Editor’s Comments:

The Winter Issue provides readers with an overview of several innovative youth development programs including the engagement of youth in community preparedness, involvement of youth in volunteer tourism and use of 4-H robotics in afterschool settings. In addition, the Winter Issue shares articles that address youth engagement in community activities and the results of research designed to better understand youth’s perceptions about youth empowerment.

Manuscripts for the Summer and Fall Issues are now being accepted. This includes:

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

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Feature Articles

Involving Youth in Community Emergency Preparedness: Impacts of a Multistate Initiative [Article 090404FA001]
Powell, Pamela; Smith, Marilyn; Black, Lynette
The National Preparedness Guidelines (2007) state, “as uniformed responders account for less than 1% of the total U.S. population, it is clear that citizens must be better prepared, trained, and practiced on how best to take care of themselves and assist others in those first crucial hours during and after a catastrophic incident.” This is increasingly more evident due to recent disasters such as hurricane Katrina.

The Alert, Evacuate and Shelter (AES) program identified and trained youth/adult teams to use geospatial technology to map shelter locations and evacuation routes. Training began with team building activities to strengthen and build youth/adult preparedness partnerships. Program evaluations revealed a major shift in thinking about the positive potential level of involvement of youth in emergencies. Survey results immediately following trainings revealed statistically significant increases in participant knowledge gain regarding emergency preparedness. Follow-up evaluations indicate the success of this project in meeting community preparedness goals.

Organizational Supports and Youth Life Skill Development: Adult Volunteers as Mentors, Managers and “Mediators” [Article 090404FA002]
Fogarty, Kate; Terry, Bryan; Pracht, Dale; Jordan, Joy
A statewide community club evaluation (youth self-report), empirically testing a logic model of factors influencing youth life skill development is described. Results supported that the way adult volunteers manage and mentor youth and explained how 4-H program features (e.g., youth sense of belonging, safety, and support) influence life skill development.

Youth engagement in activities was also linked with life skills and organizational supports were linked with youth engagement in the model. Future directions based on the findings to be discussed include: (1) examining volunteer competencies to build upon in training; (2) use of SEM to understand the larger picture of youth programs; and (3) what the results tell us about: (a) creating quality club environments for youth; (b) providing youth with caring adult support systems; and (c) developing life and career skills through subject-matter topics.

Skateboard Park Participation: A Means-end Analysis [Article 090404FA003]
Goldenberg, Marni; Shooter, Wynn
Skateboarding has become a highly visible and popular activity. However, many negative stereotypes remain associated with the activity and its participants (Jones & Graves, 2000). In contrast to the negative stereotypes, skateboarding seems to provide many individuals, and youth in particular, with an important outlet for physical activity, leisure, and personal development. The purpose of this study was to investigate why skateboarders chose to visit
skateboard parks, to identify outcomes of participating in skateboarding at skateboard parks, and to identify the underlying values that guide skateboarders’ choice of this specific setting. The conceptual framework for the reported study was provided by a means-end model, which views values as the key force influencing an individual’s decision to engage in a particular behavior (Gutman, 1982; Manyiwa & Crawford, 2002). The results indicate that this sample of skateboarders received a number of important benefits and, despite stereotypical views, may seek positive outcomes through skateboarding at skateboard parks. A socio-ecological model and a positive youth development framework provide a platform for interpreting the results and implications.

**Dose: Comparison Nutrition and Physical Activity Sessions Targeting Middle School Adolescents [Article 090404FA004]**

Shilts, Mical Kay; Martin, Anna C.; Townsend, Marilyn S.

Determining optimal intervention dose to meet time constraints of the teacher while maximizing behavioral impact for students has proven challenging. This study investigated the influence of intervention dose on 7th & 8th grade participants’ dietary and physical activity (PA) behaviors. Participants were assigned randomly to a: 1) 6 week-12 session nutrition intervention [treatment#1], or 2) 3 week-6 session nutrition intervention [treatment#2] with data collected pre/post intervention. Using ANCOVA, measures assessed dietary and PA self-efficacy and behaviors. Ethnically diverse participants (n=107) were included in the analyses (46% male). All students set two goals: one dietary and one PA regardless of dose. Treatment#1 resulted in similar outcomes compared to treatment#2 with no significant differences between groups. As a result, we recommend that teachers using the 12 week intervention give students the option of setting new goals after the 6th lesson to maintain motivation.

**Engaging Youth Through Volunteer Service Travel: In Service of the Common Good [Article 090404FA005]**

Bailey, Andrew; Russell, Keith C.

Volunteer Tourism is becoming a popular topic in the travel literature. These experiences combine the adventure of travel with opportunities to serve the communities visited. This burgeoning field of tourism may provide an attractive outlet for generating positive developmental assets and for encouraging future civic engagement. This paper highlights a study which explored the relationship of wisdom and social capital and also discussed the influence of a volunteertourism experience on wisdom and social capital domains. The sample consisted of 68 high school youth from the various high schools in Illinois. Results indicate that wisdom and social capital are positively and significantly related. In addition, wisdom and social capital indicators increased significantly over the course of the experience.

**Youth Perspectives on Meaningful Participation in Community Based Programs: A Qualitative Assessment [Article 090404FA006]**

Royce, Sherer W.

Allowing the voiceless to have a voice is a tenet of empowerment. This paper highlights research that employed a participatory action research framework to gain a better understanding of young people’s perceptions about youth empowerment and acquire their perspective (voice) about the meaningfulness of participation in out-of-school advocacy and volunteer program activities. Using Photovoice, the research provides a missing point of view in youth empowerment model development. Results indicate that the quality of a youth’s participation in a community-based program is determined by 1) youth expressing themselves without censorship, 2) occasions for youth to expand their social networks with youth and adults, and 3) adults observing and valuing youth contributions. These findings raise implications for community-based, youth empowerment programs including program
Factors Affecting Youth Voice in Decision-Making Processes within Youth Development Programs [Article 090404FA007]
Tarifa, Todd; Machtes, Krisanna; Fox, Janet E.; Johnson, Earl
Results of a study aimed at determining the factors affecting the level of inclusiveness of youth voice in the decision-making process of the 4-H youth development program are discussed in this paper. State and field level 4-H professionals identified potential factors which affect youth voice in the decision-making process. The information gathered was utilized to identify the degree to which youth voice was incorporated in the decision-making process, to better understand how to suit youth’s needs, identify promising practices, and diagnose barriers towards fostering youth voice within the 4-H youth development program. This feature article presents the findings of the study, and discusses potential ramifications and remedies.

Program Articles
Benchmarking the Kansas 4-H Judging System [Article 090404PA001]
Taylor, Amy M.; Blackwell, Cindy
This study investigated the methods and policies associated with 4-H project judging at the county level within the Kansas 4-H Program. Extension Agents surveyed about current 4-H judging processes indicated a variety of methods used. Data collected showed that 21.8% of the counties surveyed practiced some type of project judging without the 4-H member present. In regard to feedback received by the youth in non-livestock project judging, 64.1% of counties reported both verbal and written forms of feedback, with 25.6% receiving only verbal. In livestock project judging, 93.8% reported that youth receive feedback only verbally. The majority of non-livestock projects are judged using the Danish system, while the number of livestock projects judged are split among both the Danish system and peer system of competitive judging. It was concluded that a wide-variety of judging methods are used, resulting in incongruent programs offered to 4-H members.

The Perfect Mindstorm: 4-H Robotics in Afterschool Settings [Article 090404PA002]
Francis, Dave; Jones, Deb
As the 4-H Science, Engineering and Technology (SET) Mission Mandate unfolds, robotics provides an opportunity to involve youth in SET activities. Utah 4-H utilized Lego Mindstorms Robotics kits to teach youth about robotics. Evaluations demonstrated that robots increase youth’s interest in science, engineering and technology.

Resource Review
S.E.A.L.S.+PLUS Self-Esteem and Life Skills [Article 090404RR001]
Dawson, Patricia A.
S.E.A.L.S.+PLUS is an activity book and CD-ROM featuring over 75 reproducible self-esteem and mental wellness lessons for youth ages 12-18. Topics include segments on Goal Setting, Stress Management, Health Awareness, Anger Management, Communication Skills and more. Youth professionals will appreciate this well designed, interactive resource as they engage youth in positive skill development.
Involving Youth in Community Emergency Preparedness: Impacts of a Multistate Initiative

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Involving Youth in Community Emergency Preparedness: Impacts of a Multistate Initiative

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University of Nevada Cooperative Extension

Lynette Black
Oregon State University Extension Service

Abstract: The National Preparedness Guidelines (2007) state, “as uniformed responders account for less than 1% of the total U.S. population, it is clear that citizens must be better prepared, trained, and practiced on how best to take care of themselves and assist others in those first crucial hours during and after a catastrophic incident.” This is increasingly more evident due to recent disasters such as hurricane Katrina.

The Alert, Evacuate and Shelter (AES) program identified and trained youth/adult teams to use geospatial technology to map shelter locations and evacuation routes. Training began with team building activities to strengthen and build youth/adult preparedness partnerships. Program evaluations revealed a major shift in thinking about the positive potential level of involvement of youth in emergencies. Survey results immediately following trainings revealed statistically significant increases in participant knowledge gain regarding emergency preparedness. Follow-up evaluations indicate the success of this project in meeting community preparedness goals.

Introduction

Disaster situations can, and do, affect thousands of individuals every year across the United States. Preparedness levels determine the degree of individual and community response and recovery. Though some people feel it is impossible to be prepared for unexpected events, the truth is that taking preparedness actions helps people deal with disasters much more effectively when they do occur (FEMA, 2009). Just as individuals and families must prepare for the
unexpected, government and community agencies work on a larger scale to develop infrastructure strategies that help keep all residents safe. One component of community safety is the creation of maps specifying evacuation routes, shelter sites and emergency response equipment locations. With the onset of geospatial technology and its recent incorporation into the field of emergency management, map creation is becoming a reality.

Often our adult/government resources are pushed to the limit when planning for disasters. Youth have important roles they can play to help ensure that planning is optimized and information resources are available to all. The National Research Council’s 2006 report, Learning to Think Spatially, recommends that spatial thinking be recognized as a fundamental part of the K-12 education due to its importance as a problem-solving tool in many different disciplines. By understanding the relationship between people, movement and locations we gain insight into the concept of geography, and how important location is when preparing and responding to a disaster. Working alongside emergency management personnel, geospatial technology experts and county extension personnel, youth can assist agencies in educating communities about disasters. The concept of involving youth and adults as partners in community readiness networks became known as the Alert, Evacuation and Shelter (AES) program.

The AES program evaluation focused on three program objectives:

1. Increase knowledge and use of geospatial technology for emergency preparedness,
2. Promote and enhance youth and adult partnerships in emergency preparedness,
3. Increase awareness and participation in personal, family and community emergency preparedness activities.

The Program

In an effort to improve community preparedness, safety and available resources, the Alert, Evacuate and Shelter (AES) program identified and trained youth/adult teams to use geospatial technology to enhance local government and community agency emergency preparedness efforts. Teams were comprised of youth, extension personnel, adult volunteers, emergency management staff and geospatial technology experts and were recruited from the 11 southeastern states and the District of Columbia. These locations were prioritized based upon both recent and historical devastation by hurricanes and the urgent need to address emergency preparedness in these locales. Through the use of GPS (Global Positioning System) and GIS (Geographic Information System) geospatial mapping, teams learned how to work with community emergency personnel to help evaluate emergency resources and address evacuation and shelter mapping concerns.

While geography and the technology associated with it are important skills for emergency preparedness, one unique characteristic of this project was the involvement of teens in partnership with adults (The Innovation Center, 2005). Involving youth in emergency preparedness not only adds additional people available for planning and response, research indicates youth need the geographic literacy skills taught in the program (Backler, et al, 1986). Through the use of geospatial technology, youth and adult teams learned how to observe relationships, acquire information and map geographic representations of what they learned. In addition, based upon what they learned, teams worked with community agencies to map shelter locations and evacuations routes, further enhancing their knowledge of geographic relationships.
Training Overview
A multi-state group of educators recognized for their expertise in various components of session topics, e.g. youth/adult partnerships, community education, emergency management procedures, geospatial technology, were identified as trainers for this project. Trainers designed a three-day program model to introduce youth/adult teams to the field of emergency preparedness and to enhance geospatial knowledge and youth development. Youth experienced in using geospatial technology served as co-trainers teaching computer mapping applications and shared their prior experience making emergency evacuation route and shelter site maps. Each of the five regional trainings (Virginia, Maryland, Texas, Georgia, Louisiana) began with team building activities, designed to enhance the importance and value of each team member with a focus on building the youth/adult partnerships in the county teams (Zeldin, et al, 2008). Exercises supported the importance of youth/adult partnerships. Forty-six counties were represented at the trainings with 174 individuals completing (45% youth, 55% adult).

A modified tabletop exercise (TTX) allowed both youth and adults to practice leadership, decision-making, and mentoring roles. The TTX is a scenario-based exercise in which participants “practice” their response techniques and strategies in planning for a real disaster (FEMA, 2008). The TTX was designed to give participants insight into the process first responders go through when planning response to a disaster. Guest speakers reinforced the necessity of community preparedness and shared actual disaster response stories. Trainers reinforced the benefits of youth/adult partnerships and how they can impact community preparedness strategies by incorporating geospatial technology.

Participants learned many aspects of geospatial technology, including how to collect GPS coordinates, download points into computer mapping programs, incorporate digital pictures into maps, collect data for maps, format data for incorporation into maps, determine what datasets are needed, and incorporate selected databases into the completed map. In addition, youth learned how to conduct emergency resource inventories in order to assist their emergency responders in identifying gaps in needed services.

During the 3-day training, county teams were also given the opportunity to complete grant applications for mapping software to support their team technology efforts. A showcase of resources provided an overview of commercially available software, examples of applications of technology used by other educational programs, and emergency communication technology/equipment. Youth and adults were introduced to the federally supported program CERT, (Community Emergency Response Team). The CERT program trains youth/adults to prepare for, stay safe during and respond following a disaster. CERT members work to educate the community and can provide critical support before the first responders arrive. This showcase of resources was emphasized to provide the tools that community teams would need for program implementation.

Program Implementation
Following the training, youth and adult teams returned home to work with local government and community agencies to ascertain community mapping needs for improved emergency preparedness. Many of the youth/adult teams became involved in local CERT after attending the training.
Telecommunication activities were initiated to support participants in this program implementation phase. Trainers facilitated teleconferences allowing for an exchange of ideas and an opening of network opportunities. Participants discussed strategies for incorporating their skills and talents into the county emergency preparedness planning system. In addition, materials, resources and training information were posted online at www.crn4h.org. This website received over 26,000 hits in 2008 and over 1400 hits in the first two weeks of 2009. The purpose of the website was to provide support for the teams that participated in the 3-day workshops. While others obviously viewed the materials, the program evaluation was concentrated on workshop participants.

**Program Evaluation Methods**

A multi-method design was used to measure program impacts immediately following the training, six months after training and one-year after training. The logic model was the guiding principal behind this design approach of measuring short, medium and long-term outcomes (Arnold, 2002). The Dillman (2007) tailored design method was also used in designing the evaluation format.

The first instrument was designed to measure knowledge gain of participants immediately following the AES training and used a retrospective pre-post survey design for this initial measure. The retrospective pre-post survey allows participants to rate their knowledge at the end of the program on the post and to think back to how much they knew before the program on the pre. Both the pre-survey and the post-survey are completed at the end of the program and helps to alleviate the potential of respondents over- and/or under-assessing their perceived learning, a potential constraint of the traditional pre-test post-test method. This method was chosen to help address the problem of “response shift bias” (Colosi and Duncan, 2006).

Approximately six months after the training, evaluators completed a telephone survey to ascertain the level of project implementation as a result of the training. Finally, the one-year retrospective follow-up survey was completed to measure long term impacts of the training (Davis, 2003). The retrospective pre-post survey was used in this final long term measure to help eliminate problems with tracking program participants, often a problem when conducting long term evaluations (Raidl, et al, 2004).

1. **Immediately following training retrospective pre-post survey:** Immediately following each of the five training sessions, a retrospective survey was administered to youth and adults. Surveys, collected on site, were voluntary and anonymous. Respondents were asked to rate 19 topics using a 5-point Likert-type scale with a 6th point “don’t know.” In addition, respondents were asked to select if they were participating as youth, or in one of the adult roles. The survey administered immediately following the training not only evaluated participant knowledge gain, but was immediately reviewed to help trainers improve subsequent trainings. Of the 174 registered participants, 84% returned a completed survey.

2. **Six-Month follow-up telephone survey:** A telephone survey administered to team leaders mid-way through the program asked a series of 15 open-ended questions, focusing on team activities and community engagement as a result of the training. One of the purposes of this mid-term qualitative evaluation was to determine which of the program’s expectations were being acted on thereby allowing the connection of the program processes to participants’ achievement of program goals and objectives. Qualitative methods are well suited to the explanation of the program’s theory in action.
Of the 46 teams who participated in the initial trainings, 50% responded to the telephone survey. Interviews were transcribed and qualitative data analysis was completed by reviewing the themes from the interviews. Representative quotes are included in the findings to help explain team progression.

3. **One-Year follow-up retrospective pre-post survey:** Long-term impacts were measured using a mail-out survey method, again using a retrospective pre-post design (Raidl, et al, 2004). The surveys were mailed to youth and adult participants one-year after completion of training. While separate instruments were used for youth and adults, identical topics were covered. Respondents were asked 13 demographic questions and 21 questions using a 5 point Likert-type scale with a 6th point “don’t know.” Response rate from the initial 174 site training participants for this follow-up survey was 25%. Cronbach’s coefficient alpha was used to estimate reliability of the Likert-type scale survey items for the quantitative measures. The Cronbach score was high (r=.847; r=.918; r=.835) indicating a high level of survey reliability for each of the three scales used in the survey (Santos, 1999).

A Wilcoxon non-parametric statistical query was used for the quantitative data analysis for both the training survey and the follow-up survey. All evaluation instruments were approved through the University of Nevada Institutional Review Board to ensure that correct investigative protocols were maintained throughout the entire process to protect subjects’ rights.

**Evaluation Findings**

1. **Immediately following training survey:** Survey results immediately following trainings revealed statistically significant increases in participant knowledge gain, based on comparison of mean pre-test and post-test scores, for all survey questions. Table 1 below shows the ranked mean scores for each of the teaching topics included in the survey (1=low rating and 5=high rating on a Likert scale).

The rankings shown in Table 1 indicate which topics had the greatest average score improvement comparing pre- to post- scores for the 19 topics surveyed. In the ranking of topics below, ”how to use GIS (geospatial mapping) software to create maps” showed the biggest increase in knowledge gain. In general, the technology associated topics are ranked in the top four positions for biggest increases in knowledge gain. The “role of a teen CERT in a community disaster” was ranked in fifth place for knowledge gain. Those topics listed toward the bottom of Table 1 include “the importance of an alert system” and “the importance of personal and family disaster preparedness”. While participants increased their knowledge about these lowest ranking topics, their knowledge was already high when they began the program; thus the smaller differences between pre and post. Descriptive statistics software (SPSS 14.0 Software, 2006) was used to analyze survey results (84% response rate).
### Table 1
Ranking in Score Improvement on Topics Taught in a 5-state Emergency Preparedness Program

<table>
<thead>
<tr>
<th>Topics Used to Evaluate AES Trainings</th>
<th>N Matched Pairs</th>
<th>Pre-Test Mean Scores</th>
<th>Post-Test Mean Scores</th>
<th>Difference between pre and post</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to use GIS software to create maps</td>
<td>132</td>
<td>1.77</td>
<td>4.12</td>
<td>2.35</td>
<td>1</td>
</tr>
<tr>
<td>Basic skills for using GIS software</td>
<td>135</td>
<td>1.81</td>
<td>4.09</td>
<td>2.28</td>
<td>2</td>
</tr>
<tr>
<td>How to link digital photography pictures to maps</td>
<td>133</td>
<td>1.71</td>
<td>3.88</td>
<td>2.17</td>
<td>3</td>
</tr>
<tr>
<td>Ability to download GPS coordinates</td>
<td>132</td>
<td>2.21</td>
<td>4.11</td>
<td>1.90</td>
<td>4</td>
</tr>
<tr>
<td>Role of a Teen CERT in a community disaster</td>
<td>127</td>
<td>2.13</td>
<td>4.02</td>
<td>1.90</td>
<td>5</td>
</tr>
<tr>
<td>Engaging community groups to assist</td>
<td>135</td>
<td>2.47</td>
<td>4.22</td>
<td>1.76</td>
<td>6</td>
</tr>
<tr>
<td>ICS as a universal language and process</td>
<td>127</td>
<td>2.37</td>
<td>4.10</td>
<td>1.73</td>
<td>7</td>
</tr>
<tr>
<td>Ability to collect GPS data</td>
<td>138</td>
<td>2.72</td>
<td>4.43</td>
<td>1.71</td>
<td>8</td>
</tr>
<tr>
<td>4-H Science/Engineering/Technology clubs</td>
<td>135</td>
<td>2.70</td>
<td>4.39</td>
<td>1.69</td>
<td>9</td>
</tr>
<tr>
<td>Role of a CERT team in community disaster</td>
<td>138</td>
<td>2.70</td>
<td>4.36</td>
<td>1.67</td>
<td>10</td>
</tr>
<tr>
<td>Importance of geospatial technology</td>
<td>133</td>
<td>2.76</td>
<td>4.41</td>
<td>1.65</td>
<td>12</td>
</tr>
<tr>
<td>How geographic knowledge benefits communities</td>
<td>139</td>
<td>3.19</td>
<td>4.67</td>
<td>1.48</td>
<td>13</td>
</tr>
<tr>
<td>Comfortable sharing EMS information</td>
<td>140</td>
<td>2.79</td>
<td>4.27</td>
<td>1.48</td>
<td>14</td>
</tr>
<tr>
<td>The capabilities of an alert system</td>
<td>140</td>
<td>3.11</td>
<td>4.51</td>
<td>1.40</td>
<td>15</td>
</tr>
<tr>
<td>Purpose of emergency preparedness</td>
<td>136</td>
<td>3.39</td>
<td>4.65</td>
<td>1.26</td>
<td>16</td>
</tr>
<tr>
<td>The value of youth-adult partnerships</td>
<td>138</td>
<td>3.55</td>
<td>4.71</td>
<td>1.16</td>
<td>17</td>
</tr>
<tr>
<td>The importance of an alert system</td>
<td>142</td>
<td>3.71</td>
<td>4.78</td>
<td>1.07</td>
<td>18</td>
</tr>
<tr>
<td>Importance of disaster preparedness</td>
<td>142</td>
<td>3.69</td>
<td>4.70</td>
<td>1.01</td>
<td>19</td>
</tr>
</tbody>
</table>

Rating code: 5=strongly agree; 1=strongly disagree

*aDifferences between pre-test and post-test scores statistically significant at p<.01

2) **Six-Month Follow-up Telephone Survey:** The telephone survey conducted mid-project provided examples of community engagement related to program goals and objectives as well as providing a report on team activities. In general, the telephone survey responses indicated that the knowledge gained during the AES training was being used to implement community projects. Examples of projects described during the telephone interviews included the following. *“We are locating fire hydrants, fill pumps and main valves using the GPS units. We want to provide emergency management, water and sewer, fire department and anyone else who would use it, a map.”* (note: municipal water and sewer availability after recent major hurricanes was disrupted for several weeks in some areas making locations for infrastructure an important issue). Other teams were working to build community support and relationships with their emergency managers and agency officials. Said one interviewee: *“BRACE is a Hurricane expo where 3,000 people attend. At their planning meetings, information about us was brought up which allowed us to make contact with the county GIS person. We gave him a pamphlet and he took it to his bosses who gave him permission to do whatever is needed to help us. The county commissioner has given full support and he and the EOC chief officer have written letters for grant support.”*
3) **One-Year follow-up retrospective pre-post survey:** Results of the final evaluation survey are shown below and are reported in three different tables: the Opinion Scale, the Level of Involvement Scale, and Level of Knowledge Scale. A Likert-type scale (1=low and 5=high) was used for each of the questionnaire items shown in Tables 2, 3, and 4. (SPSS 16.0 Software, 2007 was used for analysis).

**Opinion scale:** Each topic listed in Table 2 had statistically significant changes associated with it. The rankings shown in Table 2 indicate which topics had the greatest average score change comparing pre- to post- scores for the 9 topics surveyed. In this opinion section of the final survey, the highest ranked statement was “I would recommend this project to others.” This ranking is a comparison of the mean pre-test score to the mean post-test score. This ranking may indicate that participants were somewhat neutral (mean score of 3.45) about the project before participation, but gave the project an almost perfect score one year later (4.66).

The lowest ranked items in the opinion scale were the items about youth/adult partnerships. The difference between the pre and the post was smaller in comparison than the highest ranked items. These smaller differences can be attributed to the high scores on the pre-survey (mean of 4.21 on the 5-point scale). It appears that program participants understood the benefits of youth/adult partnerships prior to participating in the program.

**Table 2**

Ranking in Mean Scores for the Mid-Term Impacts of the Alert, Evacuate, and Shelter Program

<table>
<thead>
<tr>
<th>Topics Used to Evaluate AES Trainings</th>
<th>N Matched Pairs</th>
<th>Pre-Test Mean Scores</th>
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<th>Difference between pre and post</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPINION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would recommend this project to others</td>
<td>38</td>
<td>3.45</td>
<td>4.66</td>
<td>1.20</td>
<td>1</td>
</tr>
<tr>
<td>This project helped me learn about new technologies</td>
<td>39</td>
<td>3.76</td>
<td>4.79</td>
<td>1.03</td>
<td>2</td>
</tr>
<tr>
<td>Youth should be involved in EMS planning</td>
<td>39</td>
<td>3.68</td>
<td>4.59</td>
<td>0.91</td>
<td>3</td>
</tr>
<tr>
<td>I am prepared to help my community in EMS issues</td>
<td>38</td>
<td>3.60</td>
<td>4.50</td>
<td>0.90</td>
<td>4</td>
</tr>
<tr>
<td>Youth and adults are capable of working together</td>
<td>38</td>
<td>4.21</td>
<td>4.76</td>
<td>0.55</td>
<td>5</td>
</tr>
<tr>
<td>There are limits to youth involvement in EMS planning</td>
<td>37</td>
<td>3.51</td>
<td>4.03</td>
<td>0.52</td>
<td>6</td>
</tr>
<tr>
<td>Youth/adult partnerships benefit the adults</td>
<td>36</td>
<td>4.32</td>
<td>4.78</td>
<td>0.46</td>
<td>7</td>
</tr>
<tr>
<td>Youth/adult partnerships benefit the community</td>
<td>37</td>
<td>4.41</td>
<td>4.78</td>
<td>0.37</td>
<td>8</td>
</tr>
<tr>
<td>Youth adult partnerships benefit the youth</td>
<td>38</td>
<td>4.48</td>
<td>4.84</td>
<td>0.36</td>
<td>9</td>
</tr>
</tbody>
</table>

Rating code: 5 = strongly agree; 1 = strongly disagree

*aDifferences between pre-test and post-test scores statistically significant at p<.01

**Level of Involvement scale:** Each topic in the one-year follow-up survey listed in Table 3 had statistically significant changes associated with it. The rankings shown in Table 3 indicate which topics had the greatest average score change comparing pre- to post- scores for the seven topics surveyed. “Youth are capable of assisting in emergencies” was the highest ranked item followed by “Youth are capable of providing educational training about emergency
management.” In contrast, the lowest ranked Level of Involvement item was “youth are capable of distributing emergency supplies.” Participants rated this item high on the pre, thus the small difference in response between pre and post.

