on VHS tape. Reports and other printed documentation about the films were found in archive collections. Some films were borrowed from a private collection for the study.

The films were investigated using techniques for "eyewitnessing" as outlined in Burke (2001) and Hunt (2010), qualitative methods as described in Berg (2009), and content analysis (Krippendorff, 2004). Three reviewers studied films and noted their impressions. The films were reviewed between three and ten times depending on the content, length of the film, and the need for clarification.

Documentation was noted regarding:
    (1) when the films were made,
    (2) the location and aspects of film production,
    (3) projects and activities that youth participated in,
    (4) social contexts and attitudes portrayed by the youth, and
    (5) film techniques used by the producers.

Documentation was sought to describe historical references to the films and any interest expressed by those watching them.

Though most of the early 4-H films were produced in the 1920s, the earliest (available for review) was completed in 1913. *Helping the Farmer of Tomorrow* shows state agricultural prize winners touring Washington DC, evidently as an award trip for work completed in their communities. There are scenes of young people receiving diplomas from the U.S. Secretary of Agriculture, James Wilson, and tours of Union Station, Continental Hall, The Pan American Union, The White House, and National Zoo.

In the 1910s, several Extension and 4-H program leaders petitioned the film department to make educational films. Proposals were submitted by O.H. Benson over a number of years. The former Iowa superintendent of schools (1906), credited with the 4-H clover, was one of the first program leaders for boys and girls clubs (early 4-H work). In his teens, he had saved the family farm by selling fresh and canned foods and, later wrote many Extension bulletins for USDA on canning. He felt the media could show appropriate techniques to women and youth to supplement the more time consuming and costly practices of demonstration travel on trains and the movable school. Film was also less cumbersome and breakable than lantern slides, another early technology.

Because of the numerous cases of food poisoning in the news and the continued threat of illness and death, *Cured by Canning* (1920) was produced. This film shows the methods of food preservation taught to mothers and daughters in Glenwood, Kansas through the formation of Extension canning clubs. The film emphasized the economy and nutritional value of home canned fruits, vegetables and meat.

In the early 1920s, camping was depicted in the films, *Club Champions at Camp Vail* (1920) and *The 4-H Camp for Boys and Girls* (1921). Many have never heard of Camp Vail. It was a multi-state camp, located in Massachusetts, for the purpose of youth displaying their knowledge through demonstrations, judging, and exhibits. Youth from ten Mid-Atlantic states gave canning and poultry demonstrations at this camp and judged sewing and livestock. The young people also took part in calisthenics, social activities, and wrote letters home. They answered reveille, ate breakfast, and washed dishes. In the mess hall, they chanted:

> "Soupie, soupie, soupie, without a string bean
> Coffee, coffee, coffee the worst I've ever seen,
> Meatie, meatie, meatie without a streak of lean."

The 4-H Club Camp for Boys and Girls (1921) showed a day's club activities, beginning with reveille, calisthenics, eating breakfast, making beds and constructing a stage. The youth rehearsed a pageant symbolizing the ideals of the 4-H program. In the film, *Bill Jones Champion,* (1922) calisthenics and attendance at lectures, horse races, and livestock shows were the primary activities.

Young people arriving on the Washington State and University of Idaho campuses were involved in sewing, judging, and other activities in *Club, College, Farm and Home* (1927). Livestock and corn judging, bee keeping, poultry husbandry, butter making and sewing classes were taught at Louisiana State University's *The Short Course* (1925) and in *A Crop Worth Saving* (1925), the Louisiana 4-H members showed livestock and garden produce, and attended corn and livestock exhibitions. The main theme of this film was to save the crop of young people for farming and homemaking.

