The Spring Issue provides readers with an overview of several innovative youth development programs including adolescent civic engagement, intervention programs for homeless youth and practitioner led evaluations.

Manuscripts for the Winter and Spring Issues are now being accepted. The Publication Committee has increased the word count for manuscripts as noted below:

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

**Copyright Guidelines**

The *Journal of Youth Development ~ Bridging Research & Practice* has a firm copyright policy. Please make sure all of your manuscript authors are aware of the policy and in compliance. Duplicate publication or submitting the same article to multiple referred journals is not acceptable and is considered a violation of scholarly ethics.

**Publication Committee**

- **Patricia Dawson, Editor**  
  Oregon State University

- **Publications Committee Chair:**  
  **Suzanne LeMenestrel**  
  National 4-H Headquarters

- **NAE4-HA Representatives:**  
  **Theresa Ferrari**  
  The Ohio State University

- **Dale Pracht**  
  University of Florida

- **Committee Members:**  
  **Dale Blyth**  
  University of Minnesota

- **Lynne Borden**  
  University of Arizona

- **Virginia Bourdeau**  
  Oregon State University

- **PeiYao Chen**  
  TCC Group

- **Michelle Alberti Gambone**  
  Youth Development Strategies, Inc.

- **Reed Larson**  
  University of Illinois at Urbana-Champaign

- **Rich Lerner**  
  Tufts University

- **Ryan Schmiesing**  
  Ohio State University Extension
Feature Articles

Civic Engagement in Adolescents: Engendering Civic Awareness Through a University Youth Program [Article 100501FA001]
Parker, Jennifer S.; Dale, Timothy M.; Wilkins, Kerri-Ann G.
A weeklong residential Youth Leadership Institute Project was conducted at USC Upstate to promote essential skills deemed necessary for future civic engagement and political identity. The program and curriculum followed a framework that suggests that underlying civic skills are necessary to foster civic engagement among youth. Building on this theory, this reported study illustrates that civic engagement requires a developmental and educational process. Adolescence is a primary time for identity exploration and formation, which makes this stage an optimal time to engender civic awareness. A diverse group of 49 youth ranging in age from 14 to 17 participated. Results from the project demonstrate that when evaluating the significance and success of youth civic engagement programs, an account must be made for both the developmental and educational capacities. In pursuing projects such as ours on university campuses and beyond, psychologists and political scientists should work together to measure their outcomes in terms of these variables.

Perceptions of 4-H Extension Educators and Volunteer Leaders toward the Inclusion of Youth with Attention Deficit Hyperactive Disorder(s) in 4-H Programs [Article 100501FA002]
Mpofu, Chido; Ingram, Patreese D.; Radhakrishna, Rama
The attitudes, training and support systems needed by 4-H extension educators and volunteer leaders in order to successfully and effectively include youth with Attention Deficit Hyperactive Disorder (ADHD) in their programs are discussed within this article. Data were collected from extension educators and volunteer leaders in a Northeastern state. The results revealed that 4-H extension educators and volunteer leaders are not adequately trained to include youth with ADHD despite the fact that they may have one or two children with these symptoms in their clubs. For inclusion to be meaningful for youth with ADHD we recommend training for extension educators and volunteer leaders on characteristics of ADHD, its implication for youth involvement as well as techniques/ways of meeting the learning styles of youth with ADHD.

A Qualitative Investigation of Californian Youth Interests in the Outdoors [Article 100501FA003]
Goldenberg, Marni; Wassenberg, Katherine; Greenwood, Jerusha; Hendricks, William; Jacobs, Jeff; Cummings, Jason
Prior research has found connections between youth participation in recreational activities and academic achievement, civic involvement, and improved health. To investigate California youth outdoor recreation attitudes, behaviors, and constraints, eight focus groups were conducted with community recreation center youth participants. Youth answered 10 questions about their experiences, attitudes, and perceptions of outdoor recreation. Data were analyzed using...
Three to seven axial codes were identified for each question. Results showed that youth want to have more access to outdoor recreational activities. However, there are frequently considerable constraints for the youth to overcome including draws of technology, family obligations, and laziness. Safety was a recurring concern among participants. Understanding youth attitudes and perceptions allows managers to meet youth needs, program for youth interests, and provides a strong foundation for marketing and as a rational for funding grants.

An Agricultural Apprenticeship Program for Youth in Trinidad, West Indies: Can it Meet the Caribbean’s Urgent Need for Younger Farmers? [Article 100501FA004]
Ganpat, Wayne G.; Webster, Nicole
To address the aging farmer population in Trinidad, W.I., a situation common to the Caribbean region, a Youth Apprenticeship Program in Agriculture (YAPA) was initiated. An assessment of its effectiveness was conducted in 2007. Results indicated that present trainees went into agriculture to make “additional” income and for self employment, with “contributing to national food security” being ranked lower. They were generally satisfied with the extent of field work, the experience gained and trainers’ knowledge and skills. However, they would leave agriculture if they received other employment opportunities or if they were not provided with key resources such as land and soft loans. Past YAPA trainees had significantly changed (p<.05 level) attitudes regarding farming; being less optimistic than present trainees about the future of farming. Recommendations included greater involvement of young persons in the restructuring of the program and overall curriculum redesign to make it more technology oriented.

Investigating an Intervention Program Linking Writing and Vocabulary Development for Homeless Children [Article 100501FA005]
Sinatra, Richard; Eschenauer, Richard
The presented study investigated the effects of a four-week academic and activity – enriched summer program on vocabulary development and writing achievement of homeless children residing in traditional shelter facilities. When compared to controls the experimental students did not reveal gains in vocabulary and spelling as measured by two norm referenced tests. They did however demonstrate highly significant gains in writing ability based on the New York State standards criteria, reflecting five qualities of writing. On two project-developed instruments designed to measure improvement in book vocabulary and tennis skills, they showed significant increases based on analyses of their pre- and posttest scores. The program closed achievement gaps, fulfilled standards criteria, and may be the first of its kind in the homeless literature whereby students’ writing development was compared to matched controls as vocabulary development occurred based on literary readings.

Effectiveness of School Based Recruitment Procedures and Modular Data Collections [Article 100501FA006]
Ahmed, Rashid; Leatherdale, Scott T.; Manske, Steve; Reid, Jessica; Burkhalter, Robin
Purpose: The School Health Action, Planning and Evaluation System (SHAPES) is a school-based data collection and knowledge exchange system designed to improve the health of youth. This paper outlines the design of the SHAPES study, examines the impact of different school recruitment models on participation rates, and examines the impact of using two different research modules during data collection on the prevalence of core behaviours being measured. Methods: In total, 76 schools were recruited from seven health regions and data were collected using the SHAPES Tobacco (TM) and Physical Activity Modules (PAM). Results: It was found that school recruitment rates were higher when both the researchers and the
health unit, worked together to recruit schools. Significant differences were found between students who completed the TM and students who completed the PAM with respect to body mass index, smoking susceptibility, the number of friends who smoke, and the number of active friends. Conclusions: This paper provides valuable real-world insight for future researchers interested in performing population-level school-based studies of youth risk behaviours. Our experience suggests that a modular approach to data collection is feasible and that recruitment rates are improved when researchers work in collaboration with health unit staff who have existing relationships with schools.

Program Articles

Engaging Youth in the Curriculum Development Process with Technology: The Nebraska State 4-H Youth Curriculum Committee [Article 100501PA001]
Garwood, Michelle J.; Fairchild, Patricia
Technology is changing the way youth learn and lead. This paper illustrates a successful case study of a program that actively engaged youth in the decision-making process through the use of an online community and virtual conferencing. Synergy was generated when the youth were mentored (virtually and in-person) by members of a parallel adult committee. Utilizing technology resources proved to be the key to building a vibrant, innovative and inclusive program that could overcome the barriers of time and travel constraints.

The Rhode Island Teen Institute: Positive Youth Development in Practice [Article 100501PA002]
Apsler, Robert; Puerini Del Sesto, Sandra; Formica, Scott W.; Mulligan, Maureen
This article describes the application of the positive youth development approach to promote and enhance leadership skills among middle and high school age peer leaders. The article reviews the goals of the positive youth development approach and describes how this approach was adopted and implemented by the Rhode Island Teen Institute (RITI), a comprehensive, residential prevention program founded in 1989. Data are presented from pretests and posttests administered during each of seven annual Institutes delivered between 2002 and 2009 with 775 youth. Participants in the RITI demonstrated significant gains in their leadership skills; an effect that persisted at a 3-month follow-up survey administered with high school age youth. Other significant findings and anecdotal effects are also discussed, such as creation by RITI graduates of a youth-led prevention program for elementary and middle school children.

Can 4-H/FCS Curricula and Program Activities Increase Self-Esteem in At-Risk Youth Ages 8-15? [Article 100501PA003]
Baker, Walter; Curry, Elizabeth
Nationally 4-H programs develop educational strategies and provide opportunities for youth and adults to work in partnership as they develop life skills. This study looks at some curricula that enhance self-esteem in at-risk youth ages 8 to 15. The Coopersmith Self-Esteem Instrument (CSI) measured changes in participants’ self-esteem while the Massachusetts Youth Screening Instrument (MAYSI), used only at the onset of the study, alert the staff of potential mental/emotional distress and other behavior that might require an immediate response. The CSI results showed increases in self-esteem. Girls showed a higher increase in self-esteem over the boys.