These findings may demonstrate a change in thinking about the level of involvement of youth in emergencies. This finding seems to demonstrate a general agreement that teen involvement in traditional adult directed jobs like distributors of supplies was an appropriate goal before the program was implemented. Data reveal that after program implementation the program goal of youth involvement in assisting with emergencies was achieved.

### Table 3

<table>
<thead>
<tr>
<th>Topics Used to Evaluate AES Trainings</th>
<th>N Matched Pairs</th>
<th>Pre-Test Mean Scores</th>
<th>Post-Test Mean Scores</th>
<th>Difference between pre and post</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth are capable of....</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- assisting in emergencies</td>
<td>40</td>
<td>3.68</td>
<td>4.69</td>
<td>1.01</td>
<td>1</td>
</tr>
<tr>
<td>- providing educational training about EMS</td>
<td>40</td>
<td>3.46</td>
<td>4.45</td>
<td>0.99</td>
<td>2</td>
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<tr>
<td>- utilizing technology (GPS, GIS, web)</td>
<td>41</td>
<td>3.80</td>
<td>4.71</td>
<td>0.91</td>
<td>3</td>
</tr>
<tr>
<td>- providing leadership to youth/adult teams</td>
<td>40</td>
<td>3.68</td>
<td>4.57</td>
<td>0.89</td>
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<td>- job shadowing emergency personnel</td>
<td>41</td>
<td>3.67</td>
<td>4.49</td>
<td>0.82</td>
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<tr>
<td>- preparing emergency supplies</td>
<td>40</td>
<td>3.88</td>
<td>4.62</td>
<td>0.74</td>
<td>6</td>
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<tr>
<td>- distributing emergency supplies</td>
<td>40</td>
<td>3.88</td>
<td>4.62</td>
<td>0.74</td>
<td>7</td>
</tr>
</tbody>
</table>

Rating code: 5 = strongly agree; 1 = strongly disagree

*Differences between pre-test and post-test scores statistically significant at p<.01

**Level of Knowledge scale:** Level of Knowledge is the final category of this one-year follow-up survey. Each of the items in this category indicates significant improvements in the technical aspects of the training. This parallels with the results of studies conducted earlier in the program. Further discussions of these geographic literacy responses are provided following Table 4, and are shown as a graphic representation in Figure 1.
Table 4
Ranking in Mean Scores for the Long-Term Impacts of the Alert, Evacuate, and Shelter Program

<table>
<thead>
<tr>
<th>Topics Used to Evaluate AES Trainings</th>
<th>N Matched Pairs</th>
<th>Pre-Test Mean Scores</th>
<th>Post-Test Mean Scores</th>
<th>Difference between pre and post</th>
<th>Ranking</th>
</tr>
</thead>
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<tr>
<td>I am......</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>proficient with GIS mapping</td>
<td>42</td>
<td>2.02</td>
<td>3.64</td>
<td>1.62</td>
<td>1</td>
</tr>
<tr>
<td>knowledgeable about CERT</td>
<td>41</td>
<td>2.44</td>
<td>4.05</td>
<td>1.61</td>
<td>2</td>
</tr>
<tr>
<td>proficient with community mapping</td>
<td>41</td>
<td>2.17</td>
<td>3.76</td>
<td>1.59</td>
<td>3</td>
</tr>
<tr>
<td>proficient with GPS</td>
<td>42</td>
<td>2.69</td>
<td>4.10</td>
<td>1.41</td>
<td>4</td>
</tr>
<tr>
<td>proficient with digital photography</td>
<td>42</td>
<td>3.76</td>
<td>4.31</td>
<td>0.55</td>
<td>5</td>
</tr>
</tbody>
</table>

Rating code: 5 = strongly agree; 1 = strongly disagree

aDifferences between pre-test and post-test scores statistically significant at p<.01

Additional Findings of One-Year Follow-up Study Data

Based upon project priorities and the richness of the data provided by project participants, additional analysis was completed on the one-year follow-up study data and is shown in Tables 2, 3 and 4. Specifically, data were scrutinized in the following areas as they correlated to the program objectives:

(a) **Objective 1:** Increase knowledge and use of geospatial technology for emergency preparedness. The Level of Knowledge subscale is looked at more closely to more clearly understand the long-term importance of the geospatial technology training to youth.

(b) **Objective 2:** Promote and enhance youth and adult partnerships in emergency preparedness. Additional analysis of the one-year follow-up study was completed to more clearly understand the impact of youth and adults working together to benefit the community.

(c) **Objective 3:** Increase awareness and participation in personal, family and community emergency preparedness activities. Data from the survey questions related to the level of knowledge about CERT to enhance team involvement in community emergency preparedness measures are further analyzed.

For the purposes of preparing the figures that follow, the 5-point Likert scale was collapsed into three categories and reported as a percentage of the total response: (1) disagree (strongly disagree plus disagree), (2) neutral (no change) and (3) agree (strongly agree plus agree). This approach to reporting the data was made to simplify the narrative explanation. Descriptive statistics were used for this analysis.

(a) **Level of Knowledge scale:** Figure 1 below shows the knowledge gains reported in the final retrospective long-term survey regarding geospatial technology taught during the AES trainings. A further look at the Level of Knowledge section of the one-year follow-up survey is provided because increased knowledge and use of geospatial technology was the priority program objective; specifically, enhancing geographic literacy through the use of geospatial technology. Figure 1 shows the dramatic increases in knowledge gain regarding the geospatial technical training.
(b) Youth and Adults are Capable of Working Together to Benefit the Community:
During the initial training program, program instructors had observed skepticism from some of the adults in the program during discussion regarding the role and level of involvement the program expected from the youth in work related to emergency preparedness. Yet, most participants reportedly understood the benefits of youth and adult partnerships prior to participation in the program (Table 2). These survey results completed at the end of the training program contrast with attitudes reported in the one-year follow-up.

The findings on the one-year follow-up pre-survey now indicate that some of the adults were indeed skeptical as shown in Figure 2. The post survey reveals a much more positive attitude for both youth and adults on this topic of working together to benefit the community. Figure 2 shows the percentage of participants who disagreed, were neutral or agreed to the statement “youth and adults are capable of working together to benefit the community” both before and after the program. A review of figure 2 reveals that about 10% of the adults disagreed with the statement at the beginning, compared to 0% of the youth. However, after the program a significant change was noticed in adult responses. Figure 2 below shows the long-term change in adult opinion, significant at p<.05. After the program, a few of the adults were still neutral in their opinion, none disagreed with the statement and an overwhelming majority agreed with the statement. In contrast about 30% of the youth were neutral about the capability of youth and adults working together at the start of the program. After the program, over 90% of the youth agreed with the concept.
(c) Increase in personal, family and community preparedness activities:
The primary activity used to measure this objective was related to CERT, specifically, “I am knowledgeable about CERT (Community Emergency Response Team)”. A review of youth and adult responses are shown in Figure 3. Analysis of the one-year follow-up data revealed that both youth and adults were unfamiliar with the CERT program at the beginning of the trainings. After the training almost all of the adults and most of the youth reported they were knowledgeable about CERT.
All project objectives were clearly met as indicated in the evaluation findings. Objectives for the evaluation included:

1) increased knowledge and use of geospatial technology,
2) promoting and enhancing youth and adult partnerships, and
3) increased awareness and participation in personal, family and community emergency preparedness activities.

Participants recognized immediate knowledge gains in all aspects of the training.

As indicated, the highest ranked reported learning took place in the area of geospatial technology. As one participant stated in the final survey "Please provide more AES trainings. In a very short time I was given more training than I received in an Intro to GIS course in college." AES participants learned about their surrounding environments and asked important geographic questions in order to complete their project and benefit their communities.

While a main focus of the AES program was geospatial technology, an equally important component was fostering youth/adult partnerships, empowering youth to take leadership roles for the betterment of their community. The final retrospective survey revealed a long-term change in knowledge, attitude and behavior. Participants recognized that youth could be valuable resources, affecting positive change. A theme revealed in the qualitative data analysis and clearly stated by one adult represented in the sample was "Without the training, I would not have been able to help them (county response agency) see the advantage of working with youth."

A cross-comparison of youth and adults revealed very interesting indications for partnerships benefiting communities. As a result of the training, adults reported that they believed youth were very valuable resources (see Figure 2 above) and that their work could be beneficial. Again, each training session heavily promoted an atmosphere for youth/adult partnerships. This change in attitude pointed to the effectiveness of training efforts to build a sense of partnership in addressing important community topics.

A third focus of the training, to increase awareness and participation in personal, family and community emergency preparedness activities, took place beyond regular training sessions as teams implemented their community projects. A comparison of youth/ adult perceptions before and after the training revealed a significant increase in knowledge of the CERT. The long-term evaluation revealed an increase in CERT participation in the community. Said one participant "We are doing Teen CERT and working with the EOC (Emergency Operations Center). We certified 4 youth and 2 adults in CERT and CPR and AED (Automated External Defibrillators) training."

The purpose of the AES program was to develop a network of youth and adult teams that could assist their communities to be better prepared to stay safe during a disaster situation. During both the training and the implementation phase of the program, youth worked hand-in-hand with their adult counterparts to learn about community infrastructure, and how their emergency response agencies plan for disasters. By incorporating geospatial technology, teams created
shelter site and evacuation maps where none had existed before, a needed skill identified as a result of several devastating hurricanes on the Gulf Coast

The focus of these trainings was to educate youth and adults interested in emergency preparedness related to hurricane tragedies. The locations of the trainings were in communities where hurricane incidents have occurred. While training materials were originally designed to address specific hurricane concerns, training content is applicable to all types of natural and man-made disasters. As disasters affect every county in the nation, this training model could easily be adapted to fit all locations and all disasters, and would be of special interest to those working to address community emergency preparedness issues. As the AES data reveal, these youth and adults teams can be valuable resources in helping keep communities safe.

An example of adapting the AES curriculum to local communities needs is a project involving animal shelters. When researching the importance of human-animal bonds during emergencies, trained teams realized the need to map animal shelters sites and educate residents about the importance of animal disaster kits. Having plans in place for animal family members is a critical component to human safety. This safety issue was demonstrated in past disasters as humans refused to evacuate without pets when there was no capacity to accommodate the pets. As a result, team members have become the catalysts for starting animal response teams in areas previously uninformed about the need or unclear as to how to begin the process of addressing pet evacuation issues.

While the objectives of this program were accomplished, the potential exists to achieve further program impacts. Additional funding could support new face-to-face training in locations other than those impacted by hurricanes. Further program development could incorporate presentations made to responder organizations to showcase program impacts and encourage youth involvement in community emergency response activities. A series of online training modules could be offered for specific AES components, supporting further knowledge gain as well as reinforcing face-to-face training concepts. Additional funding would support curriculum development needed to expand the program. Supporting youth/adult teams in educating community leaders regarding the potential additional resources of involving volunteer teams in planning for emergencies is an important goal in program expansion.

As evidenced through the impact assessment, this program clearly encouraged and enhanced youth and adult partnerships to respond to critical community needs. As first responders and agency personnel are often overwhelmed in planning for and responding to a disaster, the addition of youth helped create needed resources to enhance community and safety well-being.

**References**


Organizational Supports and Youth Life Skill Development: Adult Volunteers as Mentors, Managers and “Mediators”

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Organizational Supports and Youth Life Skill Development: Adult Volunteers as Mentors, Managers and “Mediators”

Kate Fogarty, Bryan Terry, Dale Pracht and Joy Jordan
University of Florida

Abstract: A statewide community club evaluation (youth self-report), empirically testing a logic model of factors influencing youth life skill development is described. Results supported that the way adult volunteers manage and mentor youth and explained how 4-H program features (e.g., youth sense of belonging, safety, and support) influence life skill development.

Youth engagement in activities was also linked with life skills and organizational supports were linked with youth engagement in the model. Future directions based on the findings to be discussed include: (1) examining volunteer competencies to build upon in training; (2) use of SEM to understand the larger picture of youth programs; and (3) what the results tell us about: (a) creating quality club environments for youth; (b) providing youth with caring adult support systems; and (c) developing life and career skills through subject-matter topics.

Introduction

Positive youth development (PYD) is a broadly based term that encompasses youth resilience and competency-based outcomes. It is fostered by bolstering the developmental assets of youth from a variety of ecological levels (Search Institute, 2004) and engaging youth in productive activities rather than correcting negative behavior (Damon, 2004). PYD is manifested into adaptive functioning including the acquisition of life skills and competencies for adult life. Over the past decade, studies have shown that youth spending time in engaging, safe, structured, adult-supervised, and health promoting activities, i.e., non-formal educational settings such as community clubs and afterschool programs, attain a variety of competencies and life skills and are less likely to become involved in health risk behaviors (Dierking & Faulk, 2003; Eccles & Gootman, 2002; Roth et al., 1998).
Learning environments that promote positive youth development, developmental assets, and life skill development have notable features. Eccles & Gootman (2002) identified eight features for ideal community-based settings for youth:

1. Physical and psychological safety;
2. Supportive relationships;
3. Appropriate structures;
4. Opportunities to belong;
5. Positive social norms;
6. Support for efficacy and mattering;
7. Connections among youth environments (e.g., family, school, & community); and
8. Life skill development.

Simplified, these learning environments provide learning opportunities and a safe, supportive environment (contextual influences) that facilitate life skills (youth outcomes). However, associations among these features of youth development organizations and educational delivery systems remain largely unexplored.

Youth-serving community-based clubs provide one example of long-term positive learning environments for youth in non-formal educational settings. Community-based clubs, facilitated and structured by adult volunteers or youth program staff, are ideal high context learning environments for youth to build life skill competencies and enhance assets at the individual, family, and community levels. For example, fifth through twelfth grade students who participated in community-based clubs for one or more years had higher or increased: educational aspirations; achievement motivation; intentions to help others; self-esteem; levels of interaction and communication with adults; decision-making skills; and ability to make friends (Rodriguez, Hirschl, Mead, & Goggin, 1999).

Community-based clubs, provided they maximize their use of volunteer and staff expertise and tested curricula, have noteworthy association with life skill development. Among the gamut of educational programs or delivery systems available to youth, community clubs represent a paramount means of fostering positive development. As compared with summer day camps or after school programs, community clubs are characterized by long-term, high-context and high content educational delivery for youth (Kress, 2007). High-context denotes the contextual nature of learning that takes place on-site within community clubs. Community mapping projects for youth, civic engagement activities (Lerner, 2004), and experientially-based learning of relevant life skills like workforce preparation are examples of high-context educational delivery. Content refers to subject matter areas of expertise, curricula content, and life skills capacities promoted (Kress, 2007), in which community clubs have great potential to influence youth life skill development.

Volunteers contribute to community clubs by carrying out many roles and fill positions that both directly and indirectly affect youth (Boyce, 1971). This includes:

1. Supporting youth in the achievement of their goals;
2. Providing learning opportunities that interest youth in a community club; and
3. Creating safe and secure environments for youth.
The ability of programs to provide safe and secure environments for youth depends upon the involvement and quality of adult staff and volunteers. Supportive relationships happen when young people and adults become engaged together in their communities; they are relationships between youth and adults where there is mutuality in teaching, learning, and action (Zeldin, McDaniel, Topitzes & Lorens, 2001). Mutuality is what distinguishes supportive relationships from parent-child, student-teacher, or mentoring relationships (Camino, 2000). Supportive relationships focus on nurturance; they emphasize youth and their contributions rather than problems. Positive expectations for behavior refer to shared beliefs or expectations in a social group about how people in general or members of the group ought to behave to promote healthy youth behaviors and decrease the chance that youth will engage in risky behaviors (Christensen, Rothgerber, Wood, & Matz, 2004).

Volunteers serve as role models and mentors, providing social support to the youth they serve. A mentor:

1) has greater experience or wisdom than the mentee;
2) offers guidance or instruction that is intended to facilitate the growth and development of the mentee; and
3) facilitates the development of an emotional bond and trust with the mentee (Freedman 1992).

In other words, volunteer educators (mentors) provide critical guidance to engage youth experientially while supporting and validating learning from these experiences. Mentors have been found to positively influence youth (Dubois, Halloway, Valentine, & Cooper, 2002; Rhodes, 2002). However, research on the process of mentoring is limited and is needed to gain a deeper understanding of the mentoring relationships that may account for youth outcomes (DuBois & Karcher, 2005).

**Purpose**

Community-based clubs for youth, characterized by high-context and high educational content, in out-of-school settings rely largely on a volunteer corps for program delivery. While families and schools have the greatest influence on youth development, personal development that must occur and the skills and competencies that youth achieve depend upon the resources of the broader community in these out-of-school settings (Blyth, 1992; Carnegie Corporation of New York, 1992; Lerner, 1995; Schorr, 1989).

Volunteers help to serve and represent community-based organizations in meeting the needs of their constituents (Borden & Perkins, 2007); in other words, volunteer influence potentially mediates the relation between program features and youth life skill outcomes. The evaluation of youth programs is largely based on a direct main-effect approach between youth program features and youth outcomes. Less attention has been given to examining underlying mechanisms to explain the direct effects of structural or program features on youth outcomes. Some, however, have proposed (cf., MacKinnon & Dwyer, 1993) and found support for effective youth intervention that targets mediators in order to influence positive program outcomes (cf. Stice, Presnell, Gau & Shaw, 2007).

This study empirically examined the mediating influence of volunteer support on the relationship between contextual influences (e.g., organizational features and youth education experiences) and life skill outcomes. In other words, the question becomes, do volunteer
influences explain the link between contextual features of nonformal youth education and youth outcomes?

The following hypotheses were tested in the study:

(1) learning opportunities provided by community-based clubs relate positively with support provided by volunteers;
(2) supportive environments provided by community-based clubs relate positively with support provided by volunteers;
(3) learning opportunities and supportive environments have a positive relationship with youth outcomes; and
(4) volunteer support mediates the relationship among learning opportunities and supportive environments and youth outcomes.

The overall aim of the 4-H club evaluation was to illustrate how selected factors (volunteer support systems, youth engagement in activities, and environmental and organizational supports) fall into a conceptual model in their associations with life skill outcomes. This conceptual model can:

(1) aid our understanding about how program features work to influence life skill outcomes;
(2) guide youth development professionals toward focus areas to more effectively influence youth life skills; and
(3) point to new directions in evaluation, for example, examining how specific volunteer competencies (and areas to target in volunteer training) might explain program feature effects on youth life skills.

**Method**

A community-based club evaluation survey was completed by over 600 youth from 44 county-based locations in a Southeastern state in the summer and fall of 2005. In accordance with approved institutional review board protocol for human subjects at the land grant institution, a cover letter and instructions were provided by a county extension youth development educator to each community club leader and parent describing the confidentiality, process, distribution, and voluntary nature of the survey.

Community club leaders distributed questionnaires to each youth member enrolled in a community club. Upon completion, the questionnaires were collected by the community club leader and county extension youth development educator and then forwarded to the authors of the study for data entry and analysis. Respondent youth came from approximately equal proportions of urban/suburban (49.7%) and rural counties (50.0%). Of the 628 respondents, 64.3% were female, the average age was 12.9 years old, 68.0% were from rural or small towns, and 70.6% were Caucasian. See Table 1 for participant information.
A retrospective design was used in administering the survey and collecting data in a cross-sectional, non-experimental study. The survey was designed to assess perceptions of organizational and environmental support by youth recipients and adult volunteers, as well as life skill gains among youth. The survey instrument utilized in this study was adapted from a 2004 impact study of a nonformal youth education program in Nevada (cf., Singletary & Smith, 2004). The survey included multiple questions to measure learning opportunities, supportive environments, volunteer support, and youth outcomes. Response options ranged from '1=Not at All' to '5=All the Time.'

Once data were collected and entered into a database, preliminary examinations were conducted to discern factors among positive youth outcomes (life skill gains) and “predictors” that are associated with positive youth outcomes. Principal components exploratory factor analysis (EFA), using varimax and oblimin rotations as alternatives to a non-rotated solution, of items indicating organizational supports, produced three factors that explained the majority of inter-item variance:

1. volunteer support system;
2. youth engagement in activities; and
3. environmental and organizational supports.

A composite latent life skills variable reflected a variety of life skill types including: general mastery; decision-making skills; and self-responsibility.

The aim of the following research was to illustrate how the above factors fall into a conceptual model in their associations with life skills outcomes. It was expected that contextual influences (learning opportunities, and supportive organizational environments) influence or associate with youth life skills by way of volunteer support systems. In other words, because volunteers and staff represent youth organizations and work in close proximity with youth, we wanted to know:

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth</td>
<td>628</td>
<td></td>
</tr>
<tr>
<td><strong>Mean Age</strong></td>
<td>12.96 years (SD=2.83)</td>
<td></td>
</tr>
<tr>
<td><strong>Sex</strong></td>
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<td></td>
</tr>
<tr>
<td>Male</td>
<td>208</td>
<td>35.7%</td>
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<tr>
<td>Female</td>
<td>374</td>
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<tr>
<td>Caucasian</td>
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<td>70.6%</td>
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<tr>
<td>African-American</td>
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<td>2.4%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>32</td>
<td>5.1%</td>
</tr>
<tr>
<td>Asian</td>
<td>3</td>
<td>.5%</td>
</tr>
<tr>
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<td><strong>Residence</strong></td>
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<tr>
<td>Rural</td>
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<td>41.4%</td>
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<td>Small Town</td>
<td>152</td>
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</tr>
<tr>
<td>Urban Area</td>
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<td>32.0%</td>
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<td>56</td>
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</table>
to what extent do volunteers bridge the relation between contextual/organizational environments and youth life skill outcomes?

The model of interest examined how organizational supports related to life skills as a positive youth development outcome. A mediator model was utilized to test the conceptual framework of this study. Simply stated, a mediator is an influence that accounts for the relation between two variables, a predictor and outcome (Baron & Kenny, 1986; MacKinnon, 2000). Mediators are considered to be part of the process of “causality” in which a predictor variable influences a mediator and the mediator, in turn, influences the outcome variable. Mediators, similar to third variables, help provide explanation as to how an independent and dependent variable relate. For example, a strong negative relation between a child living in poverty and her school performance can be better explained by the degree to which the child’s parents are involved in her schooling. When the mediator, “parents’ involvement in schooling,” is introduced into the equation and accounted for, the influence of poverty on school performance is reduced to a nonsignificant level.

Reduction to a zero relation (not frequently found in social sciences) when a mediator is introduced indicates total mediation. Reduction in the relation or a nonsignificant relation indicates partial mediation. Understanding intervening variables (mediators) as they explain the relation between an environmental or contextual factor and a youth development outcome, points to where intervention is likely to be most effective (Hansen, 1996). For example, if parental involvement in a child’s school performance explains a negative relation between SES and academic achievement, creating a program that encourages low-income parents to increase their involvement in a child’s schooling would be beneficial.

To test the hypothesized mediating role of volunteer support, we first assessed the following conditions for mediation using multiple regression analysis (MRA):

(a) the independent variable must be related to the mediator;
(b) the independent variable must be related to the dependent variable;
(c) the mediator must be related to the dependent variable; and
(d) the independent variable should become significantly smaller (partial mediation) (Baron & Kenney, 1986). Measured variables were examined in combination using Baron and Kenny’s (1986) method.

Initial MRA results showing partial mediation by volunteer support on the relation between organizational supports and youth life skills prompted further exploration and breakdown of variables using confirmatory factor analysis (CFA). Analytical methods included: exploratory factor analysis (EFA) of survey items; multiple regression analysis (MRA) for initial testing of mediation (SPSS Program); confirmatory factor analysis (CFA) through structural equation modeling (SEM) (AMOS software); and bivariate Pearson correlations among latent and manifest variables (SPSS).

Measures

The means, standard deviations, and reliabilities for all study variables are displayed in Table 2. For all measures, items were coded so that a high score indicates a high level of the characteristic being assessed.
**Environmental/Organizational Supports.** Environmental/Organizational Supports were evaluated using ten scale items measuring youth perceptions of their sense of belonging in a supportive and inclusive environment. Measurement items included: “4-H clubs are supportive environments where I feel accepted” and “I feel like I fit in with my peers.” Coefficient alpha for the scale was .92 indicating a high degree of internal consistency among measurement items.

**Youth Engagement.** Youth engagement, a latent construct, was indicated using three measured constructs: leadership roles, participation in 4-H events, and engagement in 4-H activities. Leadership roles included eight items that measured the various leadership roles held by survey participants in the youth organization. Roles included serving on club committees, club officer, County council officer, District/State council officer, youth-adult teaching teams, camp counselor, school committees, and community committees. Participation in 4-H events consisted of four items including county events, district events, state events, and national events. Participation in 4-H activities consisted of five items. These included: 4-H clubs, 4-H classroom or afterschool projects, fair 4-H events, 4-H day camps, and 4-H overnight camps.

To capture the context and educational value of participation, described by Lerner (2004), each activity, event and leadership role was weighted. For example, leadership roles were weighted from 1 indicating participation on club committees to 4 indicating participation in community service committees. Events were weighted from 1 indicating participation in local events to 4 indicating participation in national events. Activities were ranked in order from lower context and educational content to highest with 1 = 4-H afterschool or classroom projects and 5 = 4-H clubs. The scores from the three indicators were summed to create a single indicator for youth Engagement. Coefficient alpha for the scale was .80 indicating a high degree of internal consistency among measurement items.