Promotional Films

Much like *Helping the Farmer of Tomorrow* (1913), there were films in the 1920s that seemed to reinforce the notion: "Do a good job and you will see famous places and people." 4-H members in *Seeing Washington* (1924) visit the Lincoln and Jefferson Memorials, the Red Cross Building, and the Smithsonian. In *Carry On* (1930), participants ride in a flatbed, open-air wagon on Independence Avenue traveling toward the Capital. The film also takes the viewer to the top of the Washington Monument for aerial views of Washington, and then down again to visit the Library of Congress, Mount Vernon, the Smithsonian, Lincoln Memorial, and the Tomb of the Unknown Soldier at Arlington Cemetery. President Hoover delivers a short address to the members. In *Personages: Corbett, Hoover, Hyde and Pinchot* (1913-1929) Secretary of Agriculture Hyde and Mrs. Herbert Hoover "inspect" an early 4-H encampment on the National Mall.

The film, *Payne Fund Students Complete Course (1932)*, is the only known record of the first college graduates to participate in this year-long research experience in Washington, DC. It was also one of the first USDA films to incorporate sound.

Though many films focused on local, state and national programs, some had more educational goals. In *Good Posture Wins* (1931), a young girl improves her posture by exercise and self-awareness. Slow motion photography is used to show proper foot alignment while walking. In *Home Demonstration Work in the Western United States* (1934), an early style show is well supported by community attendance and applause. Unlike 4-H fashion revues of today, the girls literally, "twirl" across the stage.

Scenes of 4-H club meetings may be found in *Bill Jones Champion* (1922), *Secretary of Agriculture Wallace* (1924), *Good Posture Wins* (1931), and later, in *A Very Community* (1948).

Many of the films created in the 1940s and 50s, were 4-H project-oriented and some were produced with the aid of an company or corporation. These University of Georgia films depict projects for boys including: *Big Steaks* (circa 1950s), shows how a young boy raises a steer for his 4-H project. *Cotton Pickin' Money* (circa 1950s), follows a boy who raises and sells cotton, buying a used car and saving money for next year's seed and for college. Prize-winning pastures in various regions of Georgia were created by boys in *4-H Pastures* (circa 1950s). *Treasure Land* (circa 1950s) shows the inspirational nature of 4-H work. In addition to club activities and raising a calf, a young man performs neighborhood activities, such as cleaning the church grounds. The film, *4-H and the Insect World* shows extreme close-ups of insects (for identification) and how to spray fields with insecticide.

There were fewer films with "girls" work. In *Teen Togs* (sound/color/1944), the benefits of wardrobe planning and learning to sew are shared so teen girls "won't be staying home on a shelf." (The script rhymes throughout the film.)

4-H Films from Fiction

A few films portray 4-H members in fiction. *Under the 4-H Flag* (1929) was based on a children's book written by John Case. In the story, a tenant family tries to refurbish a dilapidated farm and 4-H members help the family overcome many obstacles. Similar situations stories were presented in Hollywood films.

Hollywood Films

Several films were created by Hollywood to show the value of 4-H. They often involved the National Committee on 4-H Boys and Girls Clubs staff as consultants. Some of the film stars attended national events where 4-H members were in attendance as preparation for their role. Jane Withers, for example, was reported to have attended the 1941 "Club Convention" in Washington. This film was credited to Secretary of Agriculture Claude R. Wickard and his associate, M. L. Wilson and dedicated to the "thousands of 4-H club leaders throughout the country…." A handful of films are significant because of their subject matter and the actors selected to play the 4-H members:

Young America (1942) was a film about a spoiled city girl, Jane Campbell (played by child actress, Jane Withers) who visits her aunt and uncle on the farm and ends up raising a champion steer. Through many difficult circumstances, she learns that friendship, not winning, is important. This plot is very similar to a picture created in 1961 by Universal Studios called *Tomboy and the Champ*. Both are focused on girls and livestock projects.