Extension Staffing Models to Serve 4-H Clientele in Changing Times [Article 100501PA004]
Gillespie, Donna R.; Kinder Cindy A.
In response to budget cuts in 2002, 4-H staffing models were restructured. The response by University of Idaho Extension was intended to continue meeting the needs of Idaho’s citizens
with fewer UI Extension faculty. This staffing reorganization led to the formation of the District III 4-H Team who united to bring stronger 4-H programs to south central Idaho and expand programs to underserved audiences.

Information from surveys and interviews over the past seven years reflects the effectiveness, challenges and successes of the District III 4-H Team. In Making the Best Better: 4-H Staffing Patterns and Trends in the Largest Professional Network in the Nation (2007), author Kirk A. Astroth notes a nationwide change in 4-H leadership at the county level from 4-H faculty to program assistants or coordinators. The information gathered in our research may help other states determine staffing models to meet the needs of clientele in these changing times.

Research and Evaluation Strategies
Evaluating Youth Programs: An Overview of Practitioner Led Evaluations
[Article 100501RS001]
Duerden, Mat D.; Witt, Peter A.
Youth programs are prime contexts for the intentional facilitation of positive development. However, not all youth programs achieve positive outcomes equally. In order to promote the identification and dissemination of the characteristics and processes of effective youth programs, increased focus needs to be given to program evaluation. This article briefly reviews the main tenets of evaluation science in order to provide practitioners a roadmap for conducting their own evaluations. This includes an overview of different types of evaluations and key issues to consider when constructing an evaluation strategy such as targeting outcomes and developing program logic models.
Civic Engagement in Adolescents: Engendering Civic Awareness Through a University Youth Program

Jennifer S. Parker
Department of Psychology
University of South Carolina Upstate
Spartanburg, SC
jparker@uscupstate.edu

Timothy M. Dale
Department of Social Change and Development
University of Wisconsin Green Bay
Green Bay, WI

Kerri-Ann G. Wilkins
University of South Carolina Upstate
Spartanburg, SC
Civic Engagement in Adolescents: Engendering Civic Awareness Through a University Youth Program

Jennifer S. Parker and Kerrie-Ann G. Wilkins
University of South Carolina Upstate

Timothy M. Dale
University of Wisconsin Green Bay

Abstract: A weeklong residential Youth Leadership Institute Project was conducted at USC Upstate to promote essential skills deemed necessary for future civic engagement and political identity. The program and curriculum followed a framework that suggests that underlying civic skills are necessary to foster civic engagement among youth. Building on this theory, this reported study illustrates that civic engagement requires a developmental and educational process. Adolescence is a primary time for identity exploration and formation, which makes this stage an optimal time to engender civic awareness. A diverse group of 49 youth ranging in age from 14 to 17 participated. Results from the project demonstrate that when evaluating the significance and success of youth civic engagement programs, an account must be made for both the developmental and educational capacities. In pursuing projects such as ours on university campuses and beyond, psychologists and political scientists should work together to measure their outcomes in terms of these variables.

Introduction

The decline of civic engagement is well documented by political scientists. Research explaining this decline is usually motivated by an interest in determining how civic life can be revitalized. If democratic society requires an engaged citizenry, and civic engagement is on the decline, then as advocates of democracy we are committed to finding ways to renew civic involvement. Our next step as scholars has thus involved pursuing research and avenues for civic re-engagement. This problem and project seems most important among youth, who are classically and increasingly disengaged, but who will shape the landscape of future civic life. In fact, as
traditional civic bonds are eroded, youth will either need to acquire and cultivate new bonds, or we risk an even greater decline in civic engagement among this demographic.

Though civic engagement is in decline (Putnam, 1996, 2000), several avenues can be pursued to address this decline. One significant avenue regards civic engagement among youth, since it has been shown that engendering civic roots in adolescent years strongly correlates to citizenship in adulthood (Mannheim, 1952). This can be accomplished in several ways, including actively involving youth in community affairs (Evans & Prilleltensky, 2007; Flanagan, 2003a), organized activities in schools (Verba, Schlozman, & Brady, 1995), and in volunteer programs that emphasize a collectivist way of achieving goals (Kirlin, 2002). Flanagan (2003b) argues that an ‘appreciation for polity’ develops in adolescents as they participate in these organizations and activities. In addition, these activities help to foster a sense of belonging and an awareness of being part of a community. Thus, civic activities help adolescents develop elements of a civic identity that will expand civic engagement into the future. Programs that engage youth in the community not only contribute to a thriving community but also to the development of that young person (Harré, 2007).

We presuppose this research, and understand that organized youth activities exploring social problems within the broader community facilitate the development of a broader social understanding and provide a rich context for development of political identity. These activities promote a greater understanding of the self in a world context leading to the formation of values that include a greater responsibility to society, and to the development of essential skills necessary for civic engagement.

Prior research in youth development has focused more on risky behavior of youth and costs of these risks to the individual and to society. In recent years some social theorists have begun to view youth as community assets and focus on youth engagement in the community. This approach focuses on development of skills that aid in identifying, analyzing and acting on issues relevant to youth. In this model, adults do not necessarily assume the lead in organized youth activities; rather they mentor and facilitate opportunities for youth to lead (Watts & Flanagan, 2007).

Given the research indicating a decline in civic engagement and evidence that this decline can be addressed, we believe that an additional responsibility of scholars, and the wider academic community, is to pursue initiatives to revitalize civic engagement among youth. Universities are uniquely equipped with resources that can promote engagement in communities. If applied correctly, initiatives utilizing these resources will allow us to apply and test civic engagement research, and better understand the civic skills and knowledge to increase the propensity of youth to be civicly engaged.

**Developmental characteristics needed for civic engagement**
From a developmental perspective, adolescence is an optimal time to learn skills that facilitate civic engagement. At this stage in the lifespan, youth are actively engaged in the process of identity exploration and formulating a cohesive identity, which involves a deeper understanding
of self, social relationships and society, and deciding which values held by society, will be accepted as one's own (Erikson, 1968).

Developmental psychologists in recent decades have moved from a focus on individual growth to an emphasis on the contextual influences on development (Bronfenbrenner, 1979). Thus civic involvement becomes an important context for consolidating an identity that includes political/civic development. The inclusion of civic engagement in youth programs incorporates greater social responsibility and political values into the identity process and contributes to positive social relationships (Flanagan, 2003a).

Several characteristics of development underlie the formation of skills necessary for civic engagement. One of these characteristics is a level of identity formation that includes a connection to society. Hansen, Larson and Dworkin (2003) investigated the types of developmental experiences related to five categories of youth activities. These authors utilized the Youth Experiences Survey (YES) (Hansen & Larson, 2002) to assess the impact of youth activities. They found higher rates of learning experiences reported in youth activities when compared to time in school or time spent hanging out with friends. Youth participating in these activities reported high rates of personal development in the area of identity exploration, identity reflection, leadership and linkage to community when compared to youth involvement in academic activities, sports, or performance and fine arts.

Another characteristic according to Flanagan (2003b) that directly correlates to civic engagement is trust. Flanagan defines trust as “the belief that others are fair, that they will not take advantage of us, although they could.” Trust is the product of having a sense of security in infancy. This feeling is then nurtured by our environments and caregivers and evolves into individuals having a trustworthy disposition. Erickson (1968) deemed this trait as fundamental to the development of a healthy individual. Accordingly, Putnam (2000) describes trust and civic engagement as a “virtuous cycle,” that is, each emphasizes the other. He further states that, involvement in volunteering is carried out by those who trust others and this participation increases trustworthiness. Flanagan (2003b) also found that adolescents who were engaged in their community had higher levels of trust than their disengaged cohorts. She concludes by stating that fostering social trust is a source of civic hope and engagement.

According to Larson (2000), initiative is a necessary characteristic for positive developmental experiences such as leadership and civic engagement. He analyzed positive youth development across several contexts and focused on the development of initiative, which requires intrinsic motivation, concerted engagement in the environment, and effort directed toward a goal. Larson reports that organized voluntary youth activities provide a more fertile context for the development of initiative when compared to school experience and social experience with friends. Therefore, organized youth activities may be especially suited for the development of civic engagement.

**Underlying civic skills and essential civic capacities**
Political scientists and psychologists have identified key roots of civic engagement among youth, and the skills required to facilitate and sustain this engagement. One such study by Youniss and McLellian (1997) proposes that involvement in civic organizations will have a two-fold impact on adolescents. To begin with, it familiarizes youth to the organizational practices needed for adult civic engagement and this involvement now aids in civic engagement being integrated into their identity. In adhering to the policies of their organizations, adolescents are introduced to one of the principal skills needed for civic engagement in adulthood. Kirlin (2002) states that
involvement in organizations results in the development of necessary civic skills, they include working in groups, organizing others to accomplish tasks, communicating and working out differences. Service brings about awareness that society is the result of human actions, whether political or moral. In addition, it dispels the idea that adolescents are too young to cause a change. To ensure that adolescents engage in civic skill building activities, Kirlin (2002) suggests that minor modifications need to be made to programs. Instead of telling them of society’s problems and ways to fix them, facilitate students in identifying these problems and allowing them to come up with solutions to alleviate them. Kirlin (2002) states that by these minor restructuring, youth acquire such skills as: “voicing one’s opinion, expressing interest, and reaching consensus about an action.”