**Volunteer Support.** Volunteer support, a latent construct was indicated using two measured variables: mentorship and club management. Coefficient alpha for the 8-item scale of mentorship was .94 indicating a high degree of internal consistency among measurement items. Mentorship scale items included: “My volunteer leader lets me know they have high expectations for me” and “My volunteer leader helps me with goal setting, decision-making and record keeping.” Management was measured using ten items including: “My volunteer leader makes sure that 4-H activities are safe,” “My volunteer leader manages conflict between youth” and “My volunteer leader makes sure that club members plan and lead 4-H meetings and activities.” Internal consistency reliability was measured at .93 for management items.

**Life Skills/Youth Outcomes.** Life Skills/Youth Outcomes a latent construct was indicated by using three measured variables: mastery, self-responsibility and decision-making. Mastery was measured using 10 items. Coefficient alpha for the scale was .92 indicating a high degree of internal consistency among items. Items included as a result of 4-H, I am learning: “To organize my time, money, and other things used in my projects,” “About my future career choices” and “To set and reach goals.” Self-responsibility was measured using five items. Items included as a result of 4-H, I am learning: “To be responsible for myself,” “To trust others and be trustworthy” and “I think through all of the good and bad results of different decisions before acting.” Coefficient alpha for the scale was .84 indicating internal consistency among measurement items. Decision-making was measured using seven items. Items included as a result of 4-H: “I can make my own decisions” and “I can do things on my own.” Coefficient alpha for the scale was .84 internal consistencies among measurement items.
Control Variables. In addition to the latent constructs identified above, it is equally important to understand the role of gender differences in youth engagement and volunteer support. Participant gender was coded 1 for males and 2 for females. Given that it is not possible for youth to immediately participate in all leadership roles, events and activities, it was important to understand this relationship. Years in 4-H was measured by asking participants “how many years have you been enrolled in 4-H?”

Table 2
Measured items on Youth Engagement, Life skills, Organizational Support and Volunteer Support

<table>
<thead>
<tr>
<th>Measure</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental/Organizational Supports</td>
<td>624</td>
<td>4.30</td>
<td>0.73</td>
</tr>
<tr>
<td>Participation in 4-H Activities</td>
<td>601</td>
<td>8.22</td>
<td>3.74</td>
</tr>
<tr>
<td>Participation in 4-H Events</td>
<td>601</td>
<td>2.59</td>
<td>2.32</td>
</tr>
<tr>
<td>Leadership Roles</td>
<td>601</td>
<td>4.12</td>
<td>5.55</td>
</tr>
<tr>
<td>Volunteer Support</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mentorship</td>
<td>594</td>
<td>4.38</td>
<td>0.76</td>
</tr>
<tr>
<td>Management</td>
<td>597</td>
<td>4.44</td>
<td>0.67</td>
</tr>
<tr>
<td>Life Skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Mastery</td>
<td>620</td>
<td>4.02</td>
<td>0.77</td>
</tr>
<tr>
<td>Self Responsibility</td>
<td>620</td>
<td>4.11</td>
<td>0.84</td>
</tr>
<tr>
<td>Decision Making</td>
<td>617</td>
<td>4.35</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Results
Correlations
Correlation coefficients were computed among the variables in the structural equation model (SEM), including the latent variables youth engagement, volunteer support, and life skills, the measured variable of organizational support and control variables. The results of the analyses in Table 2 show that five of the possible six correlations between youth engagement, environmental/organizational support, volunteer support, and life skills were statistically significant at p<.05.

Youth engagement was statistically significant and highly correlated to years in 4-H (r=.60, p<.001) and to some degree life skills (r=.20, p <.05) and environmental/organizational support (r=.18, p<.05). Volunteer support was statistically significant and highly associated with both life skills and environmental/organizational support (r=.75, p<.001 and r=.78, p<.001, respectively) and to a lesser degree gender. Environmental/organizational support was statistically significant and highly correlated life skills (r=.77, p<001) and to a smaller degree gender (r=.20, p<.05). Based upon these findings, separate SEM models were estimated for the study variables.
Table 3
Correlations Among Variables in the Structural Equation Model

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Youths Engagement</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Volunteer Support</td>
<td>.13</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Life Skills</td>
<td>.20*</td>
<td>.75**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Environmental/Organizational Support</td>
<td>.18*</td>
<td>.78**</td>
<td>.77**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Gender</td>
<td>.09</td>
<td>.16*</td>
<td>.16*</td>
<td>.20*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>6. Years in 4-H</td>
<td>.60**</td>
<td>.00</td>
<td>.04</td>
<td>.00</td>
<td>.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Relations Among Contextual Influences, Volunteer Support Systems and Life Skills

Table 4 presents the regression results of the variables included in this study. Results show that volunteer support partially mediates the relation between supportive environments (settings for learning and representation of youth organization) and youth life skill outcomes.

First, correlation coefficients indicated that learning opportunities (.398) and environmental support (.422) positively with volunteer support providing support for hypothesis 1 and 2. Next, correlation coefficients indicated that learning opportunities (.441) and environmental support (.450) positively with youth outcomes providing support for hypothesis 3. Finally, correlation coefficients indicated that learning opportunities (.404) and environmental support (.352) are smaller when volunteer support is included as a variable providing support for the fourth hypothesis.

Table 4
Regression Mediator Model for Predictors on Life Skills

<table>
<thead>
<tr>
<th></th>
<th>Beta</th>
<th>$R^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1. Mediator, Volunteer Support, on Predictors: Environment/Organizational Support and Youth Engagement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental/Organizational Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth Engagement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.736</td>
<td>-.050</td>
<td>.461</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>ns</td>
<td>.000</td>
</tr>
<tr>
<td>Step 2. Dependent Variable, Life Skills, on Predictors: Environmental/Organizational Support and Youth Engagement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental/Organizational Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth Engagement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.745</td>
<td>.048</td>
<td>.564</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>ns</td>
<td>.000</td>
</tr>
<tr>
<td>Step 3. Dependent Variable, Life Skills, on Mediator, Volunteer Support, then Predictors: Environmental/Organizational Support and Youth Engagement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteer Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental/Organizational Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth Engagement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.296</td>
<td>.523</td>
<td>.595</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>ns</td>
<td>.000</td>
</tr>
</tbody>
</table>
A structural equation model was used to evaluate the strength of direct relationships between: environmental/organizational support, youth engagement and life skills; and the indirect relationship that is mediated by volunteer support (Figure 1). The independence model was readily rejected ($\chi^2=3567.72$ $p<.000$, $df=66$). The mediation model provided a good fit for the data ($\chi^2=98.02$ $p<.000$, $df=37$, RMSEA = .05, Pc = .41). All indicators had moderate to high loadings on their respective latent variables.
Regression analysis, shown in Table 4, indicated that volunteer support was predicted by environmental/organizational support (standardized coefficient = .74, p<.05) and predicted life skills (standardized coefficient = .30, p<.05). Volunteer support partially mediated the relationship between predictor and outcome measures, as indicated by a significant indirect path between environmental/organizational support and life skills (standardized coefficient for indirect effect = .52, p<.05). It is noteworthy that volunteer support does not mediate the relationship between youth engagement and life skills (standardized coefficient = -.05, p<.08).

Principal components exploratory factor analysis (EFA) of items on the youth club survey (using varimax and oblimin rotations as alternatives to a non-rotated solution), produced three factors that explained the majority of inter-item variance: (1) volunteer support systems; (2) youth engagement in activities; and (3) environmental and organizational supports. A composite latent life skills outcome variable (CFA) reflected a variety of life skill types including: general mastery; decision-making skills; and self-responsibility.

The conceptual model was tested using SEM. In the model, environmental and organizational supports (youth program features) were both directly and indirectly related to youth life skills, whereas youth engagement in activities was only directly related to youth life skill outcomes. Adult volunteer support was indicated by two major features: (1) mentorship – the one-on-one relationship of the adult volunteer with the youth; and (2) management – how volunteers managed clubs and worked with the group. The major finding was that volunteer support (and its two components of youth mentorship and club management) explained how organizational supports influenced youth life skill development.

**Discussion**

The study examined the mediating role of volunteer support in the relationship among youth engagement, supportive environments and youth outcomes in community-based clubs. Consistent with Boyce (1971), volunteers contribute to community clubs by carrying out many roles that both directly and indirectly affect youth. More than half of the variance in youth perceptions of adult volunteer support (53.5%) is explained by the influence of environmental/organizational support and youth engagement. Volunteer support includes the relationships youth perceive having with their adult volunteers, volunteer disseminated information, volunteer delivered experiences, and how volunteers represent the organization and set the conditions for youth learning and participation in 4-H.

Furthermore, volunteer support partly explains the role of youth organizational settings and learning opportunities provided within the organization as they are associated with life skills (youth outcomes) or competency development. Volunteer support is highly significant and explains nearly half the variance (46.1%) in youth life skills. Volunteer support includes the relationships youth perceive having with their adult volunteers, volunteer disseminated information, volunteer delivered experiences, and how volunteers represent the organization and set the conditions for youth learning.

This model points to the potential role of adult volunteers in promoting positive youth development in community club environments. Volunteer support systems mediate or serve as a bridge between environmental influences and youth life skill outcomes. This is because volunteer support is related to each of the environmental influences and related to life skill outcomes. Volunteers may support the development of key youth life skills such as: decision-
making skills (planning, organizing time and resources, and setting goals); self-responsibility skills; and general mastery skills (relationship building skills, community service, planning club activities in community, learning leadership).

Youth organizations as a whole potentially have great impact on youth through adult volunteers who represent their organization, create supportive, safe, and cognitively engaging environments. The next step is to determine what facets of adult volunteers most influence youth development. A multiple mediator model (cf., MacKinnon, 2000) would prove useful in examining those facets of volunteers which have the most influence on youth development. Once these areas are examined and explored, the emphasis of training and volunteer development can be tailored to develop these facets.

**Conclusion**

Ultimately, these findings offer support that volunteers help create environments of safety, challenging learning, and provide critical support meet youth needs and skill development. The research findings reveal no surprises. The best way to positively influence youth life skill development – as well as the community club environment and youth engagement in activities – is through supporting and training adult volunteers who work with youth.

Findings indicated that youth perceived that the volunteers who worked with them possessed adequate organizational knowledge of the youth program (4-H), offered challenging learning opportunities for youth, created safe healthy environments for youth in clubs, and supported them through caring, encouraging relationships. The research here simply sums up a well-known maxim that in youth programs “volunteers hold the key” to youth development. Also, youth development is represented by the life skills that youth possess – life skills that volunteers and youth program organizational structures and delivery systems help to develop.

The analyses performed using this youth community club evaluation survey provides supporting data from youth on three focus areas of youth organization program effectiveness, namely:

1. creating high quality community-based learning environments for youth in clubs;
2. creating caring adults support systems for youth; and
3. developing life and career skills through subject-matter topics.

The data provided a useful means of conceptually organizing the influence of each of these three areas. Referring to the mediator model and also what is currently known about volunteer development in organizations, the support and training of adult volunteers may need to emphasize:

a. sharing information on youth program opportunities at local, state and national levels with youth and adult volunteers;

b. opportunities for professional growth in facilitating youth life skills as well as developing youth and adult subject matter expertise;

c. organizational moral support and recognition of volunteers from national, regional and local levels;

d. youth-adult partnership training in the community club environment; and

e. education on fostering and maintaining developmentally appropriate, safe, and structured environments for youth.
Limitations

The study also has some limitations. The nature of this study and its design did not collect information related to the roles of volunteers in community clubs or their level of involvement. Current research is examining the specific roles of volunteers in community clubs, levels of involvement in community clubs by volunteers and training in youth development. Additionally, the study did not collect information on lack of participation by youth. Specifically, data was not collected on why youth do not engage in leadership roles and high context, high educational value activities.

This was a cross-sectional, non-experimental design. Participants were not sampled in a stratified manner, rather on a voluntary basis. Data were not normally distributed and were negatively skewed. Future studies should involve a longitudinal design measuring life skill gains (or life skill levels over time) among participants, as well as examine multiple mediators using structural equation modeling (SEM). SEM provides fit indices and capacity to create latent constructs to approximate the conceptualized model of youth organization and volunteer input as each influence youth life skill outcomes. Moreover, when items indicating volunteer support alone (excluding other constructs) are entered into a factor analysis, a two factor solution emerges which conceptually consists of volunteers “managing youth behavior” and “offering mentoring support.” Further examination that breaks down the volunteer support mediator into separate constructs, as well as inclusion of additional indicators of volunteer support are relevant to understanding “volunteer competencies” as they promote youth development. The development of staff and volunteer competencies is an integral part of youth programs. Knowing the skill areas that volunteers possess, as well as volunteer capacities that most strongly explain and promote youth life skill development, is useful information for youth programs. Key volunteer competencies – ones with greatest impact – ideally become the focus of staff and volunteer training development in youth programs.

References


Skateboard Park Participation: A Means-end Analysis

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Skateboard Park Participation: A Means-end Analysis

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Abstract: Skateboarding has become a highly visible and popular activity. However, many negative stereotypes remain associated with the activity and its participants (Jones & Graves, 2000). In contrast to the negative stereotypes, skateboarding seems to provide many individuals, and youth in particular, with an important outlet for physical activity, leisure, and personal development. The purpose of this study was to investigate why skateboarders chose to visit skateboard parks, to identify outcomes of participating in skateboarding at skateboard parks, and to identify the underlying values that guide skateboarders’ choice of this specific setting. The conceptual framework for the reported study was provided by a means-end model, which views values as the key force influencing an individual’s decision to engage in a particular behavior (Gutman, 1982; Manyiwa & Crawford, 2002). The results indicate that this sample of skateboarders received a number of important benefits and, despite stereotypical views, may seek positive outcomes through skateboarding at skateboard parks. A socio-ecological model and a positive youth development framework provide a platform for interpreting the results and implications.

Introduction

It is clear that with large corporate sponsorships and televised competitions, skateboarding has emerged from its roots of carving the concrete banks in southern California’s schoolyards to a highly visible and popular activity. As the number of skateboarders has increased, many communities have viewed skateboarding as a problem (Dahlgren, 2006; Howell, 2005; Young 2004). Likewise, there are many negative stereotypes associated with the activity itself (e.g., property damage to public fixtures like handrails and ledges) and its participants (e.g.,
delinquency and defiance) (Jones & Graves, 2000). Rankin (1997) agreed that “many skaters [skateboarders] are viewed as unruly vandals and dangers to themselves and the public” (p. 55). In contrast to the negative stereotypes, skateboarding seems to provide an important outlet for physical activity, leisure, and personal development for many individuals.

For example, researchers have given considerable attention to the problem of inactivity among adolescents and authors have asserted that today’s adolescents face increasing challenges to living active lifestyles (Hills, King, & Armstrong, 2007; Morantz & Torrey, 2004). Obesity and cardiovascular disease are often associated with inactivity and it is widely accepted that physical activity is an effective way to overcome these and other health related challenges (Ransdell et al., 2004; West & Shores, 2008). Skateboard parks represent one outlet among other programs and facilities offered by community recreation centers that can address a growing problem of youth inactivity.

Although researchers have produced very little empirical evidence to date, Lemmon and Nowlin (2007) made the case that skateparks provide outlets for experiencing success in a safe and supportive setting. Such thinking is consistent with that of Lee (2003) who suggested that skateparks have the potential to serve as centers of youth development. Likewise, the presence of a skateboard park can increase the number of available leisure choices and provide an important meeting place for individuals who share a common interest (Dahlgren, 2006). According to Shannon and Werner (2008) skateparks, “provided opportunities for youth to gather, relax, and hang out with friends while participating in an activity that was important to them” (p. 52).

While some authors agree that skateboard parks can serve as centers for positive youth development, only recently have researchers attempted to explore specific links between skateboarding at skateboard parks and outcomes related to positive youth development. Shannon and Werner (2008) interviewed 8 users of a newly constructed skateboard park in Canada and concluded that the skateboard park provided important leisure opportunities for those youth. Enhanced leisure opportunities support efforts to enact a positive youth development framework by focusing on the developmental potential of youth instead of focusing on treating their deficits (Bocarro, Greenwood, & Henderson, 2008). While not all skateboard park users are young adults, many are, and young adults need a variety of leisure options in order to overcome the many health and developmental challenges that they face today.

Like any single component of a comprehensive recreation program, community recreation centers invest in skateboard parks with hopes that participants will receive a variety of benefits. However, any positive outcomes associated with skateboard park use remain understood vaguely at best. There is currently little empirical explanation for how participants might achieve such outcomes through using a skateboard park or why participants might be drawn to utilize these facilities. Therefore, the purpose of this exploratory study was to identify outcomes of skateboarding at community skateboard parks. The study also hoped to gain a preliminary understanding of the process or mechanisms through which visitors achieved those outcomes by investigating why skateboarders choose to visit skateboard parks and by identifying the underlying values that guide their desire to utilize this specific setting.
Methodology

The conceptual and analytical framework for this study was provided by a means-end model, which views values as the key force influencing an individual’s decision to engage in a particular behavior (Gutman, 1982; Manyiwa & Crawford, 2002). Initially, the means-end approach to understanding behavior was used to study consumer choice and/or decision-making behavior (Gutman, 1982; Mulvey, Olson, Celsi & Walker, 1994; Walker & Olson, 1991). Since then, a number of researchers have used means-end as a technique to study leisure and recreation behavior (Frauman, & Cunningham, 2001; Goldenberg, Hill, & Freidt, 2008; Goldenberg, Klenosky, O'Leary, & Templin, 2000; Goldenberg, McAvoy, & Klenosky, 2005; McAvoy, Holman, Goldenberg, & Klenosky, 2006).

The interviewing process of the means-end framework is called laddering, which results in qualitative data (Reynolds & Gutman, 1988). An interviewer asks a respondent a series of structured, but open-ended questions that gradually progress from concrete attributes to abstract values. The goal of laddering is to determine “why a particular concept is important to the respondent” (Goldenberg et al., 2000, p. 212). For example, the present study asked, “Why do you come to the skateboard park?” The response given by the participant (“to skate with my friends”) is then utilized in the next rung of the ladder. To continue this example, the next question in this laddering process might be, “Why is skateboarding with your friends important to you?” This process of continuing to use the participant’s response to generate the next “Why is _____ important to you” is repeated until the participant no longer has an answer to give. According to the means-end framework, this line of questioning brings the respondent further along a continuum from concrete, objective responses (the means) to more abstract values that are important to the individual (the ends) (Klenosky, Gengler, & Mulvey, 1993; Reynolds & Gutman, 1988). This process allows researchers to identify linkages in responses and thereby identify the outcomes that participants believe they receive from engaging in a behavior as well as the underlying values that drive that behavior.

The laddered responses are reviewed by the researchers and “aggregated to identify the major patterns of relationships among the elicited concepts” (Goldenberg et al, 2000, p. 213). The review of the data results in content codes based on informants’ responses, similar to the “cut-up-and-put-in-folders” approach (Bogdan & Biklen, 1982), which has been used successfully in prior recreation (Hultsman, 1996) and means-end research (Goldenberg et al., 2000, McAvoy et al., 2006). The coded ladder elements are then entered into LadderMap software program (Gengler & Reynolds, 1995) to facilitate data analysis. This program produces an implication matrix, which is an asymmetric matrix summarizing the number of times each concept was associated with each of the other concepts in informants’ ladders (Klenosky, Frauman, Norman, & Gengler, 1998). Based on these associations, a hierarchical value map (HVM) is created that provides a graphic summary of the linkages in the data (Gengler et al., 1995).

The HVM has lines and circles that represent the relationships among various attributes, consequences, and values. The thickness of the lines and the size of the circle indicates the number of times that concept or that link was indicated by the respondents. In other words, the HVM depicts the major patterns of relationships among the participant’s responses and provides a view of the laddered responses as they progress from concrete objects and behaviors to more abstract values. This progression is often referred to as a means-end chain (Goldenberg et al., 2000). As displayed in the HVM, this chain consists of the three links previously mentioned: attributes, consequences, and values. Attributes are viewed as being relatively concrete and are the characteristics or features of the product, object, or activity in question (Goldenberg et al.,
Consequences are viewed as more abstract and refer to outcomes associated with particular attributes. Consequences refer to desired outcomes, more commonly called benefits, but also to undesirable outcomes, such as costs and perceived risks. Values are highly abstract and summarize desired end-states of being (Goldenberg et al., 2000).

Means-end allows researchers to develop an explanation of mechanisms by identifying relationships between attributes, consequences, and values. For example, Haras, Bunting, and Witt (2005) utilized a means-end approach to examine the process whereby youth achieved outcomes of participation in an intentionally designed ropes course program. They suggested that by linking the physical attributes of a program with immediate outcomes (consequences) and the distal outcomes (values or end states), program designers can consider the complete experience of participants and thereby make informed decisions about program design. Haras and colleagues concluded by suggesting that all types of recreational programs need a thorough, organized, working knowledge of the process that guides outcome-based programming.

**Procedure**

Modern skateboard parks are built both indoors and outdoors and offer a variety of terrain features designed specifically for use by skateboarders. Although, private skateboard parks have re-emerged, most are indoor facilities and charge fees in exchange for scheduled access to the facility. The current study was concerned with public skateboard parks as those facilities are believed to serve as outlets for positive youth development. Some communities offer multiple public skateboard parks, while others offer none. Most modern, community skateboard parks offer features that simulate urban artifacts, such as ledges, benches, curb cuts, concrete embankments, and rails. These were the types of skateboard parks included in the present study.

The researchers visited nine community skateboard parks; 4 were in Salt Lake City, Utah and 5 were in the Central Coast region of California. These two locations were chosen primarily out of convenience, but also to explore the possibility of differences among skateboarders within these two regional locations. Upon arriving to the skateboard park, interviewers approached skateboarders casually and asked them if they would be willing to participate in the study by responding to a short interview. Unlike many qualitative techniques, the laddering process allows researchers to access a relatively large sample due to the structure of the laddered questioning technique. Once an interviewer had gained consent, he or she conducted the laddering interview as previously explained. The interviews were conducted between July and September 2006.

The interview responses were analyzed by three researchers who worked together to enter the data and develop the initial content codes. A fourth researcher who was familiar with means-end theory but not familiar with this study coded the data and the coders were in 81.33% agreement. This level of agreement was similar to that obtained in prior means-end research (Goldenberg et al., 2000; Klenosky et al., 1993). The disagreements were resolved by the original researchers.

Once the content codes were developed, the coded ladder elements were entered into the LadderMap software program. LadderMap software produced an implications matrix which is a chart that shows the connections between the various responses. From an implication matrix,
an HVM is developed which graphically demonstrates the links between the attributes, consequences, and values.

**Results**

Informants for this study were 171 skateboarders who visited skatepark in Salt Lake City, UT (49.12%, n= 84) and the Central Coast of California (50.88%, n= 87). No notable differences were discovered between these two groups. Respondents ranged in age from 10-45 years old, with the majority (79%, n= 135) between 10 and 21 years old. The majority were male (94.7%, n= 162), white (84.2%, n= 144), and high school or college students (69%, n=118).

Within the data, 32 content codes were present that consisted of nine attributes (representing why an individual chose to skateboard at the park), 16 consequences (representing what an individual “got out of” skateboarding at the park), and seven personal values (describing why that consequence was important to the individual). The attributes and their definitions included: bowls, designated area and environment - not crowded, interactions - skate park provides opportunity to interact with others, location, simulate street environment, skating - skateboarding, skate park, terrain, and tricks. The 16 consequences were: avoid boredom/ be entertained, camaraderie and social opportunities, creative expression/freedom, excitement, fun (at that moment in time the individual was having a fun time), healthy living, meaning and purpose, mental engagement and development, motivation inspiration encouragement, new opportunities, physical fitness, recognition, relieve stress/escape, safety, skill development, and stay out of trouble. The values included: ambition, fun and enjoyment of life (overall in their life), self betterment, self-esteem, self-reliance, sense of accomplishment, and warm relationships with others.

The following examples demonstrate the qualitative responses and the codes that were assigned to the responses. Once demographic information was obtained the individual was asked to explain what outcomes they obtain from using a skatepark. One individual stated they “hang out with friends/there is someone to talk to” (attribute = interactions), which lead to “teach you new things/know more” (consequence = mental engagement), which lead to “makes you want to try harder/push harder” (consequence = skill development), which lead to “get better and become professional/get paid to do what you love” (consequence = recognition), which then lead to the value of “making you feel good about yourself/high self-esteem” (self-esteem). Another example started with the attribute of “friends/better to skate together than alone” (interactions), which lead to the consequences of “skate better when you feed off each other’s energy” (motivation), “encourage each other with friendly competition” (competition), “cool to watch each other progress and improve/satisfying” (encouragement), which then lead to the value of having a “sense of personal accomplishment/can progress more” (sense of accomplishment).

In Figure 1, the Hierarchical Value Map (HVM), summarizes the means-end relationships among the attributes (white circles), consequences (grey circles), and values (black circles) identified by the entire sample of skatepark park users. The size of each circle is proportional to the number of times the concept identified within the circle was mentioned by the informants. Some of the most predominant attributes include social interactions, skate, skatepark, and terrain. The largest circles that represent consequences included: fun, skill development, and camaraderie and social opportunities. The most mentioned value was fun and enjoyment of life, followed by a sense of accomplishment. The thickness of the lines connecting circles is
proportional to the number of times concepts linked together. The value level concepts are represented using black circles, labeled in upper-case letters, and are located near the top of the HVM.

**Figure 1**
Hierarchical Value Map for Utah and California Skateboard Park Participants - All Respondents (N=171)
A closer look at Figure 1 reveals a number of noteworthy links between attributes, consequences, and values. For example, skateboarding [skate] led to camaraderie and social opportunities, which then lead to warm relationships with others. The terrain provided opportunities for skill development, which led to fun. Excitement also led to fun. Further, the consequence of fun led to a sense of accomplishment, ambition, and relieving stress. The consequence of skill development led to the value of self-improvement. Another interesting link includes skill development, which led to recognition, which led to self-esteem.