Green Promise (1949) was based on a story written by Monty F. Collins. Like, *Under the 4-H Flag* (1929), what is featured is the plight of farm families who move from place to place unaware or unable to employ proper crop management procedures to save the soil. In the opening scene, a family moves to a new farm after their previous land "blew away." The farmer father (played by Walter Brennan) is exceedingly ignorant of wise farming and forest practices.   He also refuses the aid of the county agent (touted by community members as the "doctor of agriculture and community problems") and is just as stubborn about his leash on family affairs, forcing his will through a pretense of the democratic process. The main story, however, is of his daughter, Susan Walters (played by Natalie Wood) who desperately wants to be a 4-H member so she can finally have something of her own. Susan becomes upset seeing how other children carry on successful projects while she is not allowed to participate. She tries to face the disappointment of her father's decision, but becomes so frustrated she tears up a project book. When her father is bedridden in a farm accident, her older sister and the Extension agent help Susan join the Millwood 4-H Club. Not to be missed is Susan's excitement at reciting the pledge at the club meeting and convincing the local banker to provide a loan for her lamb project. She learns that members "make their own luck."

Discussion

Unlike the Hollywood films, the early USDA films did not credit any of the actors except one young man named Lyman and an Extension specialist producer, Mignon Quaw (1917-1923).   Likewise it is interesting that Hollywood chose an actual 4-H member (from 11,000 applicants) Jeanne LaDuke from Indiana, to play the supporting youth role in *Green Promise*. As Jessie Wexford, she liked to make biscuits though her brother constantly teased her about them. She was involved in several scenes at the church, the fishing hole, and with "Caesar" her brother's prize bull. She wore a harem dress at the club's Halloween party and chided her brother with statements such as: "now you've done it" and "only a woman would understand."

The early USDA films are not unlike the silent, black and white films of early Hollywood. Some are documentaries or instructional films, but many are stories. The films demonstrate how much recreation and exercise were a part of club meetings and camps. The focus of the camp competitions was to show innovative ideas and personal improvement, not so much on "winning." In several films, the "winner" allows the recognition to be given to another member who has been struggling to improve themselves. Camaraderie and teamwork were depicted in many club, camp, and skit scenes.

As a historical reference, the USDA films were developed at the same time Hollywood films featured Mary Pickford, Charlie Chaplin and other early stars. Don Carlos Ellis (1919a & 1919b) coordinator of the film unit, wrote a series of articles about the motion picture activities at the U.S. Department of Agriculture. "The unit was quite progressive, experimenting with film use before World War I. It recognized the educational value of films in response to a strong demand from its Extension forces." At the time, more than a few filmmakers felt that motion pictures would become effective educational tools for civilian as well as military audiences (Blanchard, 1919; Fleming, 1911).

In a series of trials by Ellis (1919a) and his staff, it was decided that the films were especially effective in "awakening interest and encouraging the reading of publications and further investigations of subjects." Though certain types of films were found to be effective in teaching process and methods, it was felt that films were "merely to supplement and illustrate other methods of instruction (Ellis, 1919b)." For this reason, an array of bulletins and project materials was often shown at the end of the films.

There were some bulletins printed about the films that illustrate how films were shown: wired to a battery of a car outside the meeting room. In one of the films, a farm family receives a flyer in the mail and the family chooses to attend the film to give the children the experience of this new technology (regardless of the topic).

To our 21st century standards, the films stereotype "boy" and "girl" projects and emphasize traditional roles. Yet, the films also depict both boys and girls securing loans, saving money to support their projects, and selecting certain projects in order to attend college.   Older teens modeled skills so younger youth could be successful.

There is evidence that these films were very much in demand. Though no specific acknowledgement was made of the popularity of the youth-oriented films, the 250 titles available at USDA in 1930 were mailed out 11,000 times (Eisenhower, & Chew, 1930).

Probably the greatest endorsement of the early films was provided by Bernice Echols Grant, a Georgia 4-H pioneer, in a book written by her daughter (Echols, 1971).   She described the value of the early 4-H films this way:

> "Another beyond-description delight was a movie: silent, black and white, poor screen and dim light. The characters jumped and jerked across the stage. But how glorious! It is doubtful if any magnificent film in color and bedecked with Academy Awards has brought more joy to country youth of this generation than that experienced by these [youth] of over a half a century ago." (p. 23).

Reflections on Film Preservation and Availability

Though not directly part of the study, the author feels she must comment on the availability of the films as this is the primary question asked when the films are shown.