Understanding the development of these underlying skills, however, does not fully account for the ways in which civic engagement is cultivated among youth. The development of these skills also requires the development of certain ‘civic capacities,’ which facilitate the broader development of the underlying civic skills identified by Kirlin. We divide civic capacities into two categories – developmental capacities and educational capacities. Developmental capacities are those psychological and social capacities through which civic skills themselves are realized. Educational capacities refer to the basis of knowledge and social understandings that are required in order to develop and practice broader civic skills. Previous civic engagement research emphasizes the importance of the development of civic skills, particularly in adolescence, but does not sufficiently account for the underlying capacities that these skills require and assume.

As we consider the significance of civic capacities for the development of civic skills, we find helpful the categories Kirlin describes: monitoring events, deliberating about policy issues, interacting with others to promote interests, and influencing policy decisions. According to Kirlin, these civic skills each require a number of underlying skills (see Table 1). These underlying skills are insufficient, however, without other substantive developmental and educational goals also being attained. The underlying skills identified by Kirlin in the second column of the chart presented in Table 1 almost all involve understanding and processing issues and perspectives. Without these understandings, it is difficult or impossible to engage in the overarching civic processes identified in the first column of the chart. It is important to notice, however, that the underlying civic skills rely on civic capacities that make possible the civic understanding and processing that are needed to practice civic skills.

The first civic skill identified is the practice of monitoring public events and issues. As Kirlin describes, this skill requires that citizens be able to understand the distinctions between sectors of society, understand the context for events and issues, and acquire and thoughtfully review the news. These requirements are possible only when developmental and educational opportunities have been available to citizens in formative stages of life. In order to understand the context of political events and thoughtfully review the news at this level, for example, citizens must understand the nature of the political community. That is, citizens can only properly process the news if they comprehend the political world and the problems that they face within it. Without a context for understanding news and events, and how these things affect their lives, citizens will either misunderstand or ignore the most critical elements of this information. Additionally, monitoring public events and issues involves understanding not only the sectors of society but also the levels of citizenship – local, national, and global. Citizens need to be able to situate themselves within a community in order to comprehend the way in which its news and events relate to them.
Developmentally speaking, adolescents are actively exploring their identity, acquiring a deeper understanding of self as a separate being from parents and societal models, and beginning to make decisions about how they fit into the greater social context. Increasing their opportunities to monitor and participate in public events contributes not only to the process of individual identity attainment but also increases a sense of belonging to a group. This provides a broader context for the individual to explore how they fit into the larger community.

Deliberating about public policy issues is the second civic skill identified by Kirlin. To do this, Kirlin argues, citizens must be able to think critically about issues, understand multiple perspectives, and understand democratic society. This thinking and understanding also calls for the educational capacity to understand complex problems and policy issues, as well as a familiarity with democratic institutions and deliberative procedures. In addition to an appreciation for multiple perspectives, civic engagement also involves knowing the methods and goals for reaching agreement.

Adolescents are moving from a concrete stage of thinking to a higher level of decision-making, critical thinking and abstract reasoning. Providing activities for adolescents to identify issues, and to discuss and debate multiple aspects of those issues, will advance their reasoning ability and understanding of complex social issues.

Interacting with others to promote personal and common interests is the third civic skill that has been identified. Kirlin rightfully suggests that this skill involves an acceptance of the norms of collective decision-making, and the ability to work with others to define a common objective and a work plan to achieve this objective. The ability to articulate individual and group interests, however, demands that underlying cognitive capacities already exist so that these can be appropriately expressed and acted upon. One must be able to identify individual and community interests, as well as be aware that individual and group interests might potentially conflict. It is only through a deeper understanding of the realities of diversity that a cognitive flexibility will exist that allows for compromise in collective decision-making.

During adolescence, peers are influential and adolescents develop more intimate and meaningful connections to each other. Development of these interpersonal skills along with a greater capacity to reason gives way to acquisition of leadership skills such as trust and teamwork. As they develop trusting relationships, collective decision-making becomes more likely, along with a greater understanding of democratic society.

The final civic skill identified is the ability to influence policy decisions on public issues. As the most advanced civic skill, this is what allows individuals to affect social change through civic engagement. As Kirlin describes, the ability to identify decision-makers and institutions, and understanding appropriate vehicles for influencing decisions, are important related underlying skills. Educationally speaking, influencing policy decisions on public issues also demands an acquaintance with channels of decision-making, and knowing how and where to contact public officials. This also involves knowing which messages are appropriate for particular political channels and civic activities.

Developmentally speaking, adolescents are capable of understanding multiple perspectives of issues and reasoning well. They increase these capacities when they participate in activities that foster decision-making. Incorporating opportunities for adolescents to meet with public officials and provide input on policy decisions instills a political identity into their understanding of self and contributes to the development of a political ideology. Organized youth programs such as
the one described in this paper provide a unique opportunity for positive developmental experiences that underlie development of civic skills and future civic engagement.

Methods

Description of program, activities, civic skills, civic knowledge
The Youth Leadership program and curriculum followed Kirlin’s framework (2002), which suggests that underlying civic skills are necessary to foster civic engagement among youth. We find that these developmental skills are cultivated even more successfully when practiced in the context of civic activities that include the transmission of civic knowledge. For example, awareness of community problems, knowledge of the avenues for addressing these problems, and appreciation of the efficacy of specific solutions all essentially contribute to the increased likelihood that youth will become civically engaged. Building on this theory, our case study illustrates that civic engagement requires a developmental and educational process. Scholars and university communities can offer productive contributions to this process through programs such as youth leadership project presented in this paper.

The Youth Leadership Summer Institute was a weeklong residential workshop carried out at the University of South Carolina Upstate. A Housing and Urban Development Community Outreach Partnership Center Grant funded the Youth Leadership Institute designed to engage disadvantaged youth from Spartanburg’s Southside into the community and provide an opportunity structure for leadership development. Prior research indicates that disadvantaged youth have fewer opportunities for community involvement. This may be due to a lack of resources in disadvantaged communities to develop and sustain programs. Furthermore, the families of these youth are less likely to model civic involvement (Watts & Flanagan, 2007). This pattern is demonstrated in adulthood with less civic engagement in disadvantaged groups.

Participants
A total of 49 participants (25 males, 22 females) were selected from 6 different high schools in Spartanburg County and from a girl’s school in South Africa. The ages ranged from 14-17 with a mean age of 15.9. Of the 49 students selected, 26 were African American, 17 Caucasian American, 2 Asians, 2 of mixed ethnicity, and 2 South Africans (1 black and 1 white). Recruitment and inclusion of underserved youth from the Southside of Spartanburg was a priority goal of the program. Approximately half of the participants that were selected met the geographic criteria.

Overarching program goals were enhancing the identity process through increasing social understanding from local and global perspectives and teaching civic skills necessary for engagement. Another primary goal was to empower the youth to see themselves as agents of change. One of activities generated awareness and discussion of local and global problems that impact the present and future of the youth. By devising solutions that could be implemented now, the notion that they were too young to make a difference was dispelled. The youth were divided into groups at the inception of the program that reflected a wide range of diverse backgrounds. They carried out most of the activities in these groups; this was designed to promote teamwork and collective identity formation.

According to Flanagan (2003), meaningful connections to others assists with the formation of a collective identity which in turn leads to lifelong civic participation. To that end, trust and team building activities were the focus in the early part of the week along with an interactive workshop on leadership and values. This was then followed up with activities that brought
about awareness of issues in the local community as well as in the global community. One planned activity was a visit to an impoverished area of Spartanburg, where many had not previously traveled. This tour was led by a local politician who has spent his career researching the illegal disposing of waste and chemicals that took place in this community and the resulting health problems experienced by the residents. Another activity was a poverty simulation, where participants experienced food allocations relative to a worldview. Additionally, the youth engaged in an interactive videoconference with students from Pretoria Girls High School in South Africa, discussing similarities and differences in problems faced and solutions to mitigate them.

**Results**

Table 1 is an expansion of Kirlin’s (2002) framework. The first two columns in the table represent Kirlin’s framework. In addition to civic skills and underlying skills presented by Kirlin’s, we feel that more can be gained by engaging in community-organized activities. Along with civic skills and underlying civic skills, adolescents develop capacities that are vital component in engendering civic engagement in adulthood. As a result, we added two additional columns, and cited examples of how our program aided in gaining this civic development. Such examples are, awareness about diversity, and enhanced critical thinking. By gaining this development, civic engagement can now be incorporated into their identities and partaking in these activities will lessen the decline of civic engagement.