Discussion

Results suggest that this sample of skateboarders believed that skateboarding at skateboard parks enhanced their lives in a variety of ways such as increasing their fun and enjoyment of life. This is similar to Shannon and Werner’s (2008) results, which indicated that “many youth expressed that skateboarding at the skate park was more challenging, exciting, and fun than what they have been able to create for themselves on the streets and in the parking lots, and the opportunities to experience these sensations motivated their attendance at the skate park” (p. 53). Visiting the skateboard park provided them with opportunities for external recognition and a chance to develop self-esteem and self-improvement through skill development in a social setting, which was also similar to Shannon and Werner who stated that “a few youth had their own goals related to their participation and appeared motivated to master particular tricks” (p. 53). These outcomes from the current study are also consistent with those sought through a positive youth development framework (Bocarro et al., 2008; Shannon & Werner, 2008). In fact, all of the values expressed by the informants are positive in nature and provide some evidence to support the claims of Lemmon and Nowlin (2007) who suggested that skateboard parks provide an important outlet for positive youth development. In general, these results support that notion that providing youth with access to skateboard parks can result in outcomes that enhance their leisure experiences and support positive youth development efforts by providing necessary support for adolescent development (Bocarro et al., 2008; Henderson, Powell, & Scanlin, 2005).

Camaraderie, social opportunities, skill development, fun, physical fitness, stress relief, and healthy living were among the most salient outcomes identified by respondents. It is important to consider, however, that the results also provide insight into the process or mechanisms through which participants realized these outcomes. A socio-ecological model may provide a useful explanation for the process through which participants achieved the outcomes associated with skateboard park use because it explains human behavior by considering four influential components: intrapersonal psychological factors (personal), interpersonal social factors (social), environmental surroundings (environmental), and policies, that work in concert to dictate an individual’s involvement in a physical activity (Kowal & Fortier, 2007; West & Shores, 2008). This directs program designers to consider each of these features within their programs and facilities.

Consider the application of present study’s results in light of a socio-ecological model. Intrapersonal psychological factors are characteristics of the individual. This is apparent in the participant responses regarding values such as self-esteem, self-improvement, and ambition. Interpersonal social factors are social supports and interactions. This factor appeared in the responses regarding the relevance and importance of social interactions. Environmental surroundings amount to the responses that acknowledged the importance of the terrain. Lastly, policies are the rules that govern the facility, and the respondents acknowledged that they experienced the freedom necessary to pursue their own freely chosen activity. Therefore, in
response to socio-ecological theory, program designers might consider if their skateboard park, and the policies surrounding the skatepark, create the type of environment that encourages the desired outcome, in this case, physical activity.

Utilizing a socio-ecological model as an explanation for the process through which skateboard park users achieve outcomes is supported further in the results reported by Shannon and Werner (2008). They offered three key outcomes of skateboard park use that they referred to as "enhanced leisure, enhanced skateboarding experiences, and valued space" (p. 46). They reported that access to a new skateboard park afforded their sample increases in physical activity, developmental leisure opportunities, access to preferred leisure activity, and social opportunities. The personal, social, and environmental aspects of the socio-ecological model are clearly present in their findings.

Along with the socio-ecological approach, viewing skateboard park users through a positive youth development framework is recommended. Practitioners are well advised to avoid viewing skateboarders with prejudice, and instead adopt a positive youth development stance by helping skateboard park visitors realize goals such as establishing strong social relationships, having fun, and living healthy lifestyles. It is possible that the skateboarders who frequent a skateboard park are seeking meaningful opportunities to better themselves.

Identifying the physical attributes of the skateboard park, along with the proximal and distal outcomes associated with participation, should inform outcome-based thinking, positive youth development, and comprehensive, intentional, community recreation programs that support positive youth development. Documenting benefits has supported claims that positive outcomes are available to skateboard park visitors. Understanding the values of skateboard park visitors and identifying the attributes that attract them to the skatepark may provide important information for understanding why individuals choose to visit them.

Finally, the present study’s results have implications for design that support the claims of Jones and Graves (2000), who suggested that skateboarders use skateboard parks in a different way than tennis players use a tennis court or ball players use a ball field. Design of such traditional athletic facilities is defined by standardized specifications (height of the net, etc.), but skateboard parks cannot be defined in such terms and should, instead, be designed in response to users’ goals and specified desirable outcomes. Modern skateboard park designers have focused primarily on the type of features and materials that produce functional and durable skateboard parks. However, well informed parks and recreational professionals think beyond function and durability when they design facilities and programs. They carefully consider targeted outcomes and participant benefits when designing facilities and programs. Although new design trends are emerging that recognize the importance of social interaction and sense of place (Bracal & Nims, 2007), there is no evidence that skateboard parks have been designed to support the achievement of specified outcomes or benefits. One reason for this may be the historical lack of documented outcomes for skateboard park visitors.

Future research may seek to understand the differences among skateboarders that use skateboard parks and those that do not and to examine the differences between stereotypical views of skateboarders versus the actual attitudes and behaviors of contemporary skateboarders. Another future study could examine skateboard park competitions and outcomes associated with participating in such structured activities.
This study has identified a number of outcomes that were relevant to a specific sample of skateboard park users. Perhaps a broader approach that focuses on a different method and utilizes a representative sample could add to the present understanding of process and outcomes related to skateboard park use. Finally, socio-ecological theory was suggested as a useful theory to explain the means through which outcomes are realized in the skateboard park setting.

**Conclusion**

In conclusion, rather than rely on the negative stereotypes often associated with skateboarding which might suggest that skateboarders are troubled and in need of some intervention, the results indicated that a recommendation to understanding skateboard park use can be through a positive youth development framework. Applying this framework, skateboard parks are one component, among others, utilized by community recreation providers as a means to promote positive outcomes among youth. This is in contrast to viewing the skateboard park as merely a diversion from trouble or as a way to keep young adults occupied. It is not a passive or neutral approach to recreation programming. Instead, it is an active and intentional approach that begins by identifying desired outcomes and then designing programs that achieve those outcomes.

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Dose: Comparison Nutrition and Physical Activity Sessions Targeting Middle School Adolescents

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Abstract: Determining optimal intervention dose to meet time constraints of the teacher while maximizing behavioral impact for students has proven challenging. This study investigated the influence of intervention dose on 7th & 8th grade participants’ dietary and physical activity (PA) behaviors. Participants were assigned randomly to a: 1) 6 week-12 session nutrition intervention [treatment#1], or 2) 3 week-6 session nutrition intervention [treatment#2] with data collected pre/post intervention. Using ANCOVA, measures assessed dietary and PA self-efficacy and behaviors. Ethnically diverse participants (n=107) were included in the analyses (46% male). All students set two goals: one dietary and one PA regardless of dose. Treatment#1 resulted in similar outcomes compared to treatment#2 with no significant differences between groups. As a result, we recommend that teachers using the 12 week intervention give students the option of setting new goals after the 6th lesson to maintain motivation.

Introduction

Nutrition education interventions are generally implemented by classroom teachers who have limited time to introduce nutrition and fitness concepts to students. Determining optimal dosage of the intervention to maximize behavioral impact on students while meeting the time constraints of the teacher has proven to be a challenge. Dosage in the context of nutrition education has been defined by Olander (2007) as the amount of exposure to an intervention measured by number of lessons/contacts or length of time (i.e., school year).

We identified three dose related studies targeting youth. Assessment of the Know Your Body program indicated that those elementary school students receiving a higher intensity
intervention had improved health measures (vegetable consumption, cholesterol, and systolic blood pressure) compared to students receiving lower intensity intervention (Resnicow, et al., 1992).

The School Health Evaluation Study found that peak knowledge, attitudes, and practice scores of students in grades 4-7 were obtained after approximately 50 hours of instruction (Connell, Turner, & Manson, 1985). An evaluation of the Nutrition for Life program for inner-city junior high school students found that an increase in program intensity from two to five hours produced improved attitude and behavior scores (Devine, Olson, & Frongillo, 1992). Lastly, among adult EFNEP participants in New York, the number of lessons completed was significantly associated with a greater reduction in food insecurity scores (Dollahite, Olsen, & Scott-Pierce, 2003).

Although the results of these studies and logical thought support the common perception that increasing dosage generates improved outcomes, it is difficult to extrapolate specific intervention dosage recommendations from one intervention to another. Therefore, it would be advantageous to determine the optimal dosage for desired behavior outcomes for nutrition education programs while meeting the time constraints of school teachers.

The purpose of the study was to investigate the influence of intervention dose on participants’ self-efficacy and behaviors for a nutrition and physical activity intervention targeting 7th and 8th grade students in California.

**Methods**

**Dosage**

Guidelines for California Expanded Food and Nutrition Education Program (EFNEP) (US Department of Agriculture Extension Service, October 1983) and Food Stamp Nutrition Education (FSNE) (US Department of Agriculture Food and Nutrition Service) specify a minimum of 6 hours of nutrition instruction for youth. Based on this information, we specified two dosages: 6-one hour sessions and 12-one hour sessions of classroom instruction.

**Design**

Students were assigned randomly to one of two treatment groups: 1) 6 week-12 session education intervention [treatment #1], or 2) 3 week-6 session education intervention [treatment #2] with data collected before and after the intervention (Table 1). Students, but not the intervention educators, were blinded to the assignment. The first 6 sessions were taught by the same educator for both treatment groups in the same classroom. For sessions 7-12, treatment #1 and treatment #2 participants were separated into different classrooms. Treatment #1 participants received an additional 6 nutrition and physical activity education sessions followed by the posttest. Treatment #2 participants received the posttest, then 6 sessions of a money management curriculum followed by another posttest.
Table 1
Intervention Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Treatment # 1</th>
<th>Treatment # 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Consent Forms</td>
<td>Pretest</td>
</tr>
<tr>
<td>2</td>
<td>Nutrition and fitness basics</td>
<td>Diet analysis and goal setting</td>
</tr>
<tr>
<td>3</td>
<td>Fitness analysis and goal setting</td>
<td>Heart rate and energy balance</td>
</tr>
<tr>
<td>4</td>
<td>Food label activity</td>
<td>Breakfast importance</td>
</tr>
<tr>
<td>5</td>
<td>Food preparation and tasting (fruit pizza)</td>
<td>Posttest Money management video</td>
</tr>
<tr>
<td></td>
<td>Fitness fundamentals and goal setting</td>
<td>Money personality activity</td>
</tr>
<tr>
<td>6</td>
<td>Food preparation and tasting (sweet potato chips) and dietary fat activity</td>
<td>Savings account information</td>
</tr>
<tr>
<td></td>
<td>Fast food activity</td>
<td>Shopping savvy</td>
</tr>
<tr>
<td>7</td>
<td>Media savvy skills</td>
<td>Checking account information</td>
</tr>
<tr>
<td></td>
<td>Personal goal collage and media activity</td>
<td>E banking information</td>
</tr>
<tr>
<td>8</td>
<td>Posttest</td>
<td>Posttest</td>
</tr>
<tr>
<td></td>
<td>Celebration</td>
<td>Celebration</td>
</tr>
</tbody>
</table>

Teaching the intervention were community nutrition educators for California Food Stamp Nutrition Education (FSNE, now named Supplemental Nutrition Assistance Program--Education) who were trained and certified to teach the subject. The study protocol was approved by the Institutional Review Board at the University of California, Davis.

Intervention

*EatFit*, based on the Social Cognitive Theory (Bandura, 1986), was designed to improve the dietary and physical activity behaviors of middle school students (Horowitz, Shilts, & Townsend, 2004). Goal setting instruction was the primary focus of the intervention. Students set one dietary and one physical activity goal using the guided goal setting procedure described elsewhere (Horowitz, Shilts, & Townsend, 2005; Shilts, Townsend, & Horowitz, 2004) and shown to be effective in promoting adolescent behavior change (Shilts, Horowitz, & Townsend, 2009). This procedure provides participants with choices from a collection of practitioner-developed major and minor goals containing attributes necessary for optimal goal effectiveness: specificity, proximity, difficulty, and attainability (Locke & Latham, 1990; Shilts, Horowitz, & Townsend, 2004; Shilts, Horowitz, & Townsend, 2009). A key element in this strategy is that the adolescent selects his or her own goal. A complete list of the major and minor goal options is available from the first author.
Variables known to influence behavior were specifically used throughout the intervention (self-monitoring, barriers counseling, goal-setting, skills mastery, cue management, contracting, modeling, social support, reinforcement, cognitive restructuring, and relapse prevention) (Bandura, 1986). This intervention was designed specifically for three U.S. Department of Agriculture youth programs in California: EFNEP, FSNE and 4-H. This National 4-H juried curriculum has been reported previously (Horowitz, Shilts, & Townsend, 2004; Shilts, Horowitz, & Townsend, 2009).

The alternate curriculum, Money Talks: Should I be Listening? for sessions 7-12 for treatment #2 participants contained no nutrition or physical activity content. Ordering information for EatFit and Money Talks are available at http://anrcatalog.ucdavis.edu.

Sample
A convenience sample was drawn from a low-income, urban middle school in central California. The participants were 7th and 8th grade students (n=157) from all five periods of the home economics course taught at this middle school. The middle school had 65% enrollment in free/reduced price meals and met criteria for participation in two US Department of Agriculture nutrition education programs for low-income youth, EFNEP and FSNE.

Measures
Content. A self-administered instrument assessed participants’ dietary behaviors (19 items), physical activity behaviors (4 items), dietary self-efficacy (19 items), physical activity self-efficacy (4 items), and goal commitment (2 items). Behavior and self-efficacy items addressed the specific targeted behaviors of the intervention. Self-efficacy was defined as confidence to perform a targeted behavior. Goal commitment questions were included to ascertain both treatment groups’ dedication to the goal set.

Response range for the behavior-related items was an 8-point scale signifying the number of days per week the participant engaged in the targeted behavior, i.e., 0-7 days per week. The response range for the self-efficacy items was a 4-point scale, i.e., 1, not at all sure, to 4, being totally sure.

The items in the dietary and physical activity behavior sections were adapted from the Centers for Disease Control Youth Risk Behavior Survey (YRBS). The YRBS dietary and physical activity items were modified slightly to include specific targeted behaviors of the intervention. Reliability testing of YRBS items with a nationally representative sample of adolescents indicated Kappas ranging from 91.1-64.2% (Brener, Collins, Kann, Warren, & Williams, 1995).

Cognitive and Reliability Testing. Using the concurrent method of Willis (1994), all items adapted for this study were assessed using cognitive interviewing techniques as recommended by Contento, et al (Contento, et al., 2002).

In individual interviews with 8th grade students (n=16), items were cognitively tested using four questions: What does the question mean to you using your own words? How did you come up with your answer? Thinking about other students in your grade at school, would any of these words be difficult for them? How would you make this question clearer to them? Items were evaluated for content validity by three experts in behavioral nutrition and found to represent the construct domain. The revised instrument was then pilot tested with 6-8th graders (n = 34) (Shilts, Townsend, & Horowitz, 2002).
A reliability assessment of the revised instrument was conducted to establish that the items were measuring phenomena in a reproducible and consistent way (Carmines & Zeller, 1979; Litwin, 1995). Seventh and 8th grade students (n = 46) completed the instrument on two occasions, three weeks apart, with no intervention. Reliability coefficients were .73 for the dietary behavior items, .55 for the physical activity behavior items, .59 for dietary self-efficacy items and .48 for physical activity self-efficacy items. Scales and instruments used with adults are thought to have good test retest reliability with coefficients of .7 or greater (Litwin, 1995; Shilts, Lamp, Horowitz, & Townsend, 2009). The coefficients for the dietary behavior items met this criterion. The other coefficients are lower than .7 indicating more random error associated with the items (Townsend, Sylva, Martin, Metz, & Wooten-Swanson, 2008). Because the reliability assessments were conducted with 12-14 year olds, we are considering them marginally acceptable for our purposes.

Analysis
Statistical analyses were conducted using SAS PC version 8.1.(SAS Institute Inc.) Double data entry in two separate files was performed and each file was compared for differences using the compare procedure. Differences were compared within groups using paired t-test and between groups using a chi square test. For analyses using analysis of covariance, the explanatory variable was group (12 session EatFit intervention [treatment group #1], or 6 session EatFit intervention [treatment group #2]) as the main effect with covariates being pre-intervention score, gender, class period, and ethnicity. The response variables were dietary self-efficacy, physical activity self-efficacy, dietary behavior, and physical activity behavior.

Results
Participants
Before commencing the intervention, participants (n = 157) were randomly assigned to one of two treatments groups. Of the 157 potential, 31 participants did not return both consent and assent forms by the end of the 8-week intervention period, nine did not complete the evaluation instruments and 10 attended fewer than 10 of the 12 EatFit sessions (treatment #1) or fewer than 4 of the 6 EatFit sessions (treatment #2). The attrition rates were similar for both treatment groups for return rate of consent forms and completion of evaluation instruments. However, more participants in treatment #1 (n = 12) did not complete the required number of sessions (> 10) compared to treatment #2 (> 4, n = 4, p = .02). Therefore, 107 participants (46 treatment #1 and 61 treatment #2), with an average age of 12.2 ± 0.6 years were included in the analyses. More than half (54%) of the participants were female. Participants self-reported as Hispanic (39%), Asian/Pacific Islander (27%), non-Hispanic white (15%), non-Hispanic black (8%), mixed ethnicity (8%) and American Indian (2%). No significant difference between treatment #1 and treatment #2 groups were found for gender, age or ethnicity using chi square tests.

Between 44% and 63% of treatment #1 participants showed improvement in dietary and/or physical activity self-efficacy and behaviors while 31% to 46% of treatment #2 participants made positive improvements (Figure 1). Chi square tests revealed no significant differences between groups.
Participants were asked on the posttest if they made an effort to reach their eating and physical activity goals. Most participants reported they made an effort to reach their eating goal (treatment #1 = 91%, treatment #2 = 87%) and their physical activity goal (treatment #1 = 93%, treatment #2 = 87%). Chi square test revealed no differences between groups for the eating ($p=.11$) or physical activity ($p=.13$) goal effort.

Participants’ mean scores for the four outcome variables for pre and post tests were compared using a paired t tests. Treatment #1 participants made significant improvements in dietary behaviors ($p=.02$), but did not make any other significant improvements in dietary and physical activity self-efficacy or physical activity behavior. Treatment #2 participants did not make any significant improvements from pretest to posttest in dietary and physical activity self-efficacy or behaviors.

Using analysis of covariance, the explanatory variable was group (treatment #1 or treatment #2) as the main effect with covariates being pre-intervention score, gender, class period, and ethnicity. The response variables were change in dietary self-efficacy, physical activity self-efficacy, dietary behavior, and physical activity behavior. No significant differences were found between treatment groups for the dietary behavior ($p=.12$), dietary self-efficacy ($p=.22$), physical activity behavior ($p=.21$), or physical activity self-efficacy ($p=.19$) variables (Table 2).
Table 2
Change Scores for Treatment #1 and Treatment #2 Participants by Outcome Variable* (n=107)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Treatment #1</th>
<th>Treatment #2</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 EatFit sessions+</td>
<td>6 EatFit sessions+</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(n=46)</td>
<td>(n=61)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean±SD</td>
<td>Mean±SD</td>
<td></td>
</tr>
<tr>
<td>Dietary Behavior</td>
<td>4.85±13.67</td>
<td>1.30±14.50</td>
<td>0.12</td>
</tr>
<tr>
<td>Dietary Self-Efficacy</td>
<td>-0.63±8.46</td>
<td>1.08±9.94</td>
<td>0.22</td>
</tr>
<tr>
<td>Physical Activity and Behavior</td>
<td>0.37±7.68</td>
<td>-0.52±4.49</td>
<td>0.21</td>
</tr>
<tr>
<td>Physical Activity Self-Efficacy</td>
<td>-0.57±2.58</td>
<td>0.39±3.00</td>
<td>0.19</td>
</tr>
</tbody>
</table>

*Model controlled for pretest score, gender, ethnicity, and class period
+Unadjusted means and standard deviations reported

Discussion

The delivery of a 12-session intervention did not result in greater improvement in dietary and physical activity self-efficacy and behavior compared to a smaller dosage of 6-sessions.

A possible explanation for no difference in the physical activity behavior variable was that participants in both groups scored high on the pretest with an average score of 19.41 out of a possible 28. This may have been a factor in the non-significant differences between groups.

An unexpected reduction in self-efficacy in the treatment #1 group was found. This was not matched by the treatment #2 group which showed no change in self-efficacy. Participants in both groups could have had unrealistically high expectations for their capabilities prior to the intervention as noted on the pre-test for both groups. Similar findings about self-efficacy have been reported in previous research for fruit, vegetable, and fat intake (Bogers, Brug, Assema, & Dagnelie, 2004; Brug, Assema, Kok, Lenderink, & Glanz, 1994). After the longer intervention period (12 sessions), participants may have been more realistic about their capabilities compared to the participants receiving 6 sessions (Shilts, Smith, Ontai, & Townsend, 2008). This may confound comparisons of change in self-efficacy using a traditional pre/post measure (Howard et al., 1979). Traditional pre/post format has been noted to contain “optimistic bias”, also known as “response shift bias”, a possible cause of internal invalidity of the assessment tool (Rohs, Langone, & Coleman, 2001). There is some evidence to suggest that administering the self-efficacy measure retrospectively may provide a more accurate reflection of change in confidence (Howard et al., 1979; Pratt, McGuigan, & Katzeva, 2001; Shilts et al., 2008).

In a comparison to other studies, we find that Nutrition for Life (Devine et al., 1992) and the California Youth EFNEP Evaluation Study (Townsend, Johns, Shilts, & Farfan-Ramirez, 2006) are similar to this study in that all three have relatively short interventions of 5 to 12 hours of instruction time. In contrast, Know Your Body (Resnicow et al., 1992) and the School Health Evaluation Study (Connell et al., 1985) are intensive with 50 hours minimum devoted to instruction. Our study differs from these three in that our design included randomization at the child level with a small sample size. The three studies randomized at the classroom level and reached over 1,800 children each.
Limitations

Two major limitations should be discussed. These limitations are sufficiently critical to account for the findings of no difference between the two dosages. First, both consent and assent forms were not returned for 32 children participating in the study. Although the attrition rates were not different for the two groups, the individual dropouts may have differentially influenced the outcomes (Campbell & Stanley, 1966).

Second, our physical activity behavior measure may have low power, i.e., a limited ability to detect change. We do not have the psychometric analysis detecting the ability of the tool to detect change following the intervention, i.e. sensitivity to change (Townsend & Kaiser, 2007). The low reliability coefficient most certainly indicated sizable amounts of random error associated with the tool (Townsend et al., 2008).

Conclusion

Because our study found no difference between the 6 and 12 session interventions, we did not find the optimal dosage. We know six sessions was insufficient to produce behavior change. Instead integrating a segment of nutrition education into each quarter of the school year should be tested. For future research, a larger disparity in intervention dosage may be needed to detect a difference between groups as well as the use of more sensitive and reliable instruments. In addition, we recommend reevaluating treatment #1 (12 sessions), but this time giving students the option of setting new goals after the 6th lesson to maintain motivation for behavior change.

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References


Engaging Youth Through Volunteer Service Travel: In Service of the Common Good

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Engaging Youth Through Volunteer Service Travel:  
In Service of the Common Good

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Abstract: Volunteer Tourism is becoming a popular topic in the travel literature. These experiences combine the adventure of travel with opportunities to serve the communities visited. This burgeoning field of tourism may provide an attractive outlet for generating positive developmental assets and for encouraging future civic engagement. This paper highlights a study which explored the relationship of wisdom and social capital and also discussed the influence of a voluntourism experience on wisdom and social capital domains. The sample consisted of 68 high school youth from the various high schools in Illinois. Results indicate that wisdom and social capital are positively and significantly related. In addition, wisdom and social capital indicators increased significantly over the course of the experience.

Introduction

Service-oriented vacations are becoming increasingly popular among all age groups. These trips satisfy one’s longing for adventure while providing valuable services to the communities visited. Recent surveys conducted by the Travel Industry Association (2006), the University of California, San Diego (Lovitt, 2008) and Conde Nast Traveler (DeVries, 2008) indicate that interest in volunteer vacations is growing steadily. This is a heartening trend amidst mounting evidence of civic disengagement in America (Putnam, 2001; The National Conference on Citizenship, 2006). Even more promising is the general trend of increased volunteerism by today’s youth. Given that early involvement in volunteerism is a strong predictor of service in adulthood (Astin, Sax, & Avalos, 1999), it would seem prudent to capitalize on this burgeoning interest in volunteer tourism as a channel to future civic engagement.
Volunteer tourism refers to the use of “discretionary time and income to travel out of the sphere of regular activity to assist others in need” (McGehee and Santos, 2005, p. 760). When these trips include intentional opportunities for reflection and development, they also fall into the category of Service-Learning (Jacoby, 1996). These experiences have been shown to raise consciousness and increase interest in activism (McGehee, 2002; Wearing, 2001). In addition, service-learning is associated with increased self-efficacy and civic engagement (Spring, Dietz, & Grimm, 2006), improved academic performance and behavior (Lundy, 2007; Scales, et. al, 2006) and increases in empathy, cognition, self-concept, and social development (Lundy, 2007; Waldstein & Reiher, 2001).

While these outcomes are positive, they tend to represent a piecemeal collection of psychological assets that have no theoretical foundation. Many researchers are challenging this piecemeal approach to psychological evaluation, emphasizing the need for long-term, comprehensive views of human development (Baltes, Glück, & Kunzmann, 2005). The search for an appropriate measure of “optimal human performance” has brought about the rediscovery of the ancient concept of wisdom. Wisdom was first conceptualized as the eighth and final stage of human development (Erikson, 1982), but recent research has identified adolescence as a key stage for the development of the antecedents of wisdom (Staudinger & Pasupathi, 2003).

Wisdom is reasoned to arise through the negotiation of “thorny” life circumstances in youth and adulthood (Baltes et al., 2005; Erikson, 1982). Research indicates that wise individuals possess rich knowledge and experience in matters of the human condition, self-knowledge, openness for new experiences, the ability to learn from mistakes, and good intentions in action (Trowbridge, 2005). As a multi-dimensional trait, wisdom represents a balance of intrapersonal and interpersonal domains. Given that wise choices benefit the individual and the community, wisdom is also a virtue for the common good.

Few studies have been done to determine successful approaches to facilitating growth in wisdom. However, researchers indicate that an appropriate intervention would include novel experiences and opportunities for reflection. These experiences should occur within a variety of social contexts and include the opportunity for group collaboration (Baltes et. al, 2005), as well as moral challenges that allow for some degree of profundity (Webster, 2003). Concrete experience, collaboration, challenges, and opportunities for reflection are essential elements in experiential education. As such, adolescent wisdom may be influenced through the experiential methods utilized in service-oriented experiences.