The films made by USDA were filmed in locations near the land-grant colleges and universities throughout the country. They were made available to Extension educators on loan. Currently, they are available in a film collection at the National Archives (Archives II, College Park, MD) and the National Ag Library. For patrons, the films may be dubbed from old Beta cassettes as the original films are in storage. These duplications are in very poor shape.

Even so, we also should be grateful, that these early films, unlike many others, were valued and saved so that we may still see them. As large a production as *Mulligan Stew* was, there are only a few copies of the film that still exist in U.S. libraries.

Even into the 1960s, the USDA and commercial films were loaned to 4-H leaders and articles were written about them in the *National 4-H News* (1923-1988) magazine. The National 4-H Preservation Committee is currently trying to locate originals and copies of these films. As media technology changes, it is a challenge to preserve film images that are copied and re-copied and put into new formats in various states of repair and disrepair.

To locate a copy for viewing, the film center of the National Archives II is located at 8601 Adelphi Road, College Park, MD. The Extension films are listed on-line in record group 33. The NAIL (National Archives Information Locator) may be searched at http://www.nara.gov/nara/nail.html. The Extension films are best viewed and dubbed on-site. Films may be ordered, but the process is time-consuming and expensive.

The Hollywood film, *Green Promise*, has been re-mastered and copies are available from internet auction sites and book sellers. The film, *Young America*, was found in a private collection.

Conclusion

All of the films reviewed here show how the 4-H program consistently encouraged youth to complete their project work, keep good records, seek opportunities for improvement, and help others. They showed how personal goals were achieved. They are as inspirational for those who know nothing about the 4-H program as for youth who have been enrolled for many years. With quality preservation, vigilance and care, these treasures may be preserved for years to come.

Since the early days, state 4-H programs have made motion pictures of club activities and events. Youth are currently participating in video contests (Krug, 2012). Many are using YouTube and iphones as a way to share short productions with their friends (Rozum, 2013). As media formats change rapidly, the challenge will be in preserving these sketches for the benefit of 4-H members in the future.

As *Bill Jones Champion* (1922) would say, "Keep On in Club Work!"

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A Collaborative Effort to Address Adolescent Obesity in Primary Care

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Abstract: Adolescent obesity is a growing national healthcare concern. Barriers to effective treatment, such as limited time for office visits and limited reimbursement for obesity counseling, leave both patient and practitioner feeling frustrated and unsupported. This article will discuss the adolescent weight management program, *Triple E: Eat, Exercise, and Enjoy.* This program was created in collaboration with a pediatric primary care practice, a local university, an affiliated pediatric practice within the health system, the local middle school, and the community. *Triple E* was developed, with minimal funding, to combat the adolescent obesity epidemic occurring in a primary care practice.

Introduction

As primary care providers, it is difficult to provide the multi-faceted, comprehensive care needed by obese and overweight youth in the fifteen or thirty minute time slot allotted for each patient visit. Holt et al. (2011), cite "lack of clinician time" as a barrier to obesity intervention (p. 16). With an increasing number of patients being too young for a factual discussion, parental involvement is paramount; however, Holt et al. (2011) also cite "lack of parental involvement" as a barrier (p. 16).

Practitioners can provide suggestions for healthy weight loss and provide hand-outs about sound nutrition and resources such as informational websites. They can discuss and treat some complications of obesity and ultimately make a referral to a nutritionist or weight management clinic. Patients are then sent on their way, unsupported, in their weight loss journey. These small interventions, performed in the primary care office, may be somewhat effective when the patient and the family are financially sound and have access to safe, reliable transportation, healthy food selections, and safe exercise space (such as a community center or local playground, park or gym).

The HSC Foundation (2007) found that safety is a major concern for African-American and Latino parents and that environmental barriers prohibit routine exercise.