Researchers (Flanagan, 2003a; Kirlin, 2002) have observed that youth who participate in their adolescent years are more likely to become civically engaged in adulthood. We also believe that the acquisition of civic knowledge can further be divided into developmental and educational aspects. The civic knowledge one gains can facilitate cognitive and psychosocial development of the youth, such as learning teamwork, leadership skills and advancing critical thinking skills as well as furthering the educational success by increasing their understanding of world problems, politics and leadership. Self-report from all participants indicated growth in awareness of world problems and interest in solving these problems, and in areas of team building, awareness of diversity, political interest, and motivation to become more involved in the community.
<table>
<thead>
<tr>
<th>Civic Skill</th>
<th>Underlying Skills</th>
<th>Civic Capacities</th>
<th>Program Activities</th>
</tr>
</thead>
</table>
| Monitoring public events and issues | Understand distinctions between three sectors of society (public, nonprofit and private)  
Understand context for events and issues (what happens and why)  
Capacity to acquire and thoughtfully review news | **Developmental** Facilitate identity development by increasing understanding of society that leads to the development of social values and a collective identity  
**Educational** Increase awareness of community identity and its members  
Expand knowledge of current events  
Differentiate between types of communities (local, state, national and international) | Tour an impoverished neighborhood led by state congressional representative. Specifically learned about environmental racism, and efforts to address related injustice.  
Participate in a poverty simulation lunch.  
Attend lecture and discussion with representative from The World Bank. |
| Deliberating about public policy issues | Think critically about issues  
Understand multiple perspectives on issues  
Understand democratic society | **Developmental** Enhance critical thinking and facilitate formation of ideology  
**Educational** Increase understanding of public policy issues  
Identify democratic processes and institutions  
Understand the goals and methods of reaching political compromise and agreement | Public policy working groups identified challenges, and ways to address them at levels of local, national, and international governance.  
Discussion of limited resources and competition, including general political concerns. Simulated democratic deliberation about allocating resources to different groups. |
| Interacting with other citizens to promote personal and common interests | Understand democratic society (collective decision making as norm)  
Capacity to articulate individual perspective and interests  
Work with others to define common objective  
Create and follow a work plan to accomplish a goal | **Developmental** Facilitate leadership and social skills through teamwork  
Aid in the development of political views that include civic and community perspectives  
**Educational** Identify individual and community interests  
Increase awareness of potential conflicts between individual and group interests  
Promote understanding of diversity and increase cognitive flexibility | Participate in workshops on local and global leadership.  
Teambuilding activities to foster group understanding, trust and cohesion and completed personality assessments to understand individual differences.  
Model UN debates addressing global environmental concerns.  
Videoconference with students attending school in another country (South Africa) to discuss similarities and differences in political and social issues. |
| Influencing policy decisions on public issues | Identify decision makers and institutions  
Understanding appropriate vehicles for influencing decisions | **Developmental** Foster a political identity  
**Educational** Become acquainted with political officials and channels of decision-making  
Understand the impact of political action on changes in the community | Meet with the local Mayor and discussed political concerns in community, and possible solutions to these problems.  
Scheduled meeting time with other local representatives focusing community problems and possible solutions. |
Discussion

The Youth Leadership Institute Program was a demonstration of the application of the research on youth civic engagement. Many researchers have argued that adolescents need an environment that will foster the growth of civic skills to engender citizenry in adulthood. In addition to achieving this, we examine the developmental and educational requirements for cultivating civic engagement. With this differentiation, program organizers will be able to gear their activities to facilitate the engendering of specific civic skills. We also hoped to provide a model for future applications of other university initiatives and programs that strive to cultivate civic engagement, as well as offer an avenue for future research, including the efficacy of such programs, follow-up research, tracking, and identifying successful and unsuccessful community outreach and youth civic engagement activities.

Projects such as ours should be pursued on university campuses, and psychologists and political scientists should work together to measure specific outcomes, which will lead to a greater understanding of ways to improve civic engagement among youth.

Acknowledgements

This project was funded through a Housing and Urban Development Community Outreach Partnership Center Grant and the USC Upstate Center for Undergraduate Research.

Civic Engagement in Adolescents: Engendering Civic Awareness through a University Youth Program.

References


Perceptions of 4-H Extension Educators and Volunteer Leaders toward the Inclusion of Youth with Attention Deficit Hyperactive Disorder(s) in 4-H Programs

Chido Mpofu
Department of Agricultural and Extension Education
Pennsylvania State University
University Park, Pennsylvania
cum133@psu.edu

Patreece D. Ingram
Department of Agricultural and Extension Education
Pennsylvania State University
University Park, Pennsylvania
pdi1@psu.edu

Rama Radhakrishna
Department of Agricultural and Extension Education
Pennsylvania State University
University Park, Pennsylvania
Brr100@psu.edu
Perceptions of 4-H Extension Educators and Volunteer Leaders toward the Inclusion of Youth with Attention Deficit Hyperactive Disorder(s) in 4-H Programs

Chido Mpofu, Patreece D. Ingram and Rama Radhakrishna
Pennsylvania State University

Abstract: The challenges, attitudes, training and support systems needed by 4-H extension educators and volunteer leaders in order to successfully and effectively include youth with Attention Deficit Hyperactive Disorder (ADHD) in their programs are discussed within this article. Data were collected from extension educators and volunteer leaders in a Northeastern state. The results revealed that 4-H extension educators and volunteer leaders are not adequately trained to include youth with ADHD despite the fact that they may have one or two children with these symptoms in their clubs. For inclusion to be meaningful for youth with ADHD we recommend training for extension educators and volunteer leaders on characteristics of ADHD, its implication for youth involvement as well as techniques/ways of meeting the learning styles of youth with ADHD.

Introduction

Attention Deficit Hyperactive Disorder (ADHD) is defined as “a persistent pattern of inattention and/or hyperactive and impulsive behavior that is more frequent and severe than is typically observed in individuals at a comparable level of development” (Efron, Sciberras, & Hassell, 2008, p. 187). It is one of the most common childhood neurological disorders associated with a number of behavioral, academic and social problems and can continue through adulthood (National Institute of Mental Health, 2008). An estimated 5% to 8% of children aged 4-to 17 years old in the United States have ADHD (Wheeler, Pumfrey, Wakefield, & Quill, 2008).
Background

As we moved into the 1990s the question “should children with disabilities be included in 4-H programs” has translated into “how and what should be done to accommodate children with disabilities” (Boone, Boone, Reed, Woloshuk, & Gartin, 2006). These questions arose due to the signing of the Americans with Disabilities Act (ADA) in 1990 that prohibited discrimination against people with disabilities in many areas including programs funded by state and local government (Boone, et al., 2006).

The inclusion of students with special needs in formal and non-formal educational programs has been a controversial topic (Harrower & Dunlap, 2001). In most schools inclusion has been seen as a matter of social justice and human rights as well as an issue of special needs with little attention given to the implications for mainstream colleagues. As a result, less priority has been given to considerations of what does or does not work for certain groups (Humphrey, 2008; Jordan, 2008). Jordan (2008) argues that the assumption that what is being taught in schools is relevant to all children has caused the mainstream system to remain oblivious to the diversity of the children they serve.

The lack of knowledge and expertise about disabilities and their implications for youth involvement has resulted in less quality opportunities in which youth with disabilities can participate (Tormoehlen & Field, 1994). A study by Boone, et al., (2006) concluded that extension professionals are not adequately trained to work with special needs youth despite the fact that the majority of them have special needs youth in their programs. Extension professionals believe that including special needs youth in traditional 4-H programs enhances the development and growth of all youth involved (Boone, et al., 2006). In a study about attitudes of extension professionals towards diversity, it is noted that extension professionals generally agreed that physically and mentally challenged youth should be involved in 4-H programs, 91% and 89% respectively (Ingram, 1999).

The 4-H program is meant to help young people become productive citizens through the development of knowledge and life skills needed for one to be successful in today’s competitive world (All about 4-H, 2008). 4-H should “foster engaged learning, and provide support for all youth to become active and self-regulated learners as well as creating a community of learners where everyone belongs, is accepted, supports and is supported by his or her peers, other members and leaders while their educational needs are being met” (Kent, 2008, p. 2).

Much has been done to accommodate children with physical disabilities but as more and more children are being diagnosed with emotional disabilities such as Attention Deficit Hyperactive Disorder (ADHD), the questions that arise include:

- Are today’s 4-H extension educators and volunteer leaders prepared to work effectively with these children? and

- What can or is being done to meet the challenges involved in meeting the needs of these youth?
Purpose and Objectives

The purpose of this study was to determine the challenges, attitudes, training and support systems needed by 4-H Extension educators and volunteer leaders in order to successfully and effectively include youth with ADHD in 4-H programs. The objectives of this study were to determine the:

1. Comfort level and the challenges that 4-H Extension educators and volunteer leaders might face when working with youth with ADHD.
2. Perceptions of 4-H Extension educators and volunteer leaders toward members with ADHD in 4-H programs.
3. Perceptions of Extension educators and volunteer leaders on the effectiveness of 4-H programs in promoting an environment conducive for inclusion of youth with ADHD.
4. Perceived benefits of including youth with ADHD in 4-H programs.
5. Difference in perceptions between Extension educators and volunteer leaders.