The purpose of this study was to explore the relationship of wisdom and social capital and to determine the effects of a volunteer travel experience on wisdom and social capital domains:

1. SAWS is a 40-item instrument using a Likert scale format that measures wisdom as a combination of 5 sub-domains: experience, emotional regulation, humor, reflectivity, and openness to new experiences.
2. SAWS has demonstrated strong validity, and reliability ranges from .78 to .87.
3. Wisdom is an increasingly popular concept in the field of psychology that is described as a complex integration of many dimensions within an individual.

**Methodology**

The sample for this study consisted of 68 high school students who participated in a service-learning trip in February of 2007. Ages ranged from 14 to 18 ($M = 16.8$) and two-thirds of the participants were female. The students came from various high schools near Elgin, Illinois and...
traveled by bus from Elgin to Nashville, TN during the five day experience. Students engaged in service activities (i.e. food shelters, minor facility maintenance) and cultural excursions (i.e. museums, colleges) each day followed by structured reflection exercises each evening. In addition, long hours of social interaction were a natural outcome of traveling by bus. The intense interactions with a new social group in an unfamiliar environment provide the context for reflective wisdom to emerge (Bailey & Russell, 2008). Participant motives were measured using 3 items to determine the nature of the students’ motivation to participate in the trip. These items measured common volunteer motivations based on altruism, skill enhancement, and moral responsibility using a 5-point Likert scale (Berger & Milem, 2001).

Participant outcomes were measured using Webster’s (2003) Self-Assessed Wisdom Scale (SAWS). The SAWS is a 40-item instrument using a Likert scale format to measure wisdom as a combination of 5 sub-domains: experience, emotional regulation, humor, reflectivity, and openness to new experiences. Experience refers to the amount of challenging life experiences one has encountered, Emotional Regulation, one’s ability to control their emotions, and Humor measures the ability to laugh at oneself and to appreciate life’s ironies. The final two domains, Reflectivity and Openness, measure one’s tendency to reminisce, connecting the past to the present, and the extent to which one is willing to experience new ideas and activities. This type of measurement assumes that wisdom is a personal trait and not a type of cognitive-based performance (Ardelt, 2004).

Measures of community involvement consisted of an 11-item questionnaire based on the concept of "Social Capital" as defined by the Saguaro Seminar [www.hks.harvard.edu/saguaro/](http://www.hks.harvard.edu/saguaro/). These items, which were adapted from the Social Capital Short Form, measure the students’ levels of social trust (3 items), as well as formal (4 items) and informal (4 items) participation in social groups. Involvement in formal groups includes attendance at non school based clubs & religious services, and participation in volunteering and community projects. Informal engagement includes having friends over to one’s house and hanging out with friends in public places.

The instruments were completed before and immediately after the program. Due to miscommunications on one tour bus the post-trip sample size was reduced to 48, for a total response rate of 72%. In addition, the sample was self-selected and internally motivated to attend this tour. It is unclear whether or not the same results would apply to involuntary participation. Other limitations include the lack of a control group and the lack of a follow-up measure to validate the findings. Future research will need to address these issues.

**Results**

Webster’s (2003) SAWS demonstrated strong reliability (Cronbach’s α=.89), indicating that the instrument performs well with an adolescent group. While the recommended method of analysis for this instrument involves summing the five sub-domain scores, the use of sub-scales allows for a deeper understanding of the relationship between wisdom and social capital. Reliability for all five subscales was acceptable as well. With the exception of the Openness domain (Cronbach’s α=.66), all alphas ranged from .74 to .82.

Table 1 displays the correlations of demographics, motivation to participate, Social Capital and Wisdom domains. Age was not related to any of the main constructs, though the sample age range was only four years (14-18). Females tended to spend more time in informal social groups and had higher initial wisdom scores. All three motivational dispositions were positively
related to wisdom, with the motivation of enhancing one’s skills showing the strongest correlation. Altruism was the only motivation related to social trust. Formal civic engagement was strongly related to wisdom scores and also to measures of social trust. Informal engagement was not significantly related to any of the main constructs.

**Table 1**
Correlations of Demographics, Motivation, Social Capital and Wisdom.

<table>
<thead>
<tr>
<th></th>
<th>Civic</th>
<th>Informal</th>
<th>Wisdom</th>
<th>Social Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.070</td>
<td>0.041</td>
<td>-0.107</td>
<td>0.221</td>
</tr>
<tr>
<td>Gender (Male= 0, Female= 1)</td>
<td>-0.027</td>
<td>0.310**</td>
<td>0.238*</td>
<td>-0.010</td>
</tr>
<tr>
<td>Altruistic</td>
<td>0.219</td>
<td>0.192</td>
<td>0.374**</td>
<td>0.282*</td>
</tr>
<tr>
<td>Enhance skills</td>
<td>0.213</td>
<td>0.085</td>
<td>0.397**</td>
<td>0.217</td>
</tr>
<tr>
<td>Responsibility</td>
<td>0.176</td>
<td>0.010</td>
<td>0.232*</td>
<td>0.026</td>
</tr>
<tr>
<td>Civic</td>
<td>1.000</td>
<td>0.211</td>
<td>0.377**</td>
<td>0.248*</td>
</tr>
<tr>
<td>Informal</td>
<td>1.000</td>
<td>0.108</td>
<td>0.096</td>
<td></td>
</tr>
<tr>
<td>Total Wise</td>
<td></td>
<td>1.000</td>
<td></td>
<td>0.036</td>
</tr>
<tr>
<td>Social Trust</td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
</tr>
</tbody>
</table>

*Significant at a level of .05
**Significant at a level of .01

In order to better understand the complex relationship between Social Capital and Wisdom, a correlation test was conducted on the five wisdom sub-domains and the individual items associated with Social Trust and Formal civic engagement (see Table 2). Informal engagement was not included, as this variable was unrelated to other constructs. Trust in one’s schoolmates was related to three of the five sub-domains, while more general measures of trust demonstrated no significant relationships. Participation in community projects and club attendance were associated with all but the Experience and Emotional sub-domains. Those who volunteer regularly reported higher levels of Emotional Regulation, Reflectivity, and Openness to new experiences. Finally, those who attend religious services reported higher levels of Emotional Regulation. These results give insight into the specific benefits of various types of civic engagement and provide evidence to reject Hypothesis 1.

**Table 2**
Correlations of Social Capital Items and Wisdom Domains

<table>
<thead>
<tr>
<th></th>
<th>Experience</th>
<th>Emotion</th>
<th>Reflect</th>
<th>Humor</th>
<th>Openness</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Trust</td>
<td>-0.011</td>
<td>0.054</td>
<td>-0.125</td>
<td>-0.118</td>
<td>0.045</td>
</tr>
<tr>
<td>Trust Neighbors</td>
<td>-0.223</td>
<td>-0.028</td>
<td>-0.174</td>
<td>-0.125</td>
<td>0.016</td>
</tr>
<tr>
<td>Trust School</td>
<td>0.115</td>
<td>0.228</td>
<td>0.242*</td>
<td>0.313**</td>
<td>0.455**</td>
</tr>
<tr>
<td>Community Projects</td>
<td>0.067</td>
<td>0.228</td>
<td>0.231*</td>
<td>0.270*</td>
<td>0.367**</td>
</tr>
<tr>
<td>Club Attendance</td>
<td>0.206</td>
<td>0.220</td>
<td>0.307**</td>
<td>0.245*</td>
<td>0.318**</td>
</tr>
<tr>
<td>Volunteer</td>
<td>0.072</td>
<td>0.262*</td>
<td>0.261*</td>
<td>0.173</td>
<td>0.318**</td>
</tr>
<tr>
<td>Religious</td>
<td>-0.005</td>
<td>0.274*</td>
<td>0.166</td>
<td>0.015</td>
<td>0.188</td>
</tr>
</tbody>
</table>

* Significant at a level of .05
**Significant at a level of .01
In order to determine the unique contribution each construct made toward overall wisdom, a four-stage hierarchical regression was conducted using the total wisdom score as the dependant variable (See Table 3). Demographics were entered first, as they have been found to influence wisdom, but are nonmalleable variables (Baltes et al., 2005). Trust and Social Engagement were included in the second and third steps, to determine their comparative contributions. While both are measures of Social Capital, trust has been identified as an antecedent of civic engagement (Putnam, 2001). Motivation to attend was entered in the final step, in order to determine its unique contribution to the wisdom construct.

Age and gender accounted for 8.3% of the variance in wisdom. Social Trust and Civic & Informal Engagement each accounted for an additional 15% of unique variance in the wisdom construct. Finally, about 14% of unique variance was accounted for by motivations to attend the trip. The linear combination of all predictors accounted for 52.2% of the variance in total wisdom scores. With all predictors in the model, the only variable that accounted for a significant unique amount of variance was the motivation to enhance one’s skills (8%). Gender approached significance (p = .06), contributing 4% of the unique variance. Given these results, Hypothesis 2 can be rejected.

Table 3
Four State Linear Regression Model to Predict Wisdom Scores

<table>
<thead>
<tr>
<th>Step</th>
<th>R Square</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Demographics</td>
<td>0.083</td>
<td>0.083</td>
<td>2.721</td>
</tr>
<tr>
<td>Step 2</td>
<td>Social Trust</td>
<td>0.233</td>
<td>0.150</td>
<td>3.702</td>
</tr>
<tr>
<td>Step 3</td>
<td>Formal/ Informal Engagement</td>
<td>0.383</td>
<td>0.150</td>
<td>1.490</td>
</tr>
<tr>
<td>Step 4</td>
<td>Motivations</td>
<td>0.522</td>
<td>0.139</td>
<td>4.459</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Full Final Model</th>
<th>T</th>
<th>Sig.</th>
<th>Part Correlation</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.816</td>
<td>0.418</td>
<td>-0.083</td>
<td>1</td>
</tr>
<tr>
<td>Gender</td>
<td>1.931</td>
<td>0.060</td>
<td>0.197</td>
<td>4</td>
</tr>
<tr>
<td>General Trust</td>
<td>-1.548</td>
<td>0.129</td>
<td>-0.158</td>
<td>2</td>
</tr>
<tr>
<td>Trust Neighbors</td>
<td>-0.229</td>
<td>0.820</td>
<td>-0.023</td>
<td>1</td>
</tr>
<tr>
<td>Trust School</td>
<td>1.741</td>
<td>0.088</td>
<td>0.177</td>
<td>3</td>
</tr>
<tr>
<td>Comm Projects</td>
<td>1.322</td>
<td>0.193</td>
<td>0.135</td>
<td>2</td>
</tr>
<tr>
<td>Club Attendance</td>
<td>1.041</td>
<td>0.303</td>
<td>0.106</td>
<td>1</td>
</tr>
<tr>
<td>Volunteer</td>
<td>-0.410</td>
<td>0.684</td>
<td>-0.042</td>
<td></td>
</tr>
<tr>
<td>Religious Attendance</td>
<td>-0.267</td>
<td>0.791</td>
<td>-0.027</td>
<td></td>
</tr>
<tr>
<td>Friends at Home</td>
<td>0.434</td>
<td>0.666</td>
<td>0.044</td>
<td></td>
</tr>
<tr>
<td>Non-neighbor Friends</td>
<td>-1.635</td>
<td>0.109</td>
<td>-0.167</td>
<td>3</td>
</tr>
<tr>
<td>Relatives</td>
<td>-0.012</td>
<td>0.990</td>
<td>-0.001</td>
<td></td>
</tr>
<tr>
<td>Public Friends</td>
<td>0.030</td>
<td>0.976</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>Help Others</td>
<td>1.168</td>
<td>0.249</td>
<td>0.119</td>
<td>1</td>
</tr>
<tr>
<td>Enhance Skills</td>
<td>2.730</td>
<td>0.009</td>
<td>0.278</td>
<td>8</td>
</tr>
<tr>
<td>Responsibility</td>
<td>0.279</td>
<td>0.782</td>
<td>0.028</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Wisdom
To determine the influence of this volunteer vacation on wisdom and social capital, a paired t-test was conducted on pre and post-trip scores for total wisdom scores and for social trust. Other measures of social capital were not included, as this would require an additional longitudinal assessment to be accurately measured. As shown in Table 4, there were significant increases in overall wisdom scores and in social trust, both of which demonstrated moderate effect sizes. These results provide the evidence necessary to reject Hypothesis 3.

**Table 4**
*Paired t-Tests for Wisdom and Social Trust*

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>Sig. (2-tailed)</th>
<th>Effect Size (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wisdom</td>
<td>-4.261</td>
<td>&lt;0.001</td>
<td>0.297</td>
</tr>
<tr>
<td>Social Trust</td>
<td>-5.732</td>
<td>&lt;0.001</td>
<td>0.394</td>
</tr>
</tbody>
</table>

A final analysis was conducted post-hoc to ascertain whether these main effects were driven by disproportionate increases in single items or sub-domains. Table 5 displays the results for repeated-measures ANOVAs conducted on each sub-domain of wisdom and on each item in the Social Trust construct. All five wisdom sub-domains increased significantly. With the exception of Openness, these increases were well-balanced as shown by the comparable F-statistics. Increases in Social Trust were driven largely by an increase in trust of one’s school mates. General trust also increased significantly, but trust of one’s home neighbors did not change.

**Table 5**
*ANOVAs for Individual Wisdom Domains and Social Trust Items*

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience</td>
<td>12.637</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotional Regulation</td>
<td>11.249</td>
<td>0.002</td>
</tr>
<tr>
<td>Reflectivity</td>
<td>10.875</td>
<td>0.002</td>
</tr>
<tr>
<td>Humor</td>
<td>12.975</td>
<td>0.001</td>
</tr>
<tr>
<td>Openness</td>
<td>5.936</td>
<td>0.019</td>
</tr>
<tr>
<td>General Trust</td>
<td>14.504</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Trust Neighbors</td>
<td>0.218</td>
<td>0.642</td>
</tr>
<tr>
<td>Trust School</td>
<td>35.805</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

**Discussion**

The findings indicated that females tend to score higher on measures of overall wisdom. This relationship was driven mainly by higher female scores in Reflectivity ($r=.288$) and Humor ($r=.313$), indicating that females were more inclined toward life review, and that they were more apt to find humor in themselves and in life circumstances. This finding is consistent with a previous study conducted by Webster (2003) using the same instrument. Females also reported a higher rate of informal social engagement than did their male counterparts. As informal engagement was not related to Wisdom, there is no clear reason for a higher female score in Wisdom domains.

All three measures of motivation were significantly related to Wisdom, with the motivation to enhance one’s skills demonstrating the strongest correlation. These findings are appropriate
given that Wisdom is reasoned to be a virtue for the common good (Kekes, 1995). Wise individuals, then, would be driven to improve their own lives and the lives of others. The motivation of moral responsibility was also significantly related to Wisdom. However, when controlling for attendance at religious services, this relationship was no longer significant. This could be interpreted in many ways. One positive explanation would be that wise persons choose to participate in service-oriented activities regardless of any moral mandates. This would be a consistent with the idea that wise person’s are autonomous, thoughtful individuals, regardless of religious and political affiliation (Baltes et al., 2005; Trowbridge, 2005).

Informal engagement was not significantly related to any measure of Wisdom or social trust. This may be due to the nature of an informal social milieu. Informal gatherings would typically include those within one’s chosen social networks, be they family or friends. These gatherings would be akin to “Bonding” types of social capital, as they wouldn’t involve a breaching of social boundaries to include others of differing perspectives (Putnam, 2003). Attending clubs and volunteering, on the other hand, would likely require one to negotiate circumstances involving a conflict of values or worldviews. These types of interactions are common in service tours, and are often cited as one of the key features in the Pay It Forward Tour. This integration of social groups incorporates “bridging” social capital, requiring individuals to consider their own beliefs, to compare them with the beliefs of others, and perhaps widen their own personal worldview (Putnam, 2001, 2003; Wearing, 2001).

Formal civic engagement was related to overall Wisdom and to measures of social trust. Trust has been identified as an antecedent to civic engagement. As stated by Robert Putnam “a world in which we distrust one another is a world where social collaboration seems a bad gamble” (2001, p.62). While it may be intuitive to assume that trust precedes civic engagement, this may not be the case in adolescence. Since these youth are still developing their attitude toward others and the world, it is conceivable that their trust of others is affected by the quantity and variety of those encountered. Indeed, previous research has linked hours of participation in afterschool activities to compassion for others and pro-social values (Bailey & Russell, 2008). It is noteworthy that only trust of one’s schoolmates is related to measures of Wisdom in this study. Wiser youth did not demonstrate a higher level of trust in their neighbors nor in the general public. Indiscriminate trust may not be representative of a prudent disposition.

A deeper look at the various types of civic engagement in relation to wisdom domains provides a unique assessment of the contributions each activity makes to the cultivation of Wisdom. Attendance at religious services, for example, may be instrumental in helping one to manage their emotions, but it may not engender openness. In fact, none of the activities were related to all of the Wisdom sub-domains. This supports the notion that Wisdom is a gained from participation in various social contexts (Baltes & Staudinger, 1996). The only sub-domain not related to civic engagement was Experience. While formal social engagement may increase the likelihood of profound experience, a myriad of unpredictable factors would surely contribute to this domain.

The four-stage regression analysis illustrates the unique contribution of each set of predictors to the Wisdom construct. While females tended to score higher on the instrument, demographics did not account for a significant unique amount of variance in Wisdom. It should be noted, however, that the variation of demographics in this study was limited. It is likely that age, gender, SES, and other demographic variables would play a larger role in a more diverse group. Social trust and social engagement, however, accounted for one-third of the variance in the
Wisdom construct. Other studies have confirmed significant predictors of wisdom which include: intelligence (9%), personality (5%), and a supportive social environment in early adulthood (6%) (Ardelt, 2000; Staudinger & Pasupathi, 2003). Measures of Social Capital, as defined in this study, account for a larger portion of the variance in Wisdom than the predictors included in these previous studies. Motivations contributed an additional 14% of unique variance. These findings were not entirely unexpected, as many researchers consider volition to be a core wisdom domain (Birren & Fisher, 1990).

Further support for the relationship of Wisdom to Social Capital comes from the increase in both constructs over the course of the travel experience. Thus, not only are Wisdom and Civic Engagement related, but a “volunteer service vacation” that incorporates intentional opportunities for community service and reflection can generate significant gains in Wisdom and in social trust. Accordingly, trust of one’s schoolmates, the only measure of trust associated with Wisdom on the pre-test, demonstrated a powerful increase over the five-day experience. Measures of general trust increased as well, which is perhaps indicative of the power these cross-cultural experiences harbor to establish common bonds. It should be emphasized that this experience incorporated intentional opportunities for reflection with the expressed intent of developing civic awareness and understanding. It is unclear whether similar results would be reported for leisure travelers who do not engage in purposeful reflection.

**Conclusion**

Travel to areas outside of one’s normal realm may have a universal appeal. Many travelers are expressing the desire to make meaningful contributions to the communities they visit (DeVries, 2008; Lovitt, 2008; TIA, 2001). Providing “volunteer service travel” opportunities for people of all ages should be a priority for those in the field of education and tourism. Indeed, today’s youth are leading the way, as evidenced by the recent boon in student service groups (The National Conference on Citizenship, 2006). Incorporating intentional opportunities to reflect upon these services with a diverse group of individuals may be a powerful way to engage youth in self-directed learning. Volunteer travel allows youth to discover the world in a way that provokes thought and challenges assumptions. This represents the ideal learning environment as expressed by promoters of experiential education (Dewey, 1938). Combining the adventure of travel with the transforming power of dialogue could be an effective method of civic education. In this way, the participants receive the benefits of travel and exploration, the communities visited benefit by the services rendered, and the home communities benefit from a wise and engaged citizenry.

**References**


The National Conference on Citizenship. (September 18, 2006). *America's Civic Health Index: Broken Engagement*.


Appendix A: Pre-Post Trip Questionnaire

Code: ____________________________       Age:____     Gender:   Male   / Female

(Please remember this for later use)

1. Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people? (Circle One)
   1. People can be trusted
   2. You can't be too careful

2. Do you feel that you can trust the people in your neighborhood. (Circle One)
   1. Trust them not at all
   2. Trust them only a little
   3. Trust them some
   4. Trust them a lot

3. Do you feel that you can trust the people at your school. (Circle One)
   1. Trust them not at all
   2. Trust them only a little
   3. Trust them some
   4. Trust them a lot

4. How many clubs/ groups/ organizations are you involved in outside of school? (Circle One)
   1. None
   2. 1-2
   3. 3-4
   4. 5-6
   5. more than 6

5. Do you feel well-supported by your family? (Circle One)
   1. Not at all.
   2. Not very much.
   4. Pretty much.
   5. Very much so.

How important were the following items in motivating you to attend this trip?

6. The opportunity to help others.
   1. Not at all important
   2. Not very important
   3. Somewhat important
   4. Pretty important
   5. Essential

7. The opportunity to enhance your learning and life skills?
   1. Not at all important
   2. Not important
   3. Somewhat important
4. Pretty important
5. Essential

8. Fulfilling a social or moral responsibility.
   1. Not at all important
   2. Not very important
   3. Somewhat important
   4. Pretty important
   5. Essential

How many times in the past twelve months have you:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never. (A)</th>
<th>Once (B)</th>
<th>2-4 times (C)</th>
<th>5-9 times (D)</th>
<th>1-3 times a month (E)</th>
<th>1-2 times a week or more (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Worked on a community project?</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>10. Attended any club or organizational meeting (not including school or church)?</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>11. Volunteered?</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>12. Attended religious services?</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>13. Had friends over to your home?</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>14. Been in the home of someone of a different neighborhood or had them in your home?</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>15. Visited with relatives?</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>16. Hung out with friends in a public place?</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
</tbody>
</table>

Sample Items from Webster’s SAWS* and their Respective Domain.

<table>
<thead>
<tr>
<th>Item</th>
<th>Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have overcome many painful events in my life.</td>
<td>Experience</td>
</tr>
<tr>
<td>2. It is easy for me to adjust my emotions to the situation at hand.</td>
<td>Emotional Regulation</td>
</tr>
<tr>
<td>3. I often think about connections between my past and present.</td>
<td>Reflectivity</td>
</tr>
<tr>
<td>4. I can chuckle at personal embarrassments.</td>
<td>Humor</td>
</tr>
<tr>
<td>5. I like to read books which challenge me to think differently about issues.</td>
<td>Openness</td>
</tr>
</tbody>
</table>

*The full SAWS is a 40-item scale measuring 5 domains with 8 items for each domain. The author has requested that the full scale not be published.
Youth Perspectives on Meaningful Participation in Community Based Programs: A Qualitative Assessment

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Youth Perspectives on Meaningful Participation in Community Based Programs: A Qualitative Assessment

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Abstract: Allowing the voiceless to have a voice is a tenet of empowerment. This paper highlights research that employed a participatory action research framework to gain a better understanding of young people’s perceptions about youth empowerment and acquire their perspective (voice) about the meaningfulness of participation in out-of-school advocacy and volunteer program activities. Using Photovoice, the research provides a missing point of view in youth empowerment model development. Results indicate that the quality of a youth’s participation in a community-based program is determined by 1) youth expressing themselves without censorship, 2) occasions for youth to expand their social networks with youth and adults, and 3) adults observing and valuing youth contributions. These findings raise implications for community-based, youth empowerment programs including program philosophy, program procedures, youth empowerment content and activities, and adult leadership style. The findings may assist practitioners when designing youth empowering activities and researchers when operationalizing youth empowerment.

Introduction

Youth today are typically characterized by adolescent risk taking behaviors and are frequently considered problems, community liabilities, and recipients rather than resources (Lerner & Galambos, 1998). Adults rarely value today’s youth as contributing members of society, therefore, opportunities for youth to participate in constructive adult behaviors or serve in productive citizenship roles are often scarce (Bales, 2001; Lerner & Galambos, 1998). Without genuine opportunities to model productive adult-like behavior, youth do not gain developmental experience and may seek legitimacy in the participation of risk-taking behaviors such as alcohol, tobacco and other drug use, early sexual initiation, unprotected sex, crime, and violence (Hawkins, 1998; Hawkins, Catalano, & Miller, 1992). Youth programs have the potential of
countering youth risk taking behaviors by constructing opportunities to teach the fundamental principles and skills needed to help young people become responsible, empowered, and productive citizens. But are programs meeting that charge?

**Purpose**

The evaluation of youth programs has historically relied on the analysis of participation levels and youth satisfaction including interactions with staff and enthusiasm for activities (Linquanti, 1992). Evaluations that merely take stock of program participation levels and satisfaction ratings (program status factors) provide little understanding of program processes and the links those processes have to youth development (Oden, 1995). It is important that programs realize that having youth participate is not the sole antidote for social problems because youth participation in programs is not always the same experience for each youth nor is it always meaningful in ways that may ultimately protect the youth. Therefore, research that quantifies the number of hours spent participating is misrepresenting what is truly protective for the “at-risk” youth (Astroth, 1997).

Oden (1995) contends that in order for research to support youth development, studies are needed to identify key factors that could be built into youth programs. An examination of the quality and not just the quantity of youth participation experiences is therefore critical. To understand quality of an experience is to understand what was meaningful about that experience for the youth as determined by the youth. When researchers understand what a meaningful experience is for a youth, then models can be developed to guide programs.

A critique of youth empowerment models (Chinman & Linney, 1998; Kim, Crutchfield, Williams, & Hepler, 1998; Zimmerman, 2000) reveals that they are theoretical and based on researchers conceptualization and do not articulate how youth perceptions about empowerment were incorporated into model development. Therefore, the purpose of this research was to gain a better understanding of young people’s perception about youth empowerment and acquire their perspective about the meaningfulness of participation in out-of-school youth development and empowerment program activities.

This research utilized a participatory action research process whereby the community of interest determines relevant and effective solutions to problems that affect quality of life (George, Daniel, & Green, 1999; Minkler & Wallerstein, 2003; Stringer, 1999). The study was part of a statewide, community-based research project called the South Carolina American Legacy Empowerment (SCALE) Evaluation Project funded by the American Legacy Foundation with support from the Centers for Disease Control Foundation. South Carolina youth participating in out-of-school youth programs were involved in the research as researchers themselves. They provided the very integral yet missing youth voice in youth empowerment model development by examining ways the community and youth programs can provide meaningful experiences for youth participating in volunteer and advocacy projects.