In underserved areas where patients and their families have limited economic means, limited access to fresh produce and other healthy food choices, no family car and no access to a gym or safe place to exercise (due to violence in their neighborhoods or lack of such facilities), short office interventions have limited or no effectiveness (Alm, et al., 2008; HSC Foundation, 2007)

This ineffectiveness of current interventions is evident in studies of obesity rates among underserved youth. The National Center for Health Statistics reports the following obesity data on 2-19 year olds in the United States: Gender: 16.9% are male and 15.4% are female; Racial Ethnicity: 21.6% are Hispanic or Latino, 20.6% are non-Hispanic Black, and 14.1% are non-Hispanic White (Health Indicators Warehouse, 2005-2008).

Without more targeted and evidence-based interventions to help underserved, obese youth, healthcare providers are essentially helpless as children continue to gain more weight and develop associated health problems. As healthcare providers, we have become bystanders to a horrible epidemic that can (and already is) negatively affecting every aspect of our young patients' health and wellness.

Program Design

Nurse practitioners (NP) can take measures to combat this problem. In March 2012, a small, hospital-affiliated, adolescent primary care clinic operating in an underserved community, took an active stance against the obesity epidemic. The NP reached out to a local, university-based School of Nursing seeking additional nurse practitioners, interested in youth obesity, to assist with running the program. The two NPs, and two Drs. Amit and Pareen Thakral, developed their own multi-faceted weight loss program, loosely based on the *Media-Smart Youth: Eat, Think, and Be Active* curriculum from the National Institute of Health (NIH). The new curriculum incorporated both an educational and physical exercise component aimed at obese, adolescent females living in the local area. The group named the program *Triple E: Eat, Exercise, Enjoy*. The *Triple E* program was run in order to assess whether a primary care practice, in collaboration with a university, health system, school, and local community, could successfully run a weight management program.

Triple E was developed for ten participants, all obese (per BMI), adolescent females aged 11-18 years, and all living in the surrounding underserved area. The ten participants for the program were either patients of the primary care clinic where the program was run or patients from another primary care clinic within the hospital system. Program developers obtained parental consent for each participant. Participants were allowed and encouraged to bring a friend or family member of similar age also struggling with weight management. This proved to be a very effective tactic for getting participants motivated to come and participate on a regular basis and, anecdotally, also made it more fun for the participants.

During the ten-week course, participants met at the clinic weekly for one hour. The first half of each session included a didactic lesson, held in the lobby, concerning: media portrayals of foods (e.g., looking at how food ads can be very deceptive in giving nutritional information), strategies for making healthier food choices (e.g., learning to read food labels), My Plate, and exercise information (e.g., recommended length of time for exercise/day, examples of home exercises, tips on how to incorporate exercise into one's daily routine, etc). A program developer or community guest taught the didactic portion of each session. The second half of each session was the exercise portion; however, the practice space was too small for the size of the group. Therefore, the team sought and

received permission to use the gymnasium and auditorium of the middle school for the weekly exercise sessions. Five volunteers from the community, all certified and well-experienced in their area of exercise/sport, taught Zumba, aerobics, yoga and a basketball-skills clinic. The team also ran exercise sessions which included relay races and exercise stations. Music for the exercise portion was provided via an iPod or iPhone played through speakers purchased by the team.

With an initial budget of $80 ($20 from each of the four developers) the program was started. The money was used to purchase water bottles for the participants, cups and plates, craft supplies for lessons, gifts for the weekly prize baskets (hair accessories, nail polish, lip gloss), and gift cards to local retailers. The gift baskets and gift cards were awarded weekly to participants for enthusiasm, greatest effort, most weight loss, etc. A local produce distributer provided fresh fruit at the end of each session, as well as yoga mats, yoga mat carrying bags, and jump ropes; a major health insurance company donated additional yoga mats. The clinic's medical director donated additional gift cards to local retail/department stores which were also given as prizes.

Program Impact

The program developers considered *Triple E* a solid success. Data taken from the five participants who had an attendance of 70% or greater showed a total of 39lbs lost collectively. Total weight gain as a group for those same participants was 14lbs. Observationally, the developers noticed increased self-esteem in many participants, as noted by increased eye-contact and interactions during program participation, as well as changes in body language. Of note, the participant with the greatest weight-loss had strong parental support at home.