Methodology

The target population for the study was the 4-H extension educators and volunteer leaders at a major university in the Northeast. A central database of Cooperative Extension in this state was used to identify 4-H extension educators and volunteer leaders. A random sample of 384 volunteer leaders was drawn and a census (N= 67) of the extension educators was invited to participate in this study. A multi-stage sampling procedure that included stratified random sampling and systematic random sampling was used to draw a sample of volunteer leaders for the study.

Two questionnaires (one for volunteer leaders and one for extension educators) with five sections each were developed to collect data. The instrument included adopted and modified questions and statements from two studies titled “Attitudes of Extension Professionals Towards Involvement of Special Needs Youth in 4-H Programs” (Boone, et al., 2006) and “Volunteer Leaders’ Assessment of Pennsylvania 4-H Programs” (Radhakrishna, Cabot & Everhart, 2007). The questionnaire contained 58 items.

A panel of experts reviewed the questionnaires to determine the face and content validity. The panel included three faculty members with expertise in the following areas: special education, 4-H youth development programs, issues of diversity, and research methodology. The questionnaires were field tested using volunteer leaders from the target state and extension educators from Maryland. Extension educators from other states were used in the field and pilot tests because the census of extension educators in the target state was included in the research study. Adjustments to the pilot instrument were made based on the feedback and recommendations from the field test. The instrument was found to have acceptable reliability. Reliability coefficient (cronbach’s alpha) ranged from a low of .78 (challenges section) to a high of .98 (benefits section), with an overall reliability of .96 for the entire instrument.

For extension educators, the survey was sent electronically and participants completed the survey on line. The Survey Monkey program was used. For volunteer leaders, the survey was sent electronically for those who had included email addresses in the Cooperative Extension central data system. For those volunteer leaders who had not included an email address in the Cooperative Extension central data system, a written survey was sent through surface mail with
a stamped addressed envelope for return of the completed survey. A three round, two-week interval format was utilized for data collection.

The quantitative data collected for this study were analyzed using the Predictive Analytic SoftWare (PASW) version 17. Descriptive statistics used in this study included frequencies, means, and standard deviations. An independent t-test (comparison of means) was used to measure the differences in the perception of extension educators and volunteer leaders. One hundred and six (106) participants responded to the survey.

**Findings**

The typical respondent was a white female over the age of 40. One half of respondents had been involved with 4-H for more than 11 years. Approximately two-thirds of respondents had attained a bachelor’s degree or higher level of education.

The key findings of this study indicated that extension educators and volunteer leaders

i. find it challenging to work with youth with ADHD due to lack of training,

ii. have positive perceptions toward youth with ADHD,

iii. believe that all youth benefit from inclusion

iv. are uncertain that 4-H is effective in promoting an environment conducive for inclusion of youth with ADHD and

v. need training on the disorders and ways to make inclusion a success.

**Objective 1: Comfort Level and Challenges**

Over one-half of the extension educators and volunteer leaders indicated that they face various challenges when working with youth with ADHD. They need training on how to interact with youth with ADHD (67.3%), and on ways to encourage youth with ADHD to work in groups with others (65.1%). See Table 1.

<table>
<thead>
<tr>
<th>Challenges</th>
<th>S</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulties completing tasks</td>
<td>2.9</td>
<td>20.0</td>
<td>21.9</td>
<td>48.6</td>
<td>6.7</td>
<td>3.36</td>
<td>0.97</td>
</tr>
<tr>
<td>Difficulties following instruction/directions</td>
<td>1.9</td>
<td>21.9</td>
<td>17.1</td>
<td>53.3</td>
<td>5.7</td>
<td>3.39</td>
<td>0.96</td>
</tr>
<tr>
<td>Need training on ways to interact</td>
<td>0.9</td>
<td>4.7</td>
<td>27.1</td>
<td>43.9</td>
<td>23.4</td>
<td>3.84</td>
<td>0.87</td>
</tr>
<tr>
<td>Have adequate training</td>
<td>11.3</td>
<td>46.2</td>
<td>31.1</td>
<td>7.5</td>
<td>3.8</td>
<td>2.46</td>
<td>0.93</td>
</tr>
<tr>
<td>Need training on ways to encourage working in groups</td>
<td>2.8</td>
<td>2.8</td>
<td>29.2</td>
<td>50.0</td>
<td>15.1</td>
<td>3.70</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Note: SD=Strongly Disagree, D= Disagree, N=Neutral, A=Agree, SA= Strongly Agree
When asked about their comfort level on including youth with ADHD about two-thirds indicated that they are moderately to considerably comfortable including youth with ADHD in their clubs (66%), and helping youth with ADHD interact with other 4-H members (66.9%). See Table 2.

### Table 2
Percentages and Mean Scores for Respondents’ Comfort Level when Working with Youth with ADHD (N=106)

<table>
<thead>
<tr>
<th>Comfort level</th>
<th>NC</th>
<th>SC</th>
<th>MC</th>
<th>CC</th>
<th>HC</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comfortable including youth with ADHD</td>
<td>1.9</td>
<td>6.6</td>
<td>31.1</td>
<td>34.9</td>
<td>25.5</td>
<td>3.75</td>
</tr>
<tr>
<td>Comfortable helping youth with ADHD</td>
<td>2.8</td>
<td>4.7</td>
<td>31.1</td>
<td>35.8</td>
<td>25.5</td>
<td>3.76</td>
</tr>
<tr>
<td>Preparing special visual aids</td>
<td>16.0</td>
<td>21.0</td>
<td>31.0</td>
<td>22.0</td>
<td>10.0</td>
<td>2.90</td>
</tr>
</tbody>
</table>

Note: NC = Not at all Comfortable, SC= Slightly Comfortable, MC= Moderately Comfortable, CC= Considerably Comfortable, HC= Highly Comfortable

**Objective 2: Perceptions of Extension Educators and Volunteer Leaders**
The perceptions of the respondents toward youth with ADHD were mostly positive. Results show that 98.1% of the respondents perceive youth with ADHD as productive members in society, 83.9% believe that the inclusion of youth with ADHD provides good experience for other members, 76.2% believe that inclusion promotes growth for youth with ADHD and 77.3% are willing to accept youth with ADHD as 4-H members. With regard to whether youth with ADHD are best served by separate clubs, most respondents 82.1% did not feel that separate clubs are the answer, in addition 94.4% did not believe that youth with ADHD have learning difficulties that cannot be helped by 4-H. See Table 3.
Table 3  
Percentages and Mean Scores for Respondents Holding Various Perceptions Regarding Youth with ADHD (N=106)

<table>
<thead>
<tr>
<th>Perception of youth with ADHD by leaders</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>M</td>
</tr>
<tr>
<td>Productive members in society</td>
<td>0.0</td>
<td>0.0</td>
<td>1.9</td>
<td>36.8</td>
<td>61.3</td>
<td>4.59</td>
</tr>
<tr>
<td>Willingness to accept youth with ADHD</td>
<td>0.9</td>
<td>2.8</td>
<td>18.9</td>
<td>46.2</td>
<td>31.1</td>
<td>4.04</td>
</tr>
<tr>
<td>Inclusion provides good experience for other members</td>
<td>0.9</td>
<td>2.8</td>
<td>12.3</td>
<td>54.7</td>
<td>29.2</td>
<td>4.08</td>
</tr>
<tr>
<td>Need special training on how to work with ADHD</td>
<td>0.0</td>
<td>8.5</td>
<td>22.6</td>
<td>42.5</td>
<td>26.4</td>
<td>3.87</td>
</tr>
<tr>
<td>4-H clubs promote growth for youth with ADHD</td>
<td>1.0</td>
<td>2.9</td>
<td>20.0</td>
<td>53.3</td>
<td>22.9</td>
<td>3.94</td>
</tr>
<tr>
<td>Youth with ADHD have disruptive behavioral problems</td>
<td>1.9</td>
<td>27.4</td>
<td>41.5</td>
<td>27.4</td>
<td>1.9</td>
<td>3.00</td>
</tr>
<tr>
<td>Youth with ADHD take away time from other members</td>
<td>8.5</td>
<td>44.3</td>
<td>30.2</td>
<td>14.2</td>
<td>2.8</td>
<td>2.58</td>
</tr>
<tr>
<td>Youth feel uncomfortable with a member with ADHD</td>
<td>8.8</td>
<td>49.0</td>
<td>26.5</td>
<td>15.7</td>
<td>0.0</td>
<td>2.49</td>
</tr>
<tr>
<td>Youth with ADHD are best served by separate clubs</td>
<td>33.0</td>
<td>49.1</td>
<td>14.2</td>
<td>1.9</td>
<td>1.9</td>
<td>1.91</td>
</tr>
<tr>
<td>Behaviors of youth with ADHD set an undesirable example</td>
<td>26.4</td>
<td>50.5</td>
<td>17.9</td>
<td>5.7</td>
<td>0.0</td>
<td>2.03</td>
</tr>
<tr>
<td>Youth with ADHD have learning difficulties 4-H cannot help them with</td>
<td>60.3</td>
<td>34.0</td>
<td>3.8</td>
<td>1.9</td>
<td>0.0</td>
<td>1.47</td>
</tr>
</tbody>
</table>