**Research Methods**

**Study Population**

Purposeful sampling determined the selection of the SCALE study population. The particular programs in this evaluation study were selected based on a strict criteria of being an out-of-school, community-based program, as well as one which considers itself a youth development and empowerment organization and/or having a tobacco use prevention mission. It was
important to have project participants representing geographic, racial, gender and socioeconomic diversity. The two youth programs selected to participate in the research included Action Against Tobacco and Youth Service.

Action Against Tobacco is a youth tobacco prevention advocacy organization located in the largest metropolitan area in South Carolina. The mission of Action Against Tobacco is to advocate against teen tobacco use by developing strategies similar to those which the nationally recognized anti-tobacco campaign, the truth®, promotes which also champions the use of empowerment as its approach to addressing issues.

Youth Service is a county-wide youth volunteer service organization located in a rural part of South Carolina with a participant roster of more than 500 youth. Youth Service is premised on youth development and youth empowerment principles and seeks to provide youth with tools necessary for success: access to a caring adult, a safe place, health education, marketable skills and opportunities to serve. The Youth Service mission is to instill an ethic of service among the rural county youth through cooperative community volunteer activities.

Twenty youth ranging in age from 13-20 years completed all phases of this qualitative evaluation research. The youth leaders of each organization were selected to participate in the study. The sample size for this qualitative study was kept intentionally small due to the volume of photographic data Photovoice would generate. However, these adolescents represented twelve schools (six middle schools and six high schools) in two distinct regions of South Carolina; one in a rural community located on the coast and the other in a large urban city on the other side of the state. Thirty percent of the participants were male (n=6) and seventy percent were female (n=14). Forty percent (n=8) self identified as Caucasian, fifty-five percent (n=11) African American, and five percent (n=1) Asian.

**Data Collection**

Data collection observed an empowering and participative approach and used Photovoice, developed by Wang and Burris (1997), as a methodology for gathering the evidence of youth empowerment. The premise of the Photovoice methodology is “empowering communities through documentary photography.” It is a specific photographic technique that puts cameras in the hands of people who don’t have a voice; they have little power themselves, or little access to those who have power over their lives. The camera therefore becomes their tool, their voice. Photovoice can be seen as a grassroots approach to social action. That is, it is a process that can reach, inform and organize community members for social change (Wang & Burris, 1997). Royce, Parra-Medina & Messias (2006) have documented lessons learned from using Photovoice to examine youth empowerment in community-based programs.

During this Photovoice project, data was collected

1) from observations of the youth during their youth program meetings,
2) through the youth’s photography and photo essays, and
3) from discussions/debriefings with the youth Photovoice teams after the youth compiled their photo essays including a large focus group of all team members.

During the debriefings, the self-selected teams (consisting of two to four youth researchers each) were guided in a discussion about their photo essays and overall findings of youth empowerment. The debriefings lasted approximately an hour and a half and were tape recorded. The focus group was conducted after all team debriefings had been completed and used a more focused discussion guide probing on points that were raised during the team
deb briefings. This session was also tape recorded and transcribed for analysis For more information about conducting Photovoice, visit www.photovoice.com (Wang, 2005).

Data Analysis
The data for analysis included the photo essays and their captions (n = 8), transcriptions of the debriefings from each Photovoice team representing Action Against Tobacco (n = 2) and Youth Service (n = 6), transcriptions of a focus group summary discussion (n = 1), and observation notes taken of youth interactions during regular meeting sessions.

Data was analyzed using grounded theory techniques in order to operationalize and define youth perceptions of youth empowerment. To help build grounded theory, Glaser and Strauss advocate a constant comparison method of combining coding with analysis (Glaser & Strauss, 1967). In the constant comparison method, the data is coded to generate categories and hypotheses. This method involves

- identifying, reducing, coding, and displaying categories of text data;
- analyzing the categories by comparing them to one another and checking for emerging themes;
- further refining the categories to focus on the details of empowerment and youth participation in the community and in youth programs; and finally,
- describing and summarizing the major themes.

The constant comparison method of analysis was used to analyze all transcript data associated with the Photovoice research project. NVIVO computer software was used to manage the coding processes and generate reports of all the associated categorical data.

Three levels of coding were used to create the themes and results of this research. The first step involved identifying passages of data related to outcomes of youth participation in community-based programs. The second level of coding was to separate the coded “outcomes of youth participation” passages into categories of supporting processes and constraining processes. The third level of coding identified influencing factors on the “supporting and constraining processes” such as program processes, adult program leaders, program philosophy, program social environment, program structure, youth and peers, individuals, church, community institutions, media, schools and Photovoice project in programs.

Results
Regarding youths’ perspectives on youth development and empowerment programs, three themes emerged from the data that illustrate dimensions of meaningful participation. The themes describe the context and environment by which youth development and empowerment programs could meaningfully engage youth:

1) Youth Expression without Censorship,
2) Expanding Social Networks with Youth and Adults
3) Observing and Valuing Youth Contributions.

Theme 1: Youth Expression without Censorship

The ability to be expressive and having a voice was a prominent theme that emerged from the youth data. Youth want to be able to express themselves and have a voice, yet they are very self-conscious and cautious about doing so. They defined their voice as communicating,
speaking out and providing one’s opinion, demonstrating skills, expressing creativity, and decision-making. While the youth believed that they have many ways to express themselves, it was felt that they do not always have an audience willing to engage or listen to them.

Barriers youth identified which might inhibit them from gaining voice and censor their expression are

(a) the prevailing negative images adults have of youth,
(b) the fear of saying something wrong,
(c) an omnipresent and overly watchful adult leader,
(d) unconstructive criticism from adults, and
(e) and adult-dominated decision-making and control.

A. The prevailing negative images adults have of youth.
Youth unanimously agreed that a negative stereotype of teens exists, “There’s the good and there’s the bad and people tend to see the bad.” While many young people have “a lot of good stuff to say” to adults, they fear that adults and program leaders do not take them seriously. For instance, one youth fretted, “A lot of times, people see that you are a teenager...and that because you are teenager, even if you have a good idea you couldn’t have come up with this because, you know, you’re only a teenager. You’re only in high school. What do you know?” Therefore, adult program leaders can be part of the problem and inhibit youth empowerment through expression when they do not recognize the positive side of youth.

B. The fear of saying something wrong.
Potential criticism and scrutiny from a youth’s audience is a barrier to expression. While discussing youth speaking out on an issue or simply asking a question in front of a group of peers or adults, several youth reported that “fear of being put down while speaking one’s mind” or the potential of “getting in trouble” inhibits youth expression and communication. Therefore, the youth felt that when they express themselves they are taking a risk. Youth suggested, “To have voice, you have to be prepared for rejection and criticism. And you have to prepare for it all. You puttin’ yourself under scrutiny cause whatever you say, somebody’s going to take it apart to see if there’s any flaws in it.”

C. An omnipresent and overly watchful program leader.
When program leaders subscribe to the prevailing sentiment that youth are liabilities and problems, they may not listen to the youth or provide youth the freedom to experiment and take risks. Instead, they may be looking for youth mistakes. These actions may inhibit a youth’s desire to participate altogether. As one youth relayed an experience she had, “...It’s just that you don’t want somebody always on your back trying to make sure you’re not going to do anything bad. You want people to actually watch you for the things that you do good.”

D. Unconstructive criticism from adults.
Program leaders can offset censorship and facilitate youth efficacy for expression by providing reasoning to the youth. For example, one youth explained how a program leader provided constructive criticism about the potential for the success of a youth’s program idea with an explanation about why a project could not be achieved. “...And we went to them with an idea. And then, if it was feasible, they said, ‘OK.’ If it wasn’t then they said, ‘Well, we wouldn’t be able to do that.’ And they told us the reason why
E. Adult-dominated decision-making and control.
Some youth groups have a philosophy of being youth run. That is, youth are given more responsibility (voice) in a program beyond being passive recipients of services or participants in projects. They may participate as a youth representative on an adult-filled board of directors or vote on adult-initiated ideas. Many of the youth commented that they had been consulted by the adult leaders on decisions important to their program. However, the ultimate decisions were mostly made by the adults. The youth concurred that their consultations seemed like token gestures at best without the adults truly listening or considering their ideas.

Having been told repeatedly that theirs was a youth run organization and given a project to accomplish, one youth expressed his frustrations in these words: “That was the meeting that really hit me that it was not a youth movement; whenever we knew it was more adults than youth voting on it (project plan). If you call it a youth-led group, then have the youth lead it. And, adults can get their influence, but you have to keep adults from trying to take it over.” Therefore, youth should not be led to believe that they are in charge then have their leadership stripped from them. Another youth commented, “We can understand that there are some things that youth can’t do that adults can. We understand that. We want the adult support, but if you want youth to run the group, then youth should run the group.”

Furthermore, the first youth added, “Youth don’t work like the adults want them to work.” Therefore, youth may appear to the adults that they are not taking the project seriously. This, too, could potentially result in adults resuming control of the decision-making for program activities when they do not see the results that they wish to have.

**Theme 2: Expanding Social Networks with Youth and Adults**

Community programs have the capability of expanding a youth’s network of friends and acquaintances. Community youth programs provide places for youth to gather and “hang outside the home,” to have fun, and to express themselves. They are places that may provide service opportunities and other projects for youth to plan, implement or just participate. Community programs are also places that provide youth opportunities for social action or to join a “cause.” Youth characterized community programs as agents for expanding and strengthening social networks by:

- (a) promoting diversity (age, race, schools, gender),
- (b) providing a singular common goal,
- (c) forging group identity and teamwork, and
- (d) fostering positive relationships with adult leaders.

A. Opportunities for diversity.
Community venues and programs are potential catalysts for youth development and empowerment. Having a place to go with friends in the community to have fun encourages youth to better their own skills and learn new ones. Refine. Additionally, youth believe that they have empowerment when with their peers and therefore, they can learn from each other.

B. Providing a singular common goal.
Youth in both programs believed that providing a singular, common program goal is a way to have diverse youth network together. For instance, “We all get along and we are all from different schools and we just clash all together because we all want to volunteer. We all have that in common,” one youth noted, “Youth Service is a good way to get people who don’t think
that they have anything in common to work with each other and to realize that they’re not that different, you know, they maybe have racial differences and cultural differences, but it just helps people to work together that normally wouldn’t and so I think it’s a good thing.”

C. **Forging group identity and teamwork.**
Both, Youth Service and Action Against Tobacco offer youth the possibility of expanding their social networks by coming together as a team for a common purpose (volunteer service) or social action cause (tobacco prevention) and developing group identity around a common goal.

According to a concurring group of youth Photovoice participants, schools are not places where youth diversify their social networks. Students tend to go through school with their same cliques of similar youth. Therefore, it was believed that schools are not venues that build diversity within groups. Youth agreed, “In schools, you don’t tend to accept anyone other, you know, that’s different.” One youth reflected on her experience with diversity interactions, “When we do things, you have to force ’em together. You gotta put ’em in the environment that makes them have to discuss with each other. Make them have to talk with each other.”

D. **Fostering positive relationships with adults.**
Community programs are places for youth to build relationships with adults. The Photovoice youth revealed, however, that it is difficult to cultivate these friendships because most often, adults wear an authoritative hat in their role as program leader. That authority inherently creates a “power over” dynamic that can be awkward for youth to breach. As well, youth often do not possess the confidence or skills to eliminate that barrier or simply do not realize that it is acceptable to develop friendships with adult authority figures.

Adult program leaders can soften the power gap and attempt to level the playing field by the manner in which they communicate with and listen to the youth. The youth respondents indicated positive adult communication and interactions will have an overall greater impact on the youth’s experience in the program. This requires adults trusting youth, adults showing care for youth, and adults serving as friends. Several youth suggested that adults and program leaders who are effective communicators with youth are those who are easy to approach and who spend time getting to know you. One youth positively remarked about his program’s adult leadership, “They don’t talk to you like you’re a teenager. They talk to you like you’re a human being. They appreciate what you’re doing. And that’s really important.”

Two youth offered these comments about positive adult leader relationships, “They’re (program leaders) so welcoming. They’re just so easy to approach and talk to. And even if you just need someone to talk to about anything, you can just go to’em. It’s kind of like a friend more than an adult.”

The youth also identified certain communication characteristics that hinder the development of good adult relationships with them. These include adults using big words, ordering youth around, jumping to conclusions and prejudging youth.

**Theme 3: Observing and Valuing Youth Contributions in the Community and Youth Program**

Youth want to have influence and make a positive impact in their community as well as their youth program. Youth defined this dimension of meaningful participation as

(a) receiving positive feedback and validation from others,
(b) having a positive impact on others, and
(c) contributing to the success of their program.

Supporting factors included smiles, verbal recognition, being listened to by adults, and participating in a program’s processes.

A. Receiving positive feedback and validation from others.
Volunteering in the community and participating in advocacy projects are ways youth can find opportunities to contribute and be valued. Many feel, however, they do good things that often go unnoticed. “There’s a whole lot of good that’s happening throughout the state that youth have done. But you tend to…don’t’ hear about that,” said a youth participant. Therefore, youth feel that they need an organization to back them up and support their good deeds.

Youth want to be valued as a contributor. Recognition, positive feedback and validation from community members for their good deeds and efforts of being part of the solution is one reward youth find inspiring. Verbal feedback or even a smile from those who youth assist in the community or in a program itself can have a strong motivating influence on a young person to continue serving. One Youth Service participant explained her feelings from serving in the community, “When you help ‘em out and you get to see what you’ve done for them and just the look on their face, it just makes you feel so good. Pretty much, people are really appreciative.”

B. Having a positive impact on others.
The positive good feelings that come as a result of community service can also be very powerful and motivating for some youth. During a group discussion about contributing in the community, youth agreed that they feel valued when they have made a difference in someone’s life by either helping them in some way or positively influencing them or changing their minds towards a bad behavior. One youth beamed that his community service was important to him because it actually made a difference in his father’s life, “I think that whenever you get feedback from something that you did, it really makes you feel important, or you feel like you have done something. I did Rage Against the Haze (a youth movement against tobacco), and with me doing that, my dad stopped smoking. So, that was really important and youth empowering … when I can influence people to do certain things.”

Several youth concurred about participating in the community and working towards solving community problems, “I just get a really great feeling out of it. I mean, it just makes me feel good to know that I’m giving my time for other people instead of, you know, going shopping or something.”

C. Contributing to the success of their program.
According to the youth, not only does community service have intrinsic benefits, so does engagement in program processes. Having an active role in a program makes youth feel valued even though they recognize there are things which only the adult leader can do. One female participant explained, “You want to feel like you really do have a part. I mean, you may not necessarily be able to lead it because the adults may know a lot more than you do. But, you still have an active part in it.” One youth recalled how he was made to feel valued by the program leader. From his experience, the program leader would suggest goals but leave it up to the youth to determine how the project got accomplished as indicated by this statement, “This is what we want you to do. Now tell us how you want to do it.”
Volunteering in community service projects and participating in youth programs is often a choice for the youth. Therefore, the great feeling the youth get from helping others and contributing to the good of the program is the biggest reward and reason to continue participating. Additionally, one youth smiled and said, “volunteering can give you really good bragging rights to say ‘I did that!’”

**Discussion**

Out-of-school community-based programs provide youth an alternative to their unstructured discretionary time during non-school hours. During unstructured or unsupervised time, youth may seek opportunities that are harmful to themselves or others. Alternatively, out-of-school community-based programs provide supervised places for youth to gather and host constructive activities in which youth can participate. While time spent participating in organized community program activities are hours not spent engaged in destructive behaviors, one’s participation in these programs does not necessarily protect or discourage them from risk taking at another time. Therefore, the quality and meaningfulness of a youth’s experience in a program are important for keeping youth participating and minimizing desire for risky behaviors.

The youth results indicate meaningfulness of participation in community-based programs is determined by a youth’s opportunity for expression and to have a voice without censorship, occasions for exploring diversity and building social networks with youth and adults, the potential for contribution and being valued in the program. Therefore, community-based youth programs have a duty to provide those meaningful opportunities for youth, assisting their youth development and empowerment.

*What does this mean for community-based youth programs?*

**Program Philosophy.**

Our findings would suggest that a program should have a philosophy and climate that is entirely youth-focused to contribute to the meaningfulness of an experience. While it is essential for a program to be fun and social for youth, youth discovery and expression matter. Innovation can increase when a program seeks youth opinions and embraces the creativity and ingenuity of youth with youth-initiated/youth-led projects. Programs that support this idea may be flexible in their approaches to planning and program implementation.

Programs with a value for nurturing adult/youth relationships will assist a greater community appreciation for all that youth have to offer. This may lead to increased opportunities to foster youths’ strength and potential both within the program and the community at large.

Additionally, programs that introduce youth participants to a variety of people enable them to break out of their normal peer group. Youth learn to communicate, interact, and work with others not like themselves; they broaden their scope and learn new perspectives; and they identify a network to accomplish goals.

Therefore, a community-based youth program with a youth oriented philosophy should value all youth and be inclusive, advocate for youth at all times, encourage and support youth ideas for projects and program improvements, provide constructive adult feedback, and reward youth for their initiative.
**Program Procedures.**
Youth have something to gain or lose from community-based programs and should be considered stakeholders of the program and not just recipients of services. A program’s organizational structure should allow youth to have an active role and voice in programmatic decision-making and program governance which contributes to the good of the program and/or community.

A program which is willing to have a philosophy of inclusion and is willing to recruit from different social demographics and diverse areas of a community has the potential of making a program stronger and more meaningful for the entire group. Therefore, membership recruitment practices or participant selection in program activities are instrumental to whether youth have opportunities to experience diversity.

Youth programs can be opportunities for youth to “safely” network with others from various backgrounds. When possible, program goals should be broad enough to appeal to many youth. Programs offering social action or service missions may encourage a variety of participants to interact collectively as a team towards a common goal.

Programs should have reward mechanisms for validating and recognizing youth efforts. Otherwise, programs are silently sustaining the negative stereotype that adolescents mostly engage in risk taking behaviors rather than productive activities.

Additionally, programs that offer opportunities for socializing and communication with friends and peers during the program meetings can help to foster new perspectives, build collective identity, and strengthen peer support as well as develop youth confidence in how they express themselves.

**Program Leader.**
The youth universally agreed that the program leader had a direct impact on their experiences in the program. Program leaders play an important role in limiting censorship of youth expression and for fostering youth contributions in youth programs. Program leaders should first acknowledge that youth have a voice. They should then be available to the youth as a willing audience and create a safe environment that is free of censorship. That is, youth should know that the program leader’s primary interest is the youth participant and that they can approach the program leader with an idea. In turn, program leaders should be willing to hear all of their ideas, encourage youth to conceptualize and plan a program or challenge the youth to find a solution to a problem. Programs leaders who seek and embrace youth ideas and opinions and listen to their input stand the chance of gaining youth ownership of a problem which may result in group identity and increase the meaningfulness of their participation and goal attainment within the program.

Program leaders can also help youth have a more meaningful experience by letting youth be a part of the solution through decision-making. They can simply ask youth for changes they believe should be incorporated into their program’s operation and structure. This involvement, as well as, program leaders who try to see things the way youth do, and adults who acknowledge youth processes, makes youth feel valued. While scrutiny of youth expression and voice is inevitable, program leaders should avoid flippant critique that may lead to youth insecurity and hesitancy when youth wish to express themselves.
Therefore, adult leaders who create a safe place for youth to gather and express themselves productively will not only enhance a youth’s level of enjoyment in a program but foster meaningful participation that will ultimately lead to a youth’s development and empowerment. These leaders will ask for youth opinions and listen to their suggestions. They will facilitate youth ownership of the program by engaging them in program problem solving and allowing youth processes for achieving goals. These leaders will let youth fail and/or succeed and recognize their efforts either way. But most importantly, these leaders will have a positive youth outlook without being domineering, forceful or “constantly watchful.”

**Conclusion**

Programs that engage youth in meaningful participation, as expressed by the youth and outlined above, are allowing their participants opportunities to develop competencies and skills for becoming productive members of society. To facilitate empowerment among adolescents is to provide a preventive intervention for many of the problems that confront this population. The level of program participation by a youth and the number of dimensions of meaningful participation employed may affect the empowerment outcome. The more active and engaged a youth is in a program and the more dimensions of meaningful participation employed, the more likely a positive benefit is to occur. The youth who choose to participate as passive recipients of youth program services are likely to benefit less.

**References**


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Factors Affecting Youth Voice in Decision-Making Processes within Youth Development Programs

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Factors Affecting Youth Voice in Decision-Making Processes within Youth Development Programs

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Abstract: Results of a study aimed at determining the factors affecting the level of inclusiveness of youth voice in the decision-making process of the 4-H youth development program are discussed in this paper. State and field level 4-H professionals identified potential factors which affect youth voice in the decision-making process. The information gathered was utilized to identify the degree to which youth voice was incorporated in the decision-making process, to better understand how to suit youth’s needs, identify promising practices, and diagnose barriers towards fostering youth voice within the 4-H youth development program. This feature article presents the findings of the study, and discusses potential ramifications and remedies.

Introduction

Findings from a study aimed at determining the factors affecting the level of inclusiveness of youth voice in the decision-making process in the 4-H youth development program are presented in this article. State and field level 4-H professionals identified potential factors which affect youth voice in the decision-making process. The information gathered was utilized to identify the level of inclusiveness of youth voice in the decision-making process, to better understand how to suit youth’s needs, identify promising practices, and diagnose barriers towards fostering youth voice within the 4-H youth development program.

Four-H youth development professionals considered the following factors while examining perceptions of youth voice:
• the level in which both youth and adults share responsibility;
• lack of transportation accessible to youth;
• the ability of youth and adults to work cohesively;
• the opportunity for youth to develop a caring relationship with adults;
• an adult’s expectations of youth roles within the 4-H program;
• youths’ expectations of adult roles within the 4-H program;
• the level in which the organization accepts youth involvement in the decision-making process; and
• youth having too many scheduling conflicts.

Youth Voice
The term youth voice has gained credibility as a concept which describes the many aspects in which youth might have the opportunities to a voice and active participation in the decisions shaping their lives (Fielding, 2001; Levin, 1999). Additionally, research implies that youth voice serves as a catalyst for change in schools, including helping to improve teaching, the curriculum, and adult youth relationships (Fielding, 2001; Mitra, 2003; Rudduck & Flutter, 2000). Youth voice concerns considering the opinions and ideas of youth, with respect to what they have to say. It also involves taking risks and working together to accomplish the mission of the organization being served (Fletcher, 2002). When organizations practice youth voice, they give ample opportunities for youth to experience the adult roles for which they are preparing to assume. The general goal of engaging and empowering youth should be to teach them to define and express their concerns, and to design, discuss and put into action solutions to those concerns (Pittman & Wright, 1991).

Adults in Decision-Making Roles
Although youth issues may be the main concern in the community or within the organization, adults are most often at the forefront of the decision-making process, with little discussion or input from youth. Based on several studies, adults are hesitant about youth and the role of youth in the decision-making process within society (Guzman, Lippman, Moore, & O’Hare, 2003; Rennekamp, 1993; Zeldin et al., 2000). Through research, it has been well documented that stereotyping of youth by adults confines young peoples’ potential within their community (Camino, 2000; Klindera & Menderweld, 2001; Yohalem & Pittman; 2001; Zeldin et al., 2000). Adults must realize that youth are up-to-date on current issues and events directly affecting themselves and their peers. Adults all too frequently perceive youth as consumers, and not resources, within the organization and community (Klindera & Menderweld, 2001; Zeldin et al., 2000).

Youth Voice on Boards and Committees
The 4-H youth development program involves stakeholders in decision-making and program development processes, through the use of advisory committees that operate at the parish and state levels (Tassin, 2005). One part of the success of these committees is the inclusion of 4-H youth members. By allowing youth to have a voice, these committees have identified cutting edge programs that appeal to youth and have recognized barriers to youth participation, such as time, transportation, and lack of interest in existing programs (Tassin, 2005). Benson (1997) stated that allowing youth to serve on boards or committees in a meaningful role is one of the least likely experiences for youth in the present day. Many organizations fail to recognize that youth are talented, competent, and capable of bringing diverse ideas to bear. Several research studies have indicated that youth can decipher and resolve problems, if empowered through involvement in the decision-making process (Flanagan & Faison, 2001; Kaba, 2000; Lerner, Ostrom, & Freel, 1995; McLaughlin, Irby & Langman, 1994; Villarruel, Perkins, Borden & Keith, 2003; Zeldin, et al., 2000). Adults are a major influence in youths’ lives; therefore, it is critical that youth development professionals serve as positive adult role models by mentoring, guiding, and connecting with youth.
Youth and Adult Partnerships
Researchers have found that programs which provide a link between youth and adults help dismiss negative stereotypes youth and adults may hold about each other (Camino, 2000; Matters, 1990). It is important that a program (e.g. 4-H) provide rewarding experiences and opportunities for both youth and adults. Benson (1997) concluded that youth are frequently isolated from positive experiences with caring adults. In addition, Wunrow and Einspruch (2001) indicated that youth-adult partnerships are necessary in developing, implementing, and evaluating programs that impact youth. A less biased balance of power between adults and youth in the decision-making process is necessary as a means of valuing youth voice if youth are to benefit from these programs.

One of the most critical components to the success of youth voice is the youth-adult partnership. If the youth-adult partnership is negatively affected by poor attitudes, a lack of communication, or stereotyping, youth will struggle to become part of the decision-making process. The concepts of adultism and paternalism, where youth are not appreciated or respected by adults, play significant roles in limiting youth voice. Youth are viewed as less important, and adults are always superior when it comes to making decisions (Justinianno and Scherer, 2001; Pittman, Irby and Ferber, 2001). These barriers promote the concept that youth can not be trusted to develop correctly without being disciplined and guided into the adult world (Checkoway, 1996).

Youth Voice Benefits
Youth must be considered in the decision-making process, because they know the needs and wants of their peers, and understand how to effectively reach their peers (Kothari, 1996). It is important to include youth input in the decision-making process to foster individual and community growth and development. Kothari (1996) argued that the individual, the organization, and the community benefit from the process of youth participation. The individual benefits from the learning process and sense of connectedness of participation, while the organization and community benefit from the effectiveness of the projects (Kothari, 1996). O'Donoghue and Kirshner (2003) found that youth involved in community-based youth organizations honed important competencies through democratic participation, ranging from collaborative work and decision-making, to practical knowledge about local concerns and how to make an impact on them. The competencies youth gained from involvement in real-world, project-based programs were rarely available to them in traditional public schools. These opportunities for actual public work towards meaningful change meant that youth experienced the successes, challenges, and failures that only come from genuine encounters with complex public problems. Youth occasionally experienced frustration; however, this was viewed as part of a learning process which would enable them to continue their democratic work in other settings with new experiences and wisdom.