The success of this program is attributed to the dedication of the team of developers and the motivated participants who attended regularly. Also helpful was the strong collaboration with a local university, hospital, and school, as well as the outpouring of volunteers from the community (all of whom stated their interest in continued involvement with the program).In addition, as stated earlier, encouraging each participant to bring a friend or family member who was also obese proved popular and led to better attendance rates and increased enjoyment of the program.

Due to the success of *Triple E,* the program was expanded in the fall 2012. Improvements planned for the next session of *Triple E*, based on observations by the developers of the program, feedback from participants, and research include increasing the length of the exercise portion of the session; increasing the number of sessions in the program; obtaining biometric measurements (waist, neck, and arm circumference), including parents/guardians of participants as much as possible; recruiting a nutritionist to assist participants in developing healthy meal plans; including a self-esteem scale as an outcome measure of the program; and recruiting a social worker or other counselor to provide services (including community referrals) that address the mental health issues associated with being an obese adolescent.

Discussion

According to the evidence in current published studies, adolescent weight management programs should be multi-faceted and should include dietary modifications, physical behavior modifications, and incorporation of a parental involvement component. Individual approaches to behavioral change should be complemented with environmental and policy approaches such as building social support, modification of school meals, and changes in nutrition policies (Sharma, 2011, 215S). The team intends to seek approval from the hospital IRB for the next session of *Triple E* to provide further research on interventions to combat childhood obesity.

Implications and Summary

Healthcare providers are not helpless bystanders to the obesity epidemic that is negatively affecting every aspect of our young patients' health. Providers can take an active role in preventing and managing obesity and its health complications. Through collaboration of local resources, effective weight management programs can be developed and run out of primary care offices with minimal funding.

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Resource Review:
The State of Girls: Unfinished Business

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The State of Girls: Unfinished Business

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Abstract: *The State of Girls: Unfinished Business* is an extensive report published by the Girl Scout Research Institute. The 156 page publication examines girls' health and well-being in the United States with a focus on key issues including health, educational achievement, demographic trends and safety. The report includes excellent charts, tables and diagrams and an appendix of state-level sources of data to support research findings. Youth professionals will appreciate this well documented, easy to comprehend resource as they engage in positive youth development programming.

Review

The Girl Scout Research Institute continues to develop excellent resources based on current national statistical indicators to examine key issues such as demographic trends of girls, health, safety and educational achievement. *The State of Girls: Unfinished Business* (Girl Scout Research Institute, 2013) provides a wealth of information regarding girls' health and well-being in the United States. The contents would be useful for youth professionals as well as policy makers and community leaders.

The 156 page publication is divided into nine major divisions:

1. The Changing Face of Girls – Growing racial/ethnic diversity, regional distribution, family structure and homelessness
2. Economic Well-Being and Employment Status – Poverty and Income
3. Physical Health and Safety – Health Insurance, Weight Conditions, Physical Activity, Substance Abuse and Safety
4. Emotional Health and Safety – Self-Esteem, Mental Health, Body Image, Relationships and Bullying
5. Education – Educational attainment and achievement, college enrollment, fields of study, financial literacy and women in STEM

6. Extracurricular and Out-of-School Activities – Childcare, Student Government, Clubs, Physical Activity, Religiosity, Evening Activities
7. Girls' Leadership – How defined by girls, aspirations, leadership experiences and leadership skills.
8. Technology and Media Use – Access, Communicating through electronic media and impact of media use on health and well-being
9. What Was Learned – State of girls snapshot, data limitations, state-level data.

In addition to highlighting findings in the categories listed above, the report also cites the need for additional data to fully understand how girls are faring in the future examining the following issues: Bullying, Criminal Behavior, Disabilities, Exposure to Violence, Homelessness and Volunteering.

Detailed tables, charts and diagrams highlighting key findings are used throughout the report. Section summary pages and implications prove particularly helpful. An appendix at the conclusion of the report provides state-level sources of data supporting the document's chapter topics.

This resource is available at no charge as a download at
www.girlscouts.org/research/pdf/sog_full_report.pdf

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