Note: SD=Strongly Disagree, D= Disagree, N=Neutral, A=Agree, SA= Strongly Agree

**Objective 3: Perceptions of Extension Educators and Volunteer Leaders on Effectiveness of 4-H**

One of the study’s objectives was to determine the perceptions of extension educators and volunteer leaders on the effectiveness of 4-H programs in promoting an environment conducive for inclusion of youth with ADHD. Most of the respondents were uncertain and/or perceived 4-H to be ineffective in promoting a conducive environment. Of the 10 items only two were rated as effective by more than 50% of the respondents. Sixty-eight percent (68.3%) of the respondents believe that 4-H is effective to very effective when it comes to providing programs in which all youth can participate, and developing opportunities for broadening personal experience for all participants (52.8%). See Table 4.
**Table 4**
Percentages and Mean Scores for Respondents Regarding the Effectiveness of 4-H Programs in Promoting an Environment Conducive for Inclusion of Youth with ADHD (N=104)

<table>
<thead>
<tr>
<th>Perceptions on effectiveness</th>
<th>VI</th>
<th>I</th>
<th>N</th>
<th>E</th>
<th>VE</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>Defining ADHD and its implication to youth involvement</td>
<td>6.8</td>
<td>35.9</td>
<td>46.6</td>
<td>9.7</td>
<td>1.0</td>
<td>2.62</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.79</td>
</tr>
<tr>
<td>Providing guidance on how to work with youth with ADHD</td>
<td>7.8</td>
<td>37.9</td>
<td>38.8</td>
<td>12.6</td>
<td>2.9</td>
<td>2.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.9</td>
</tr>
<tr>
<td>Providing programs in which all youth can participate</td>
<td>0.0</td>
<td>3.8</td>
<td>27.9</td>
<td>48.1</td>
<td>20.2</td>
<td>3.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.79</td>
</tr>
<tr>
<td>Developing projects that are appropriate for youth with ADHD</td>
<td>1.0</td>
<td>15.7</td>
<td>48.0</td>
<td>27.5</td>
<td>7.8</td>
<td>3.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.85</td>
</tr>
<tr>
<td>Making leaders aware of children with ADHD</td>
<td>3.8</td>
<td>28.8</td>
<td>45.2</td>
<td>19.2</td>
<td>2.9</td>
<td>2.88</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.86</td>
</tr>
<tr>
<td>Providing skills needed to lead projects for youth with ADHD</td>
<td>3.9</td>
<td>39.8</td>
<td>37.9</td>
<td>14.6</td>
<td>3.9</td>
<td>2.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.89</td>
</tr>
<tr>
<td>Providing training on inclusion of youth with ADHD</td>
<td>11.5</td>
<td>35.6</td>
<td>41.3</td>
<td>7.7</td>
<td>3.8</td>
<td>2.57</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.93</td>
</tr>
<tr>
<td>Providing alternative projects for youth with ADHD</td>
<td>5.8</td>
<td>38.8</td>
<td>44.7</td>
<td>9.7</td>
<td>1.0</td>
<td>2.61</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.79</td>
</tr>
<tr>
<td>Developing opportunities for broadening personal experience</td>
<td>1.0</td>
<td>10.6</td>
<td>35.6</td>
<td>36.5</td>
<td>16.3</td>
<td>3.57</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.92</td>
</tr>
<tr>
<td>Promote self esteem for youth with ADHD</td>
<td>0.0</td>
<td>12.5</td>
<td>39.4</td>
<td>36.5</td>
<td>11.5</td>
<td>3.47</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.86</td>
</tr>
</tbody>
</table>

Note: VI= Very Ineffective, I=Ineffective, N=Neutral, E= Effective, VE= Very Effective

**Objective 4: Perceived Benefits of Including Members with ADHD In 4-H Programs**
The respondents believe that 4-H members benefit much from the inclusion of members with ADHD in 4-H programs. They believe that because of inclusion of youth with ADHD, other 4-H members learn how to communicate with people different from themselves (75.2%), gain relationship building skills (79.2%) and learn that everyone has their own strengths and weakness (80.2%). In addition, the data also show that leaders believe that other members learn to be less prejudiced and see other person’s unique abilities instead of disabilities (75.3%). Youth learn to focus on the strengths and positive attitudes of others (76.2%). Respondents also believe that youth with ADHD benefit from an inclusive 4-H program. Seventy-three percent (73%) believe that youth with ADHD learn communication skills, 74% relationship building skills, and 72% decision-making skills. Furthermore, 73% of the leaders believe that youth with ADHD achieve greater confidence around others, and learn to be responsible for themselves (71%). See Table 5.

The study also sought to determine the incidences of ADHD in 4-H clubs. Our study found the incidences of ADHD in 4-H to be comparable to the national average of 5% to 8%.
Table 5
Percentage and Mean Scores for Respondents Regarding the Benefits of Including Youth with ADHD in 4-H Programs for Other Members (N=101)

<table>
<thead>
<tr>
<th>As a result of inclusion other members learn:</th>
<th>VL</th>
<th>L</th>
<th>N</th>
<th>M</th>
<th>VM</th>
<th>Mean Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills useful in dealing with conflicts</td>
<td>2.0</td>
<td>6.9</td>
<td>29.7</td>
<td>47.5</td>
<td>13.9</td>
<td>3.64 0.88</td>
</tr>
<tr>
<td>Communication Skills with different people</td>
<td>1.0</td>
<td>5.0</td>
<td>18.8</td>
<td>58.4</td>
<td>16.8</td>
<td>3.85 0.79</td>
</tr>
<tr>
<td>Relationship building skills</td>
<td>0.0</td>
<td>3.0</td>
<td>17.8</td>
<td>60.4</td>
<td>18.8</td>
<td>3.95 0.70</td>
</tr>
<tr>
<td>That everyone is different/ has strengths and weakness</td>
<td>0.0</td>
<td>2.0</td>
<td>17.8</td>
<td>57.4</td>
<td>22.8</td>
<td>4.01 0.70</td>
</tr>
<tr>
<td>To be less prejudiced</td>
<td>0.0</td>
<td>2.0</td>
<td>22.8</td>
<td>61.4</td>
<td>13.9</td>
<td>3.87 0.66</td>
</tr>
<tr>
<td>To focus on strengths and positive attitudes</td>
<td>0.0</td>
<td>2.0</td>
<td>21.8</td>
<td>56.4</td>
<td>19.8</td>
<td>3.94 0.70</td>
</tr>
<tr>
<td>New techniques of working with youth with ADHD</td>
<td>4.0</td>
<td>17.8</td>
<td>42.6</td>
<td>27.7</td>
<td>7.9</td>
<td>3.17 0.95</td>
</tr>
<tr>
<td>To be more accepting of youth with ADHD</td>
<td>1.0</td>
<td>8.9</td>
<td>34.7</td>
<td>41.6</td>
<td>13.9</td>
<td>3.58 0.87</td>
</tr>
<tr>
<td>That everyone can do some things better than others</td>
<td>1.0</td>
<td>5.0</td>
<td>24.8</td>
<td>44.6</td>
<td>24.8</td>
<td>3.87 0.88</td>
</tr>
</tbody>
</table>

Note: VL= Very Little, L= Little, N=Neutral, M=Much, V= Very Much

Objective 5: Differences in Perceptions Between Extension Educators and Volunteer Leaders

An independent t-test was conducted to determine if there was a difference in perceptions of extension educators and volunteer leaders toward the inclusion of youth with ADHD in 4-H programs. There was no significant difference between the perceptions of extension educators and volunteer leaders.

Qualitative questions of this study were designed to capture information on the training related to inclusion of youth with ADHD that 4-H extension educators and volunteer leaders have attended in the past and may be interested in attending. Additionally, the study sought to determine if there are any needs related to working with youth with ADHD that are not being met by the 4-H club or advisory committee of their county extension office. Leaders were asked to explain their need and give suggestions on how they thought these needs could be met. Most of the respondents reported that they had no prior training related to working with youth with ADHD. None of those who had been trained received the training through 4-H. Twenty-seven (27) volunteer leaders and 14 extension educators indicated that they had received prior training.

When asked about the type of training that they would be interested in attending, leaders and educators gave a number of subject areas related to inclusion of youth with ADHD they would be interested in receiving. Topics generally focused on alternative educational methods and effective techniques that can make inclusion more productive and successful.

Discussion

Literature reveals that educators’ confidence and effectiveness in working with children with ADHD is strongly related to training and experience (Weyandt, 2007). The findings of this study
indicated that leaders lack adequate training to work with youth with ADHD. Leaders and educators need training on how to interact with, and encourage youth with ADHD to work in groups with others. Surprisingly when asked about their comfort level of helping youth with ADHD interact with other 4-H members, a considerable percentage of respondents indicated that they are moderately to considerably comfortable even though almost three-quarters of them indicated they need training on how to interact with youth with ADHD themselves. Overall, over one-half of the respondents in this study indicated that they are moderately to considerably comfortable including youth with ADHD in their clubs. But does that mean they are willing to go the extra mile to ensure that the inclusion is meaningful for these youth?