When youth participate in the decision-making process, they see themselves as persons who have some significance to add to the world (Pittman, 2000). The concept of youth voice has surfaced as an approach for improving the success of community and school reform efforts; thus far, few studies have examined this concept either in theory or empirically (Felix, 2003). However, youth advocates in the decades between 1960 and 2000 have contributed to a tremendous shift in youth policies and practices in America. Through this shift in paradigm, there has been a growing awareness of the combined efforts of youth, families, and community stakeholders working together to create, plan and implement projects (Pittman, 2000). Thus, youth are redefining both their roles in the decision-making process, and the efforts which affect or change the communities in which they live (Pittman & Wright, 1991). Today’s youth
seek to have their views, beliefs, concerns, and input respected at levels of the decision-making process which not only affect them as individuals, but also affect the schools they attend, organizations they stand by, and communities in which they develop (Felix, 2003).

When youth develop strong, caring relationships with their communities, they are more likely to grow up safe and healthy, participate in educational, cultural and employment opportunities, and not become involved in violence and crime (Leifer & McLarney, 1997). All-inclusive participation is a primary component of any civil society. Yet, opportunities and pathways for youth to engage the community remain limited due to the daily segregation of youth from adults and the negative public opinion of adolescents (Camino & Zeldin, 2002). Therefore, youth voice and engagement are important means of overcoming the disrespect of young people, who can contribute to constructive and positive change for society (Stoneman, 2002).

Youth Voice Challenges
Youth voice models are valuable tools for actively engaging youth in the community. Yet, like most change efforts, achieving youth voice can pose a number of challenges. Common challenges arise from balancing the school/work schedules between youth and adults, and sustaining youth attention and loyalty. A number of challenges were identified by Justinianno and Scherer of the Points of Light Foundation (2001).

**Logistical and organization:** Adults whom support the concept of youth-adult partnerships and youth voice must also be prepared to identify and adjust the organization’s environment (where institutional barriers can be particularly significant for youth). Such institutional barriers as hours for meetings and work, transportation, food, equipment and support, procedures and policies, and training make legitimate youth-adult partnerships and youth voice difficult.

**Sharing power:** Some adults have trouble yielding power to youth during the planning and decision-making process. Simultaneously, some youth may be uncomfortable with assuming the accountability and responsibility that comes with having power.

**Stereotypes:** Many adults reach out to youth that they think will act and perform like adults. As a result, it may be easier to engage youth whom have already been identified as leaders. Youth also have stereotypes of adults, which may lead to lack of confidence, expectations, or skepticism about adults’ enthusiasm to support and partner with them.

**Viewing youth as recipients:** Many adults and youth have difficulty seeing youth as leaders or resources in the social order. Some do not consider or believe that youth could offer worthwhile or valuable contributions to the community (Justinianno & Scherer, 2001).

Newsome and Scalera (2001) found that youth whom were interviewed stated they felt disconnected, alienated, unsupported, unacknowledged, and disrespected by adults within the organization. Positive youth-adult partnerships are critical to engaging youth in the decision-making process. Adults must share power with youth to keep them involved (Justinianno & Scherer, 2001; Young & Sazama, 1999; Zeldin et al., 2000). One of the recurring barriers to youth voice identified by both youth and adults in the literature is the lack of orientation and training. Similarly, it has been shown that youth are negatively affected when adults do not clearly communicate their expectations (Princeton Survey Research Associates, 1998). Scheduling conflicts with youth participants in decision-making processes are another barrier identified in research. The research has specified that youth generally lack for time, and the organization’s resistance to flexible scheduling of meetings at times typically convenient for
youth to attend generate barriers to youth participation (Hoover & Weisenbach, 1999; Kurkoski et al., 1997; Newsome & Scalera, 2001; Parker, 1998; Parker, 1999; Princeton Survey Research Associates, 1998). In addition, there are technical obstacles that act as barriers to youth that want to be involved in decision-making process, such as transportation (Parker, 1999) and youth being denied access to resources they need to be successful (Checkoway, 1996).

Some barriers documented in a study conducted by Hart (1992) included the youth’s level of self-esteem, their basic capability in taking the perspective of another person, their level of academic development, and child-rearing practices that instill youth with different attitudes. In addition, youth whom are disadvantaged, disabled, or lacking attention may also have been denied the opportunity to contribute in the decision-making process (Australian Youth Foundation, 1996). Other barriers to participation could include: the amount of time available by young people; a lack of skills, training and/or experience; a lack of resources; an adult “mind set” against youth input or fear of losing power; and an organizational, community or cultural opposition (International Youth Foundation, 1996).

Methodology

A descriptive-correlational study was conducted to describe the 4-H organization’s views on youth voice in the decision-making process. Dillman’s (2000) survey design and methodology was followed in the study.

Population and Sample

This was a national study, which was designed to gather information from three different populations that are significant and essential groups of the 4-H youth development program. The accessible population consisted of the following three groups:

1. the State 4-H Program Leaders in all 50 states,
2. the State 4-H Youth Development Specialists in all 50 states, and
3. five 4-H Youth Agents/Educators in Cooperative Extension county/parish offices in each state whom have assigned 4-H duties as identified by their State 4-H Program Leader.

The first population is the target population of 4-H Program Leaders in all 50 states. These individuals were identified through the USDA Cooperative State Research, Education, and Extension Service website directory. The second population was the accessible population of 4-H Youth Development Specialists in each state. These individuals were also identified through the USDA Cooperative State Research, Education, and Extension Service website directory. All 50 State 4-H Offices were contacted to verify 4-H Youth Development Specialists. The third population was the accessible population of 4-H Youth Agents/Educators, whom were identified by the State 4-H Program Leader in each state. Each 4-H State Program Leader was asked to identify five 4-H Youth Agents/Educators, based on the diversity and demographics of their state, to complete the survey. Prior to the survey, a letter was sent via e-mail to each state’s 4-H Program Leader, 4-H Youth Development Specialists, and 4-H Youth Agents / Educators to notify them of the study.

Survey Instrument and Procedure

The instruments were developed based on empirical literature. Specific questions have been developed in order to determine respondents’ perceptions on barriers affecting youth voice in the decision-making process within the 4-H program, and obtain demographics for the populations sampled. Participants were asked to indicate the issues that affect youth voice in the decision-making process by rating their perceptions on a five-point anchored Likert-type
scale: “Never,” “Seldom,” “Sometimes,” “Often,” and “Always.” The instrument was also utilized to collect the following demographic data: gender, highest level of education, ethnicity, participation in other youth organizations, years served as a 4-H youth development professional, and the number and hours of trainings attended on youth voice. The instruments were reviewed by an expert panel prior to data collection to determine content validity. The panel was made up of a volunteer specialist with 20 years of experience, two researchers/practitioners with 20 years of experience each, and a panel of 30 youth whose ages ranged from 14 to 18 years old.

**Data Collection**

Data was collected by the researcher after administering the instrument via Zoomerang© (electronic survey software) to each state’s 4-H Program Leader, 4-H Youth Development Specialists, and 4-H Youth Agents/Educators (selected by the State 4-H Program Leaders to complete the survey) surveyed in this study. All participants were sent electronically a brief cover letter that requested their participation, provided instructions for completing the survey, and contained a URL link to the survey. Dillman’s survey techniques (Dillman, 2000) were used to encourage the participation in the study of sample subjects, and to follow up with non-respondents.

There were 50 State 4-H Program Leaders, 406 4-H Youth Development Specialists, and 250 4-H Agents/Educators invited to participate in the study. A total of 706 participants were asked to complete the survey during the time period extending from May 17, 2006 through July 27, 2006. Participants were assured confidentiality in completing the survey.

**Results**

The objective was to determine the perceptions of State 4-H Program Leaders, State 4-H Youth Development Specialists, and 4-H Youth Agents/Educators throughout the United States regarding their views on the factors affecting youth voice in the decision-making process. The responses from which respondents could choose were as follows: “1 = Never,” “2 = Seldom,” “3 = Sometimes,” “4 = Often,” “5 = Always.”

The following interpretive scale was developed for the perception mean scores, as it pertains to factors that affect the level of youth voice in the 4-H program:

- mean scores ranging from 1.00 to 1.50, were interpreted as “Never” affecting youth voice;
- mean scores ranging from 1.51 to 2.50, were interpreted as “Seldom” affecting youth voice;
- mean scores ranging from 2.51 to 3.50, were interpreted as “Sometimes” affecting youth voice;
- mean scores ranging from 3.51 to 4.50, were interpreted as “Often” affecting youth voice; and
- mean scores ranging from 4.51 to 5.00, were interpreted as “Always” affecting youth voice.

When State 4-H Program Leaders were asked to select the most appropriate response to the statements included on the survey instrument, thirteen items on the scale were interpreted as “Often” being factors which affect the level of youth voice in the decision-making process in the 4-H program. Twenty-one items were interpreted as “Sometimes” being a factor that affects the level of youth voice in the decision-making process in the 4-H program, and one was
interpreted as “Seldom” being a factor which affects the level of youth voice in the decision-making process in the 4-H program. Cronbach’s alpha measure of reliability (internal consistency) was calculated for the section of the instrument that determined the factors affecting youth voice as perceived by the State 4-H Program Leaders. Cronbach’s alpha was calculated to be .939, which according to Hair et al. (1998) indicates acceptable reliability.

Data regarding the perceptions of State 4-H Program Leaders on the factors affecting youth voice in the decision-making process within the 4-H program are presented in Table 1. The factors perceived as most and least important to developing and supporting youth voice in the decision-making process within the 4-H program are presented.

**Table 1**

<table>
<thead>
<tr>
<th>State 4-H Program Leader</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The level in which both adults and youth share responsibilities within the program affects youth voice in the 4-H program.</td>
<td>32</td>
<td>4.09</td>
<td>.59</td>
<td>Often</td>
</tr>
<tr>
<td>The level in which the organization accepts youth involvement in the decision making process affects youth voice in the 4-H program.</td>
<td>32</td>
<td>3.84</td>
<td>.81</td>
<td>Often</td>
</tr>
<tr>
<td>An adult’s expectations of youth roles within the 4-H program affects youth voice.</td>
<td>32</td>
<td>3.81</td>
<td>.64</td>
<td>Often</td>
</tr>
<tr>
<td>The ability of youth and adults to work as a team affects youth voice in the 4-H program.</td>
<td>32</td>
<td>3.78</td>
<td>.79</td>
<td>Often</td>
</tr>
<tr>
<td>Both youth and adults awareness of the 4-H program’s policies affects youth voice in the 4-H program.</td>
<td>32</td>
<td>3.78</td>
<td>.66</td>
<td>Often</td>
</tr>
<tr>
<td>An adult’s past negative experiences when being involved in 4-H affects youth voice in the 4-H program.</td>
<td>32</td>
<td>3.06</td>
<td>1.01</td>
<td>Sometimes</td>
</tr>
<tr>
<td>The level of recognition for youth in the 4-H program affects youth voice in the 4-H program.</td>
<td>32</td>
<td>3.03</td>
<td>.97</td>
<td>Sometimes</td>
</tr>
<tr>
<td>The decision making skills of youth affects youth voice within the 4-H program.</td>
<td>32</td>
<td>3.00</td>
<td>.88</td>
<td>Sometimes</td>
</tr>
<tr>
<td>The level of recognition for adults in the 4-H program affects youth voice in the 4-H program.</td>
<td>32</td>
<td>2.81</td>
<td>1.07</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Whether food is provided at activities/programs affects youth voice in the 4-H program.</td>
<td>32</td>
<td>2.22</td>
<td>.83</td>
<td>Seldom</td>
</tr>
</tbody>
</table>

*Note.* Response based on Likert-type scale with values: 1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always.

Interpretive scale: 1.00 to 1.50 = Never; 1.51 to 2.50 = Seldom; 2.51 to 3.50 = Sometimes; 3.51 to 4.50 = Often; and 4.51 to 5.00 = Always.

When 4-H Youth Development Specialists were asked to select the most appropriate response to the statements included on the survey instrument, fourteen items on the scale were
interpreted as “Often” being factors that affect the level of youth voice in the decision-making process in the 4-H program. Twenty-two items were interpreted as “Sometimes” being factors affecting the level of youth voice in the decision-making process in the 4-H program. Cronbach’s alpha measure of reliability (internal consistency) was calculated for the section of the instrument which determined the factors affecting youth voice as perceived by 4-H Youth Development Specialists. Cronbach’s alpha was calculated to be .924, which indicates acceptable reliability (Hair et. al, 1998).

Data regarding the perceptions of 4-H Youth Development Specialists on the factors which affect youth voice in the decision-making process within the 4-H program are presented in Table 2. The factors perceived as most and least important to developing and supporting youth voice in the decision-making process within the 4-H program are presented.

**Table 2**

<table>
<thead>
<tr>
<th>4-H Youth Development Specialist</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The level in which both adults and youth share responsibilities within the program affects youth voice in the 4-H program.</td>
<td>187</td>
<td>4.26</td>
<td>.65</td>
<td>Often</td>
</tr>
<tr>
<td>The level in which the organization accepts youth involvement in the decision making process affects youth voice in the 4-H program.</td>
<td>187</td>
<td>4.01</td>
<td>.82</td>
<td>Often</td>
</tr>
<tr>
<td>An adult’s expectations of youth roles within the 4-H program affects youth voice.</td>
<td>187</td>
<td>3.94</td>
<td>.71</td>
<td>Often</td>
</tr>
<tr>
<td>Youth having too many scheduling conflicts affects youth voice in the 4-H program.</td>
<td>187</td>
<td>3.90</td>
<td>.64</td>
<td>Often</td>
</tr>
<tr>
<td>The ability of youth and adults to work as a team affects youth voice in the 4-H program.</td>
<td>187</td>
<td>3.86</td>
<td>.80</td>
<td>Often</td>
</tr>
<tr>
<td>An adult’s fear of sharing their ideas with youth affects youth voice in the 4-H program.</td>
<td>187</td>
<td>3.22</td>
<td>.90</td>
<td>Sometimes</td>
</tr>
<tr>
<td>The level of recognition for youth in the 4-H program affects youth voice in the 4-H program.</td>
<td>187</td>
<td>3.18</td>
<td>.89</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Adult’s lack of self-esteem affects the level of youth voice in the 4-H program.</td>
<td>187</td>
<td>3.09</td>
<td>.90</td>
<td>Sometimes</td>
</tr>
<tr>
<td>A lack of communication skills by youth affects youth voice within the 4-H program.</td>
<td>187</td>
<td>3.04</td>
<td>.84</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Whether food is provided at activities/programs affects youth voice in the 4-H program.</td>
<td>187</td>
<td>2.78</td>
<td>.91</td>
<td>Sometimes</td>
</tr>
<tr>
<td>The level of recognition for adults in the 4-H program affects youth voice in the 4-H program.</td>
<td>187</td>
<td>2.77</td>
<td>.79</td>
<td>Sometimes</td>
</tr>
</tbody>
</table>

*Note. Response based on Likert-type scale with values: 1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always
Interpretive scale: 1.00 to 1.50 = Never; 1.51 to 2.50 = Seldom; 2.51 to 3.50 = Sometimes; 3.51 to 4.50 = Often; and 4.51 to 5.00 = Always.

When 4-H Agents/Educators were asked to select the most appropriate response to the statements included on the survey instrument, fifteen items on the scale were interpreted as “Often” being factors which affected the level of youth voice in the decision-making process within the 4-H program. Twenty-one items were interpreted as “Sometimes” being factors affecting the level of youth voice in the decision-making process within the 4-H program.
Cronbach’s alpha measure of reliability (internal consistency) was calculated for the section of the instrument which determined the factors affecting youth voice as perceived by the 4-H Agents/Educators. Cronbach’s alpha was calculated to be .954, which indicates acceptable reliability (Hair et. al, 1998).

Data regarding the perceptions of 4-H Agents/Educators on the factors which affect youth voice in the decision-making process within the 4-H program are presented in Table 3. The factors perceived as most and least important to developing and supporting youth voice in the decision-making process within the 4-H program are presented.

Table 3

<table>
<thead>
<tr>
<th>4-H Agents/Educators</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The level in which both adults and youth share responsibilities within the program affects youth voice in the 4-H program.</td>
<td>130</td>
<td>4.14</td>
<td>.78</td>
<td>Often</td>
</tr>
<tr>
<td>Youth having too many scheduling conflicts affects youth voice in the 4-H program.</td>
<td>130</td>
<td>3.98</td>
<td>.86</td>
<td>Often</td>
</tr>
<tr>
<td>The ability of youth and adults to work as a team affects youth voice in the 4-H program.</td>
<td>130</td>
<td>3.89</td>
<td>.81</td>
<td>Often</td>
</tr>
<tr>
<td>The level in which the organization accepts youth involvement in the decision making process affects youth voice in the 4-H program.</td>
<td>130</td>
<td>3.88</td>
<td>.95</td>
<td>Often</td>
</tr>
<tr>
<td>Youth understanding their role affects youth voice in the 4-H program.</td>
<td>130</td>
<td>3.82</td>
<td>.83</td>
<td>Often</td>
</tr>
<tr>
<td>Youth not having enough program options to participate in 4-H affects youth voice in the 4-H program.</td>
<td>130</td>
<td>3.20</td>
<td>1.02</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Adult’s fear of failing affects youth voice in the 4-H program.</td>
<td>130</td>
<td>3.16</td>
<td>.97</td>
<td>Sometimes</td>
</tr>
<tr>
<td>An adult’s fear of sharing their ideas with youth affects youth voice in the 4-H program.</td>
<td>130</td>
<td>3.15</td>
<td>.99</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Whether food is provided at activities/programs affects youth voice in the 4-H program.</td>
<td>130</td>
<td>2.99</td>
<td>1.08</td>
<td>Sometimes</td>
</tr>
<tr>
<td>The level of recognition for adults in the 4-H program affects youth voice in the 4-H program.</td>
<td>130</td>
<td>2.90</td>
<td>.87</td>
<td>Sometimes</td>
</tr>
</tbody>
</table>

Note. Response based on Likert-type scale with values: 1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always
Interpretive scale: 1.00 to 1.50 = Never; 1.51 to 2.50 = Seldom; 2.51 to 3.50 = Sometimes; 3.51 to 4.50 = Often; and 4.51 to 5.00 = Always.
Conclusion

When examining 4-H youth development professionals’ perceptions on the factors affecting youth voice in the decision-making process within the 4-H Youth Program, respondents considered several causes, which affect youth voice in the decision-making process. These issues included the level at which both youth and adults share responsibility, lack of available transportation, and the ability of youth and adults to work as a team. Additional factors included the opportunity for youth to develop a caring relationship with adults, an adult’s expectations of youth roles within the 4-H program, and youth’s expectations of adult roles within the 4-H program. Further, both youths’ and adults’ awareness of the 4-H program’s policies, the level in which the organization accepts youth involvement in the decision-making process, and youth having too many scheduling conflicts were also considered as barriers impacting youth voice by 4-H youth development professionals.

Important patterns regarding the perceptions of 4-H youth development professionals, agents/educators, and state leaders regarding factors which affect youth voice in the decision-making process within the 4-H Youth Program emerge upon reviewing the results of this study. Each of the 4-H three groups included in this study (youth development professionals, agents/educators, and state leaders) unanimously perceive that the level of responsibility shared between adults and youth represents the single most important factor that affects youth voice in the decision-making process within the 4-H Youth Program. Similarly, the level at which the organization accepts youth involvement in the decision-making process was also unanimously indicated as an important factor affecting youth voice within 4-H programs. Further, the ability of youth and adults to work as a team within the organization was also unanimously prescribed as one of the most important factors affecting youth voice in the decision-making process within the 4-H Youth Program.

These factors, unanimously perceived as having most important affects upon youth voice in the decision-making process within the 4-H Youth Program (shared responsibility, acceptance, and teamwork), are well supported within the literature. The need for shared responsibility and teamwork between youth and adults within organizations and programs is highlighted by Benson (1997) and Wunrow and Einspruch (2001). Acceptance of youth in the decision-making process within organizations is strongly supported and advocated by Kothari (1996), for the benefit of both youth involved and the organization. These findings are further supported and expanded upon by O'Donoghue and Kirshner (2003). That the factors of shared responsibility and teamwork between youth and adults for purposes of decision-making, and the acceptance of the role of youth within the decision-making process, are perceived by all surveyed groups as affecting youth voice is a positive indication that 4-H programs successfully foster youth involvement. This agrees with the findings of Tassin (2005).

Other results, however, are not congruent with the literature. Results indicate that only 4-H youth development specialists and agents/ instructors perceive scheduling conflicts of youth as greatly affecting youth voice in decision-making process within 4-H programs, while state 4-H leaders perceive other factors as having greater affect. Four-H youth development specialists and agents/ instructors, and not state leaders, also perceive adults’ fear of sharing their ideas with youth as minimally affecting youth voice in decision-making processes within 4-H programs. State 4-H leaders and youth development professionals perceive recognition of youths’ contributions as only "Somewhat" affecting youth voice in decision-making processes within 4-H programs. The provision of food at activities/ programs was unanimously perceived
by all three groups as one of the two least important factors affecting youth voice in the decision-making process within 4-H programs.

These results are incongruent with the literature. The importance of logistic details – such as scheduling, recognizing contributions, and the provision of modest comforts such as food – for fostering youth voice in the decision-making processes of programs has been well established (Justinianno and Scherer, 2001; Newsome and Scalera, 2001; and Princeton Survey Research Associates, 1998). Adults’ fears of sharing ideas with youth in the decision-making processes of programs can represent negative attitudes of youth held by adults, and create barriers that impede progress (Checkoway, 1996; Pittman, Irby, and Ferber, 2001; and Justinianno and Scherer, 2001). These results may indicate difficulties that still exist within 4-H programs, despite efforts to include youth in the decision-making processes of the organization.

**Recommendation**

Such issues as transportation will always be a dilemma, and will often retard progress – especially when dealing with youth. However, remaining factors which serve as barriers to youth voice can be remedied with proper training on youth voice, preparation for youth voice (orientation, position descriptions, etc.), and involvement. If such steps are taken, youth and adults can become partners, and develop meaningful relationships which provide the respect and trust needed for youth voice to thrive. Research has shown that one of the most critical components to the success of youth voice is the youth-adult partnership. If the youth-adult partnership is negatively affected by poor attitudes, a lack of communication, or stereotyping, youth struggle to become part of the decision-making process. The concept of adult power and control (adultism) plays a significant role in the failure of youth voice.

As youth development professionals, we can not deem youth less important than adults to the decision making process. Nor should it be assumed that adults are always superior to youth when making decisions. Adults whom control the program and do not allow youth voice in the decision-making process are a critical barrier; they insinuate that youth can not be trusted to develop correctly without being disciplined and guided into the adult world (Checkoway, 1996). Additionally, communicating high standards and clear expectations to all individuals involved, and making sure that meeting times, locations, transportation, and other logistic details are flexible and available for youth have been identified as effective practices which foster an environment conducive for youth voice (Carstarphen, 2001; Checkoway et al., 2003; Justinianno & Scherer, 2001; Kurkoski et al., 1997; Mason & Goll, 2000; Parker, 1998; Young & Sazama, 1999; Zeldin et al., 2000).

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Benchmarking the Kansas 4-H Judging System

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Benchmarking the Kansas 4-H Judging System

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Abstract: This study investigated the methods and policies associated with 4-H project judging at the county level within the Kansas 4-H Program. Extension Agents surveyed about current 4-H judging processes indicated a variety of methods used. Data collected showed that 21.8% of the counties surveyed practiced some type of project judging without the 4-H member present. In regard to feedback received by the youth in non-livestock project judging, 64.1% of counties reported both verbal and written forms of feedback, with 25.6% receiving only verbal. In livestock project judging, 93.8% reported that youth receive feedback only verbally. The majority of non-livestock projects are judged using the Danish system, while the number of livestock projects judged are split among both the Danish system and peer system of competitive judging. It was concluded that a wide-variety of judging methods are used, resulting in incongruent programs offered to 4-H members.

Introduction

Since the turn of the 20th century, boys and girls across America have been participating in what is known as the 4-H Youth Development program. In the early 1900’s USDA officials sought to educate farmers and homemakers about better practices to improve their living conditions. One way to achieve this was to teach the children in the hope that they would in turn teach their parents. Boys and girls who participated in 4-H club work learned new, effective practices for both the farm and the home, ultimately teaching their parents the same new skills. 4-H club work came about from the efforts of many. School teachers, scientists, government officials, and concerned community members all played an important role in shaping the 4-H program (Wessel & Wessel, 1982).

Traditionally 4-H was an organization for America’s rural youth; boys participated in corn clubs and girls in cooking and sewing clubs (Wessel & Wessel, 1982). Over the years, the 4-H program has grown and expanded from a small, rural youth organization to the largest non-
formal youth development organization in the world. While the traditional community club program is still the root of the organization, military clubs, after school programming, and other non-traditional programs are just as effective in many urban and suburban locations. Within the traditional community club program, youth typically engage in monthly club meetings, with additional project meetings, day camps, and social outings. 4-H strives to instill life skills within every member, utilizing project areas to facilitate this learning. The 4-H project experience most often culminates at the county fair, either in a show ring or similar competitive judging process (Ladewig & Thomas, 1987).

According to Wessel and Wessel (1982), the use and value of competitions in 4-H dates back to agricultural clubs and contests created around the beginning of the 20th century. In a national study of former 4-H members, 4-H programs were indicated as having used competitive events and activities as a means to promote learning and the development of specific skills of 4-H members (Ladewig & Thomas, 1987). Researchers have indicated that one of the most utilized teaching methods of 4-H has been to provide educational opportunities for youth through competitive activities (Keith & Vaughn, 1998; Weber & McCullers, 1986). Much debate has risen over the positives and negatives of competition and its system of rewards. Weber and McCullers (1986) point out that the 4-H system of competition and rewards have been very successful for over 70 years. However, others argue that competition is a system that creates few winners and many losers (Fetsch & Yang, 2002).