These results raise a number of questions:

i. if leaders are not aware of youth with ADHD in their program how can these youth be helped?

ii. if leaders do not know or think that the 4-H environment is conducive for the inclusion of youth with ADHD in terms of providing support and resources needed for meaningful inclusion, is 4-H taking steps to meet its goal of providing similar experience for all members?

The mission of 4-H is to help youth develop life skills and empower all youth and their families through the provision of opportunities for youth to get involved in activities that are unique to their abilities (Tatman, 2008). 4-H programs provide opportunities for all youth with and without disabilities to get involved, gain life skills, develop self confidence, and self reliance (Tatman, 2008). This study revealed that 4-H leaders and educators believe that all members benefit from the inclusion of youth with ADHD in 4-H programs. However, most of the respondents were uncertain or thought that 4-H was ineffective in promoting an environment conducive for the inclusion of youth with ADHD.

4-H leaders and educators need training on the ways to effectively include youth with ADHD. In this study, more than half of the respondents indicated that they have no formal training working with youth with ADHD. A total of 41 respondents indicated that they have been trained on working with youth with ADHD but none of them received the training through 4-H. Most of the trained leaders were educators/school teachers who got trained to accommodate children with ADHD in their classrooms.

Most respondents indicated that they are struggling with adapting projects books to suit youth with ADHD. Leaders and educators need training on how to adapt the project books to make them appropriate for youth with ADHD and how to present project material in ways that can be easily comprehended by youth with ADHD. Respondents also expressed their wishes to learn about ways to encourage youth with ADHD to work in groups with others, and to learn about alternative education methods and effective techniques to help these youth become more productive and successful.

Some of the leaders and educators indicated that they do not have the basic understanding of the characteristics of ADHD. According to the literature, the lack of basic understanding can result in leaders having minimum confidence in their ability to establish a behavior contract with children with ADHD (Efron, Hassel, & Sciberras, 2008; Hewitt, 1999).
Leaders indicated that they are interested in understanding the characteristics of ADHD, the issues and problems associated with it and are also interested in gaining information on:

- Topics that can hold the interest of youth with ADHD
- How to handle and accommodate youth with ADHD in their 4-H club settings
- Ways to help others understand and accept youth with ADHD
- Techniques of disciplining, and setting expectations for children with ADHD
- Making club meetings more hands-on and suitable for different learning styles other than ADHD
- Working with youth with special needs such as autism and other developmental disorders
- “dealing with parents of children with ADHD as they often drop off kids and leave without explaining their child’s special needs, and using 4H as well as other organizations as babysitters and relief from their own children”

Respondents expressed a need to have an expert in ADHD available as a consultant to leaders and educators. They also mentioned that there is lack of training on how to work with youth with other disabilities such as Asperger’s syndrome and developmental/learning problems. They feel alone when it comes to dealing with youth with special needs. Some of the respondents suggested that as one approach to addressing the lack of training, families of youth with special needs should be encouraged to get involved as helpers and to provide guidance. Factual information, tools and methods (websites, project books, and sensitivity training) should be available to help everyone in the club be successful in their own right and value each other.

**Conclusions and Implications**

The findings of this study echo a study conducted by Boone and colleagues (2006) regarding the attitudes and perceptions of extension professionals on including youth with special needs in 4-H programs. In their study, Boone and colleagues concluded that extension professionals are not adequately trained to work with special needs youth despite the fact that the majority of them have special needs youth in their programs. Educators, however, believe that including special needs youth in traditional 4-H programs enhances the development and growth of all youth involved (Boone, et al., 2006). The findings of this study were very similar.

Study results suggest that 4-H leaders find it challenging to foster engaged learning and provide meaningful support for youth with ADHD due to lack of training and support on the disorder. However, the positive perceptions of leaders toward these youth and their willingness to learn are strengths upon which to build, given appropriate support. Leaders are willing to accept youth with ADHD in their programs but need more help to move from simply including the presence of youth with ADHD to the addition of careful planning and consideration, modification of normal routines, activities and provision of necessary support services.

**Recommendations for the 4-H Program**

The following recommendations are offered based on the findings and conclusions of this study.

1. Extension Educators and Volunteer Leaders need training on:
   - Basic characteristics of ADHD and the issues and problems associated with it
   - How to handle and accommodate youth with ADHD in their 4-H club settings
• How to increase engagement of youth with ADHD in projects with other members in the clubs
• How to adapt project books to more effectively serve youth with ADHD
• Ways to help others understand and accept youth with ADHD
• Techniques of disciplining, and setting expectations for children with ADHD
• Alternative education methods and effective techniques of working with youth with ADHD
• Making club meetings more hands-on and suitable for different learning styles, not just ADHD

2. 4-H should consider learning how the scouting organization has been training its leaders on work with children with special needs and adapt that to 4-H.
3. 4-H should provide information on inclusion of youth with special needs through publications and websites.

**Recommendations for Extension Administration**

1. Administration should provide funds for training and resources to help educators and volunteer leaders become more knowledgeable about and work more effectively with youth with special needs.
2. Emphasize the importance of inclusion of youth with special needs in 4-H programs.
3. Hire a specialist with expertise on special needs to serve as a consultant for 4-H.
4. Develop curricular materials that specifically address the needs of special needs youth.
5. Work collaboratively with other youth serving organizations on professional development opportunities that increase the effectiveness of youth development professionals to serve youth with disabilities.

**References**


© Copyright of Journal of Youth Development ~ Bridging Research and Practice. Content may not be copied or emailed to multiple sites or posted to a listserv without copyright holder’s express written permission. However, users may print, download or email articles for individual use.
A Qualitative Investigation of Californian Youth Interests in the Outdoors

Marni Goldenberg
Recreation, Parks, & Tourism Administration Department
California Polytechnic State University
San Luis Obispo, CA
mgoldenb@calpoly.edu

Katherine Wassenberg
Recreation, Parks & Tourism Administration Department
California Polytechnic State University
San Luis Obispo, CA
kewassenberg@gmail.com

Jerusha Greenwood
Recreation, Parks & Tourism Administration Department
California Polytechnic State University
San Luis Obispo, CA
jbgreenw@calpoly.edu

William Hendricks
Recreation, Parks & Tourism Administration Department
California Polytechnic State University
San Luis Obispo, CA
whendric@calpoly.edu

Jeff Jacobs
Recreation, Parks & Tourism Administration Department
California Polytechnic State University
San Luis Obispo, CA
jacobs@calpoly.edu

Jason Cummings
Recreation, Parks & Tourism Administration Department
California Polytechnic State University
San Luis Obispo, CA
jpc2178@yahoo.com
A Qualitative Investigation of Californian Youth Interests in the Outdoors

Marni Goldenberg, Katherine Wassenberg, Jerusha Greenwood, William Hendricks, Jeff Jacobs and Jason Cummings
California Polytechnic State University

Abstract: Prior research has found connections between youth participation in recreational activities and academic achievement, civic involvement, and improved health. To investigate California youth outdoor recreation attitudes, behaviors, and constraints, eight focus groups were conducted with community recreation center youth participants. Youth answered 10 questions about their experiences, attitudes, and perceptions of outdoor recreation. Data were analyzed using grounded theory. Three to seven axial codes were identified for each question. Results showed that youth want to have more access to outdoor recreational activities. However, there are frequently considerable constraints for the youth to overcome including draws of technology, family obligations, and laziness. Safety was a recurring concern among participants. Understanding youth attitudes and perceptions allows managers to meet youth needs, program for youth interests, provides a strong foundation for marketing and as a rational for funding grants.

Introduction

Investigating California youth outdoor recreation attitudes, behaviors, and constraints is a priority of the California Department of Parks and Recreation. Prior research has revealed connections between youth participation in recreational activities and academic achievement, civic involvement, and improved health (Larson, 2000; Peck, Roeser, Zarrett, & Eccles, 2008; Zaff, Moore, Papillo, & Williams, 2003). With more than 14 million K-12 students having limited adult supervision after school, and most delinquent adolescent behavior (including sexual activity, drug and alcohol use, and violence) occurring between 2:00-8:00 p.m., it is important to assist youth, especially unsupervised youth, in finding and engaging in constructive recreational activities (Gootman, 2000; Libby, 2007). A 4-H study demonstrated the need to provide youth with a selection of recreational opportunities and the ability to choose activities in
which to participate (Theokas, Lerner, Phelps, & Lerner, 2006). An understanding of perceived constraints to participation provides the opportunity to increase constraint negotiation and allows for more frequent and significant participation (Schneider & Wilhelm Stanis, 2007).