“It has been well documented that American children place great value on winning over others” (Ames, 1981, p. 274). Like many youth programs, 4-H has utilized competition as an appropriate teaching-learning strategy (Allen, Iyechad, Mayeske, Parsons, Rodriguez, Singh, et al., 1989). Radhakrishna, Everhart, and Sinasky (2006) found that 4-H participants believed that 4-H competitive events were avenues to help them learn new things, develop life skills, set goals, and strive for excellence. In addition, competitions prepare youth for a competitive world, and motivate them to strive for excellence (Ladewig & Thomas, 1987; Weber & McCullers, 1986; Wessel & Wessel, 1982).

In a meta analysis of 122 studies on cooperation versus competition, researchers found that “cooperation is considerably more effective than interpersonal competition and individualistic efforts in promoting achievement and productivity” (Johnson, Maruyama, Johnson, Nelson, & Skon, 1981, p. 51). Pruvlovich (1982) argued that it is the innate differences in children’s intellect, physical ability, and social capability that breeds competition itself; that competition in essence, is a natural process that enhances the original being. Radhakrishna (2006) pointed out that “competitions contribute to learning democratic values, combating juvenile delinquency, fostering responsible social behaviors...stimulating creativity...and developing life skills” (p. 71). Many studies discuss that competition prepares youth for a competitive world, while stimulating intrinsic motivation (Fetsch & Yang, 2002; Keith & Vaughn, 1998; Ladewig & Thomas, 1987; Weber & McCullers, 1986).

Radhakrishna (2006) found that parents strongly agreed with many positive statements regarding 4-H competition. In studies designed to determined life skills learned through competitive 4-H projects, parents perceived many benefits, such as responsibility, setting goals, self motivation, social relations, and the development of character (Boleman, Cummings, & Briers, 2004; Davis, Kieth, Williams, & Fraze, 2000; Kieth & Vaughn, 1998). 4-H members themselves reported that they enjoyed competition and that it motivated them to strive for excellence (Radhakrishna, Everhart, & Sinasky, 2006).
In opposition, the literature revealed that parents were concerned with negative outcomes of 4-H competition, such as aggressive behavior, cheating, and the development of unhealthy practices, and financial greed (Kieth & Vaughn, 1998; Radhakrishna, 2006). Youth were also concerned about excessive parent involvement, unethical practices, and unhealthy characteristics that were prevalent in some competitive events (Radhakrishna et al., 2006). The National USDA/ES Task Force Report on Competitions found that research on competition in 4-H to be limited and lacking in psychological or educational concepts (Allen et al., 1989). Many researchers have recommended that all 4-H competitive events should be revisited and modified to mirror the current changes that are occurring in 4-H programs and the way competitive events are structured and implemented (Allen et al., 1989).

Ames (1981) points out that the desire to win may overshadow any value found in that of an excellent performance in a cooperative setting. The literature also showed that “rewards may cause an individual to avoid difficult and challenging tasks” (Weber & McCullers, 1986, para. 11). In a study to determine factors which influence 4-H participation, researchers found that youth were concerned about “the inequity of judging activities exhibited through criteria” (Cano & Bankston, 1992, p. 26). These inequities may play a factor in re-enrollment, member satisfaction, and life skills learned. Smith and Collins (1988) also found similar results; their study determined youth attitudes toward competition, and found that they had statistically significant negative attitudes. On the other hand, interpersonal competition has shown its advantages, allowing children to perform new skills, apply knowledge, and practice in real world settings (McTighe, 1997).

Theoretical Framework

Because the 4-H program encompasses youth of varying ages and stages, it is important that the activities offered are age appropriate (Karns & Myers-Walls, 1996). The theoretical framework behind this study is that of Erikson’s psychodynamic approach. His theories focused on how healthy personalities develop through stages of crisis (Bergen, 2008). Erikson (1963) studied how social factors during childhood play out in the forming of a healthy psychological development as an adult.

Erikson outlined eight stages of psychosocial development, known as the Eight Ages of Man, each that have two opposite extreme outcomes. The eight stages include:

1. trust versus mistrust (ages 0-1),
2. autonomy versus shame and doubt (ages 2-3),
3. initiative versus guilt (ages 3-6),
4. industry versus inferiority (6-12),
5. identity versus identity diffusion (ages 12-18),
6. intimacy versus isolation (20’s),
7. generativity versus stagnation (20’s-50’s), and
8. integrity versus despair (50’s and beyond) (Green, 1989).

In Erikson’s fourth stage, Industry vs. Inferiority (ages 6-12), children learn to produce good work, which in turn, gives them satisfaction (Bergen, 2008). Erikson (1963) stated that “the child’s danger, at this stage, lies in a sense of inadequacy and inferiority” (p. 260). It is a social stage, in which if children experience unresolved feelings of inadequacy, they can suffer from serious competence and self-esteem issues. In this stage, the crisis requires the child to learn
cooperatively, completing tasks assigned by parents or teachers; if the tasks require greater competencies than the child has mastered, feelings of failure and inferiority may occur (Green, 1989).

If the Cooperative Extension Service stems from research-based information and initiatives, then the 4-H Youth Development programs must follow suit (CSREES, 2006). The 4-H program model consists of four components:

(a) positive relationships with a caring adult,
(b) a safe environment,
(c) opportunities for youth to develop mastery, and
(d) the ability to demonstrate acquired skills (CSREES, 2006).

Nationally, the 4-H program has adopted an experiential learning model as their delivery mode. “Learning by doing” is an important part of the 4-H mission, encouraging youth to learn as they experience and process new knowledge and skills with limited adult guidance (Diem, 2004). By utilizing the Experiential Learning Model, youth advance through five steps to fully learn new skills and knowledge: 1) experience, 2) share, 3) process, 4) generalize, and 5) apply. This model is designed for children of all ages and developmental stages (Diem, 2001).

Definition of Terms
Terms for many of the methods discussed may vary from region to region. In order to fully understand the following methods and research findings, the following definitions are provided.

Peer Competition: Judging method in which a 4-H member’s project work is being compared to another’s (Bethard, 1994).

Danish System: A method of evaluating 4-H exhibits based upon a set of standard created for that specific project area. Entries are categorized into one of three groups reflecting how closely the exhibit met the created standards. Three categories exist: blue award- excellent work, exceeds standards; red award- good work, meets standards; and white award- needs improvement, does not meet standards (Newman, 2006).

Exhibit Judging: A judging method based upon the exhibit only and how the exhibit meets set standards, without the member present (Bethard, 1994).

Conference Style: An evaluation method designed to stimulate conversation between the judge and 4-H member; an exchange of knowledge and project experience (Million & Taylor, 2000).

Lifeskills: Skills that are abilities in which youth learn that are necessary and will help them lead a productive adult life (Friedman, 1994, p. 107).

Purpose & Objectives
The need for this study arose from the obligation to ensure that 4-H youth are benefiting from a safe and positive learning environment throughout the 4-H project judging experience. This coincides with several of the Essential Elements of 4-H Youth Development as outlined by Kress (2004): positive relationship with a caring adult, a safe environment, engagement in learning, and opportunity for mastery. Several judging methods are used throughout the Kansas 4-H program, some of which create a competitive learning atmosphere. The literature reveals
problems with certain competitive environments that are currently used. The purpose of this study was to benchmark county fair 4-H judging practices currently used in the Kansas 4-H program. The study addressed the following research questions:

1. At what age are 4-H members eligible to participate in competitive events?
2. Are youth present during project judging?
3. Do youth receive feedback upon completion of project judging?
4. Are exhibits judged upon standards using the Danish System?

**Methods**

The population for this study included all Kansas Extension agents with 4-H programming responsibility. Seeing as though one county may have more than one Extension Agent with 4-H responsibility, and to avoid multiple responses per county, one agent was randomly selected from each county for the purpose of this study. Due to the nature of this study, the web-based survey used a proportionate stratified random sampling design, with n=105.

A survey instrument consisting of 8 questions was developed to benchmark the current judging methods used at county fairs within the Kansas 4-H program. As Creswell (2008) mentioned, “Instances where surveys are most suitable are to assess trends or characteristics of a population; learn about individual attitudes, opinions, beliefs, and practices....” (p. 414). The first portion of the instrument was designed to assess the current non-livestock 4-H project judging methods used by the county, with the second assessing 4-H livestock project judging methods. The survey instrument was reviewed by a panel of experts to address face and content validity. In addition, a panel of 15 experts within the Oklahoma State University Extension Service pilot tested the instrument in September of 2008 to determine construct validity. It was assumed that all Extensions agents in Kansas had high speed Internet access; this largely reduced the technology threat to effective measurement, as outlined by Dillman and Smyth (2007).

Due to the nature of this report, the study should not be generalized to populations outside of the Kansas 4-H program. This study did not attempt to document the best practice or make causal statements among the variables. Data was not collected on state or regional 4-H programs or contests; this study focused on the 4-H judging methods and processes used at county fairs pertaining to 4-H project work. For the purpose of this study, the researcher assumed that Kansas Extension Agents have an accurate account of what judging methods are currently being used within their 4-H program at their county fair. The researcher also assumed that every county 4-H program is using competitive events as a teaching/learning strategy.

**Results**

Eighty-one surveys were completed out of a possible 105 counties, resulting in a 77% response rate. Of those Extension Agents completing the survey, 58.8% had a 4-H youth development program focus, 43.8% agriculture program focus, and 18.8% family and consumer science (FCS) program focus. With many single agent counties having agricultural and natural resource agents, this explains the relatively low representation of FCS agents in the study.

The first research question in this study was designed to benchmark the age of 4-H members when they become eligible to participate in competitive events. In both non-livestock and livestock 4-H projects, the overwhelming majority was seven years old. Only one county
responded with an age of 8, resulting in 98.8% of agents reporting age seven for non-livestock projects, and 100% of agents reporting age seven for livestock projects.

The second research question benchmarked the 4-H member’s presence at the time of judging. In non-livestock 4-H project areas (i.e. foods, photography, visual arts, etc), 78.2% of agents reported they utilize the conference style of judging, where the youth member is present. Another 2.6% of agents reported the use of exhibit style judging, where the child is completely absent from the judging process. The remaining 19.2% of agents reported some mixture of both methods, with some project areas judged in the absence of the member and some judged in their presence. Projects repeatedly mentioned using the conference style of judging includes: clothing, photography, and foods. 4-H project areas such as woodworking, entomology, posters, electricity, were often noted as being judged without the member present.

Research question three benchmarked the feedback that youth received from judges. Table 1 summarizes these findings. Several of the respondents noted that only the non-livestock projects judged conference style received feedback, while the other project areas did not. The eight agents who reported “other” in non-livestock projects used a combination of verbal and written feedback, varying by the project area. The four agents who reported “other” in livestock projects provided written feedback in projects such as dog, bucket calves, and rabbits only.

**Table 1**

Feedback received by youth during project exhibit judging

<table>
<thead>
<tr>
<th></th>
<th><strong>Non-livestock</strong> project areas, number of respondents</th>
<th><strong>Livestock</strong> project areas, number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal feedback only</td>
<td>20</td>
<td>71</td>
</tr>
<tr>
<td>Written feedback only</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Both, verbal and written</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>No feedback</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

The fourth research question in this study was developed to benchmark the system on which projects are judged. Table 2 summarizes these findings. A majority of the respondents who chose “other” further explained that many of their projects are judged according to the Danish system, but champions are picked using peer competition. For example, out of a class of ten, five blues may be awarded, along with five red, utilizing the Danish system judging the exhibits on individual merit against a set standards. Then, utilizing peer competition, the judge takes the five blues, compares them against each other, and finally picks the top two projects that then receive champion and reserve champion. This dual method was reported in both livestock and non-livestock project areas.
Table 2
Judging method used to evaluate exhibits

<table>
<thead>
<tr>
<th>Non-livestock project areas, number of respondents</th>
<th>Livestock project areas, number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer competition</td>
<td>1</td>
</tr>
<tr>
<td>Danish system</td>
<td>65</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Discussion & Implications

It is concluded that a variety of methods are used in 4-H project judging at the county-level across the state of Kansas. The incongruence is not only county to county, but within each county from project to project. While a large majority of counties followed the same age guidelines, vast differences occurred in the member’s presence and how the project itself was judged. These differences provide diverse experiences for 4-H members across the state. The competitive experience of one 4-H member can greatly differ from that of a member in a different county, and the educational outcomes of the project exhibit can also widely vary.

With almost 22% of the counties surveyed reporting that several projects areas are judged without the member present, concern is raised. The child’s absence from the project judging contradicts the experiential learning model, the cornerstone of the 4-H educational mission. The member misses out on the opportunity to share and process the project exhibit, two key steps in the experiential learning model (Diem, 2001). If county fair 4-H project judging is so widely experienced by so many members, and if agents are not effectively utilizing the experiential learning model in the majority of project areas and counties, then the following question remains: is Kansas 4-H missing the mark by not fully utilizing the experiential learning process?

While not abundant in the literature, research on the effective utilization of the Danish system could alleviate some of the risks and potentially negative outcomes of competition. When using the Danish system of judging, projects are not compared against one another, but rather judged against a set of standards (Bethard, 1994). Each exhibit may receive a ribbon. An excellent rating receives a blue, a red ribbon signifies very good work, and a white may mean improvement is needed. According to Bethard (1994), “The purpose of using the Danish judging system is to give every 4-H member the recognition deserved for the work that was done” (p. 426).

In addition, a conference style judging system could also be used to enhance the benefits of the Danish system. In this setting, the judge interviews the 4-H member while he or she evaluates the exhibit. Judges give both written and verbal feedback and concentrate on the knowledge learned by the youth. 4-H members are given an opportunity to explain their exhibit using their public speaking skills, interact one on one with an adult, and gain insight as to how to improve for the future (Million & Taylor, 2000). Other factors that contribute to the judging systems success may include the judges themselves, the county agent, the parent’s understanding, room set-up, etc. Many factors play a role in the success of the 4-H member’s project judging. To the best of the ability of those involved, risks should be minimized in order to meet the critical elements upon which the organization is based upon.
Conclusion

This study reveals areas in need of further research. Statistical data is currently lacking regarding the number of youth participating in 4-H project judging at the county level. While it is known how many youth participate in community clubs, after-school and in-school programs, and military clubs, data does not exist correlating them to project exhibition at the county fair. Future research should also be done to determine 4-H member participation in project exhibition at the county fair in relation to their participation in other club activities. This data could provide future direction in prioritizing program areas of need. In addition, further research on the judging methods and their effectiveness should be studied.

The years between ages six and twelve present a crucial point in the development of young person. Erikson's theories (1963) relate the importance of each crisis at each developmental stage, and competition within 4-H is no exception. The 4-H project judging experience offers opportunities to successfully develop feelings of adequacy and productivity through cooperation. While the there is sufficient literature discussing the impact of competition on youth, there is a lack of information regarding the methods in which to deliver such learning methods. Extension work, 4-H youth development programs included, is researched-based; with this said, there is a void in the body of literature directly related to one of the most popular learning opportunities experienced by many youth.

References


The Perfect Mindstorm:
4-H Robotics in Afterschool Settings

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The Perfect Mindstorm: 4-H Robotics in Afterschool Settings

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Abstract: As the 4-H Science, Engineering and Technology (SET) Mission Mandate unfolds, robotics provides an opportunity to involve youth in SET activities. Utah 4-H utilized Lego Mindstorms Robotics kits to teach youth about robotics. Evaluations demonstrated that robots increase youth’s interest in science, engineering and technology.

Introduction

4-H youth have been engaged in university-based research and demonstration projects for over 100 years – helping bring innovation and understanding to local communities. While many youth and adults think of 4-H as “cows and cookies,” the organization has excellent resources and capacity to involve youth in non-formal science, engineering and technology (SET) experiences.

The importance of involving youth in the work of the land grant is as relevant today as it was 100 years ago. National trends demonstrate that youth are not adequately prepared for and pursuing education and careers in SET (NAEP, 2005). American students’ low proficiency in math and science are a real concern in a world where advanced knowledge is widespread and low-cost labor is readily available. In addition, research indicates that the United States is producing fewer science and technology workers (Porter & van Opstal, 2001).

Utah State University Extension 4-H provides SET experiences that go beyond teaching scientific principles. By integrating the 4-H program with strategies that support the developmental needs of young people, participants develop SET abilities and basic life skills as they experience teamwork and joint decision-making. Combining the outcomes of positive youth development with critical science, engineering and technology skills helps youth become prepared for careers in SET.

Through activities and projects, 4-H youth gain leadership, citizenship and life skills. These skills prepare young people to become effective in the workplace as well as in their communities. To
be literate in the 21st Century means not just acquiring technology skills, but also the analytic, communications, interpersonal and self-directional skills, which 4-H programs provide. 4-H activities encourage youth to work together in large group activities that foster communication, teamwork and problem solving skills (National 4-H Council, 2008).

The Need for SET

Local requests encouraged Utah 4-H to increase the amount of SET training and programming for youth. Based on input from field staff and afterschool providers, the need was recognized to identify a program that would:
- Address topics in science, engineering and technology (SET)
- Be age appropriate for upper elementary and middle school youth
- Be fun and provide opportunities for hands on learning
- While not “boy specific,” be something that would help attract boys to be involved in the program

After researching 4-H programs, Utah 4-H determined that the Lego Mindstorms Robotics program met these criteria. In addition to fulfilling the above criteria, Robotics also allows for several teaching components. Strong emotional appeal in building and programming robots, a competitive element that allowed youth to build and program robots to complete challenges and the possibility for a robots experience to be as short as 5 hrs or extend to 30 to 40 were attractive elements. Utah 4-H also began the program because of news of an upcoming 4-H Robotics curriculum and nationwide involvement of 4-H in robotics.

Getting started – Summer Camps

To begin the Robotics program, Utah 4-H purchased four Lego Team Challenge Robotics sets. Each set contained over 800 Lego pieces, a programmable brick and the software. Ideal conditions allowed pairs of youth to share a computer and robotics set. The program was promoted to Utah 4-H field staff throughout state and they were able to checkout Robotics kits.

The Utah program quickly hit two barriers. Not every site had access to a computer lab and four kits were not sufficient to accommodate larger afterschool programs or a summer camp setting. In 2005 the program secured funds to purchase 12 robotics kits and 12 laptop computers. Five pilot programs were identified to complete a Robotics Camp “PROBE” that allows kids to build robots to work on a fictional planet -- Orange Planet H-99. The camp was based on a pre-packaged “camp on a disk” from Lego Education that includes a CD-ROM with all of the information and curriculum to operate a robotics camp, including a camp itinerary, forms, posters, robot building instructions, animated slide shows, challenges, robot building and programming assistance.

Ninety-seven youth participated in five different summer camp experiences in 2006. All but one of the experiences were week-long for at least five hours a day. Evaluations mailed to camp participants yielded approximately a 30% return rate. Camp participants rated the quality of the camps’ fun and educational aspects as 4.63 using the following scale: 1=poor; 2=below average; 3=average; 4=above average; and 5=excellent. While our target grade was 6-8 camp sites reported upper elementary, grades 4-5 with some high school youth assisting in a counselor role. Gender information was not collected on camp participants but field staff expressed that a large majority of the campers were male.
Seventy-four percent indicated an increased ability to work with others, with an average rating of 3.61. Participants shared:

“I had to work with other ideas as well as mine.”

“I made new friends and we learned to work together and listen to each other to build our robot.”

“One teammate would know more about handling computers or building strong structures, and the other teammate might know more about the other. This would help people to create a good program and robot.”

“Me and another kid were teamed up for a competition so we started giving each other ideas and it got easier to work with other kids.”

Seventy-five percent increased their ability to problem solve with an average rating of 3.72. Participants stated:

“When our robot wouldn’t work we had to verbalize our thoughts as to what went wrong so we could fix it.”

“Programming was challenging and I learned some new things from that.”

“It took many tries but was rewarding in the end because if it didn’t work right I had to figure out what was wrong.”

An evaluation question asked parents how they felt their child benefited from the program. Parents said:

“Coby learned more about technology. He learned about programming. He learned about success and failure. He learned to work as a team.”

“Tanner told me he wants to build robots for the moon, to repair the ozone layer, to reduce death in war and to make his bed in the morning. He was still learning even though school was out and realized how much fun math and science can be.”

**Summer Camps - Year Two**

Based on the outcomes of the pilot summer camps and word-of-mouth spreading about the robotics activities, Utah 4-H saw an increase in the number of requests for afterschool programs. These programs were able to utilize the same activities, but spread the lessons out over a longer period.

In 2007, Utah 4-H saw an increase in the number of requests to complete a summer robotics experience. Many field staff utilized Robotics summer camps in order to introduce the 4-H experience to the community and then followed the camp up with a longer term after school camp or 4-H club setting. With increased kits, the Robotics program reached over 160 youth. To accommodate the sites from the previous year the theme changed to “Aquaboats: Voyage to Sealab Nautilus.” The materials provided similar activities to PROBE with an ocean exploration theme including building robots to explore the ocean floor and saving a giant squid.
Evaluations mailed to 2007 camp participants yielded approximately a 40% return rate. Camp quality was similar to the previous year overall, rated 4.69 compared to 4.63; increase in the ability to work with others was rated 4.0, compared to 3.61; and problem solving was rated 4.0 compared to 3.72.

Eighty-two percent indicated that the experience made them more interested in exploring career possibilities in SET. In response to the question, “Did your experience with the 4-H robotics program make you more interested in exploring career possibilities in science, engineering, or technology,” participants stated:

“By showing us the capability of the robots and technology.”

“I got to learn how to program robots and learn about them.”

“I was planning on getting a science or technology career and this boosted my want for a job like those.”

Because the whole robotics thing was fascinating and fun.”

Equipment and Resources

Purchase, transport and storage of all of the robotic equipment is an ongoing project. Funds to continue the program were identified through various internal and external sources. Utah 4-H found it easier to secure funding by linking life skills and SET literacy gained through the robotics experience to SET career awareness and economic development. To improve programs around the state, robotics kits are placed regionally to allow easier pick up and return. Four kits are stored in a large plastic tote with the entire support software and design book in a binder with each book and kit assigned a number. Totes make it easier to store and transport from car to building and they can be shipped through the mail to assist more remote locations. During the summer months, kits can be checked out for one week and during the rest of the year kits can be checked out on a one to two month basis. As word spread about the program, Utah 4-H saw an increase in afterschool sites purchasing their own equipment either to use for an extensive program or to rotate within various sites within a school district.

Training

From the start, Utah 4-H recognized that facilitators of the robotics experience may not be as “tech savvy” and may feel intimidated by the program. However, we encouraged staff to learn with the youth and not feel like that had to know all of the answers. Staff training took on many forms including self-guided experiences to all day training events. Shorter trainings provided simple hands-on experiences and an overview of the program. Longer trainings allowed participants to spend time building and programming robots and utilizing the challenge board. Included on the Robolab software is a series of systematic tutorials with audio and video to allow learners to go at their own pace. An additional feature of the Camp on a Disk program was the ability to see the robots building instructions as a piece-by-piece screen shot, video clips of the robot in action and sample program outlines to edit and change. As the program continues to grow Utah 4-H is beginning to see a community of practice develop that shares ideas and support. An example of the Robotics Club setup, developed by one of the volunteers, can be found at www.utah4-h.org.
**The Experience – Expanding Our Outreach**

While the bulk of robotics camp experiences utilized a summer day camp format, other delivery modes have also been applied including:

- A short-term after school program that provides robotics for the duration of a quarter or semester during afterschool times
- A longer term project as part of a youth mentoring program that allowed youth and their mentors to work on robotics projects together
- An ongoing 4-H club that meets twice a month
- An all day Saturday program

Regardless of the format, Utah 4-H found the robotics experience created positive and memorable experiences for youth. When asked, “What was your favorite thing to learn about in this program,” often participants cited specific team challenges and how they completed the task. One camp participant responded, “The mission where we had to take the squid to the cave, it was fun and challenging.”

Utah 4-H has identified that robotics and specifically the Lego Mindstorms are an effective tool to engage kids in SET when they are not in school. Camp evaluation results indicate that robotics increases skills in SET abilities and encourages kids to think about careers in SET. To reach more youth, Utah 4-H is working with afterschool partners through the statewide afterschool network to increase awareness and training in robotics.

**Replication**

For groups wanting to start a robotics program funding is often the greatest obstacle. During the Utah 4-H experience, state government, technology-focused businesses and foundations were interested in funding career exploration specifically for SET at the middle school and high school level. Once started, depending on the geographic location and local market, robotics programs were unique enough to generate camp fees upwards of $179 per child for a 30 hr. a week camp experience. These funds helped purchase additional materials to support the program and provided fee waivers for underserved audiences. Camps also provided a core group of interested youth that formed longer term 4-H clubs. These clubs were able to purchase parts from [www.ebay.com](http://www.ebay.com) to assemble kits at a cheaper rate.

To find out more about 4-H Science, Engineering and Technology programs visit [www.national4hcouncil.edu](http://www.national4hcouncil.edu)

**References**


S.E.A.L.S.++PLUS
Self-Esteem and Life Skills

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S.E.A.L.S. + PLUS
Self-Esteem and Life Skills

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**Abstract:** S.E.A.L.S. + PLUS is an activity book and CD-ROM featuring over 75 reproducible self-esteem and mental wellness lessons for youth ages 12-18. Topics include segments on Goal Setting, Stress Management, Health Awareness, Anger Management, Communication Skills and more. Youth professionals will appreciate this well designed, interactive resource as they engage youth in positive skill development.

**Review**

A key element for many youth development programs focuses on the development of practical life skills (Perkins & Borden 2003). S.E.A.L.S. + PLUS: Self-Esteem and Life Skills (Korb, Azok & Leutenberg, 1992) is a reproducible activity book addressing mental wellness and life-skills education for youth aged 12-18. The material is particularly useful for breakout classes at Leadership Conferences and Teen Retreats and is designed to save educators time in preparing lessons for individual or group activities.

Topics covered include:
- Anger Management
- Assertion
- Awareness
- Communication Skills
- Coping Skills
- Emotion Identification
- Goal Setting
- Health Awareness
- Money Management
- Problem Solving
• Risk Taking
• Self-Esteem
• Stress Management
• Support Systems
• Time Management
• Values Clarification

Several activities and engaging, age-appropriate handouts have been developed for each of the above topics. The material is designed to help middle and high school students achieve increased self-esteem and learn important life lessons. In addition a 15 page facilitator’s bonus section includes supplemental role-plays.

The book contains over 75 handouts, role-play guidelines, a glossary and a CD-ROM for ease in printing selected handouts. The book with CD-ROM is reasonable priced at $60 and may be ordered on line at www.At-Risk.com.

References