Understanding that youth themselves can provide the greatest insight into their interests and perceived constraints, youth focus groups were conducted as a component of The Public Opinions and Attitudes on Outdoor Recreation survey, which is conducted every five years by the California Department of Parks and Recreation as an element of the California Outdoor Recreation Plan (California State Parks, 2009). This study aims to determine interest levels and frequency of participation among California youth in outdoor recreation activities, as well as their negotiation of perceived participation constraints.

**Methods**

**Study Locale**

Eight focus groups were conducted in large cities within four geographical regions of California, including San Diego, Modesto, Livermore, and the Los Angeles Metro Area. Residents of these regions represent 90% of the state's population.

A research assistant contacted community recreation centers in each of the cities by telephone and email to determine their interest in participating in the study. Focus groups in San Diego and Los Angeles occurred in September of 2007. Those in Modesto and Livermore occurred in November of 2007. In April 2008, focus groups were repeated in Los Angeles due to a technological failure to record the interviews when the audio recorder could not pick up the voices because people were seated too far away.

**Description of Subjects**

The sample for the study was limited to community recreation center youth participants, aged 10-17, from the four geographical regions stated above. Participants were asked to participate in the study. Seventy-two California youths participated in these focus group sessions.

Youth in each geographical region were divided into two groups based on age (10-13 and 14-17). Participating recreation centers disseminated parental permission and human subject forms to the parents/guardians of their youth members prior to the focus groups. Youth who returned permission forms and were available at the time of the focus group were able to participate.

**Description of Instrument**

Researchers developed the interview script for the focus groups based on a similar format to the 2008 Oregon Statewide Comprehensive Outdoor Recreation Plan (Burn, Autry, & Graefe, 2007). In order to verify the relevance of the script to its target population of California youth, an expert panel was consulted to review the script. A pilot test was conducted with a youth group in Atascadero, CA to test the script, the audio recording of the youths’ comments, and the overall format of the focus groups. No changes to the interview script resulted from the pilot test.

The focus group interview script was composed of three warm-up questions and 10 focused questions. The warm-up questions asked participants about swimming in the ocean, spending a night in a tent, and their favorite month. The purpose of the warm-up questions was to encourage the youth to actively participate in the focus group. The 10 focused questions included:
1. When you think about the outdoors, what kinds of things pop into your mind?
2. What activities do you do in the outdoors?
3. How much time do you spend outdoors? How important is it for you to increase your time spent outdoors in the future?
4. Are there any outdoor activities that would you like to participate in, that you haven’t tried yet? What are these activities?
5. What do you enjoy most about being outdoors? Why? What do you like about doing these activities outdoors?
6. What don’t you enjoy about outdoor activities? Is there anything you don’t like about the outdoors or doing things outdoors?
7. What keeps you from participating in outdoor activities? What keeps you from doing more in the outdoors (or being outside more)?
8. There are people whose job is to manage parks. What can they do to get kids interested in doing things outdoors?
9. Have you participated in an outdoor activity because someone brought you to that location or taught you that activity? Was it your parents, school, or organizations that you belong to?
10. Do you recreate in the same places that your parents visited as kids? What do your parents say about this place?

Study Procedures
The researchers used audio to record the eight focus groups; however, only seven of those recordings were useable and transcribed by a research assistant. Field notes were used to analyze the eighth session. During each focus group, one or two researchers conducted the interview while a third researcher recorded the session and took notes. A research assistant listened to the audio recordings and created a transcript for each of the focus groups.

Data Analysis
A researcher and research assistant analyzed the transcribed results through categorization of participant responses into axial codes or thematic categories. Using grounded theory techniques, each focus group session was reviewed by searching for thematic categories and subcategories within participant responses, which were then developed into major themes (axial codes) that described the data (Silverman, 2004; Strauss & Corbin, 1990).

The axial codes identified in this data set included:
- Activities
- Amenities
- Community/People
- Environment
- Environment Base
- Exercise-Oriented
- Location
- Mechanized
- Outdoor Recreational
- Passive
• Personal
• Physical
• Team Sports
• Social
• Structure

These axial codes were selected based on previous leisure research (Iso-Ahola, Jackson & Dunn, 1994; Jackson, 1987; Jackson, 1994) that identified categories of leisure and outdoor recreation activities.

The researcher and research assistant worked together to find themes for one transcription by reading a participant’s statement and answering the question “What is being referred to here?” After one focus group session was coded, the researcher and research assistant then separately coded the remaining seven sessions. Inter-rater reliability was 90% between their coding. Discrepancies were resolved by returning to the original transcriptions. A third researcher reviewed the three to seven axial codes (major themes) that emerged for each question and was in agreement with the coded data.

**Results**

**Study Participants**
Demographic information was self-reported by subjects during the focus group sessions, as subjects raised their hand to indicate their race. Most respondents were Hispanic (n=25), Caucasian (n=21), or African American (n=16). Other racial groups represented were Asian, Native American, and multiracial. Males (n=38) and females (n=34) were almost equally represented. Of the 72 participants, 32 were 10-13 years old, and 40 were 14-17 years old.

**Focused Questions**
In analyzing the focus group data, between three and seven axial codes (major themes) were identified for each question. These three axial codes were each appeared in four questions: Environment, Social, and Other. Two axial codes appeared in three questions: Personal and Physical. Seven axial codes were each identified in two questions: Activities, Amenities, Exercise-Oriented, Location, Mechanized, Outdoor Recreational, and Team Sports. The following four axial codes were identified for a single question: Community/People, Environment Base, Passive, and Structure.

**Question One**
The first interview question asked subjects “When you think about the outdoors, what kinds of things pop into your mind?” Responses from the first interview question fit into four axial codes: Environment, Activities, Community/People, and Location. Within the Environment category, participants frequently mentioned the animals, water (such as lakes, rivers, and the ocean), and trees. Within the Activities category, participants frequently mentioned camping/tents, skateboarding/skate parks, biking, and walking (either with or without a dog). In the Community/People category, participants most often mentioned people (such as hippies or mountain men), happiness/fun, and community/neighborhood/ houses/schools. Within the Locations category, participants mentioned locations such as Santa Cruz, Costa Rica, and Renaissance Fair.
One high school subject from Livermore responded that she thinks about: “Wilderness compared to, like, industrialization. It’s just the opposite of that whole idea.” A middle school student from LA stated, “I think about the trees and the plants and the environment.” When asked what it was about the environment, this subject responded “like how it should be clean.”

**Question Two**
The second question asked subjects what activities they do in the outdoors. Participants referred to six axial codes: Outdoor Recreational, Exercise-Oriented, Team Sports, Mechanized, Passive, and Other. Within the Outdoor Recreational category, participants most often mentioned skateboarding, camping, and hunting. Within the Exercise-Oriented category, participants most often mentioned swimming and hiking. Within the Team Sports category, participants most often mentioned football, soccer, basketball, and baseball. Within the Mechanized category, participants most frequently mentioned biking, but three/four wheeling and motorcycling were also mentioned.

A high school student from Livermore explained: “I mostly surf, pretty much the only outdoor sport I do. I’m not much of a sports kind of person.” While another student in the same focus group explained “just sit outside.”

**Question Three**
Subjects were asked “How much time do you spend in the outdoors?” A middle school student from Lakeside answered: “Most of my day. As soon as I get home, then I go outside and ride my bike and stuff.” A middle school student from Los Angeles stated the opposite: “I want to stay indoors because I want to play my Xbox 360.”

Also, subjects were asked “How important is it for you to increase your time spent outdoors in the future?” A middle school female from Modesto said: “Well, it depends...if it’s really hot outside than decrease, but if it’s just like the perfect weather, increase.” “I say both [indoors and outdoors] because when you’re indoors you can still play but not like how you play outdoors and I say outdoors because you’re being active and not just sitting around watching tv or playing video games” stated a middle school student from Los Angeles.

Subjects reported spending a median of three to four hours in the outdoors on an average day and 81% of participants indicated that they would like to increase the number of hours that they spend outside.

**Question Four**
In response to “Are there any outdoor activities that you would like to participate in, that you haven’t tried yet? What are these activities?” Responses from all subjects included references to five axial codes: Exercise-Oriented, Outdoor Recreational, Team Sports, Mechanized, and Other. Outdoor Recreational and Mechanized were most frequently cited. Within the Outdoor Recreational category, participants often mentioned mountain/rock climbing, snowboarding, kayaking, skiing, and scuba diving. Within the Mechanized category, participants most frequently mentioned skydiving and motorized/non-motorized forms of biking. Team Sports included football, ice hockey, tennis, basketball, and lacrosse. Other activities included traveling more and bungee jumping.

One middle school student from Lakeside said “I want to go camping. The only thing that worries me is that we have coyotes where we go.” Another middle school subject from LA said “I say football because I’ve seen people play it but I’ve never.”
**Question Five**

Subjects were asked “What do you like most about being outdoors? Why? What do you like about doing these activities outdoors?” Five axial codes were found in response to this question, including: Environment, Physical, Personal, Social, and Other. Personal was the most frequently cited, with participants often mentioning fun/enjoyment, experiencing new places/things, and forget about stress/peaceful/relaxing. Within the Environment category, participants most frequently mention weather. In the social category, participants most frequently mentioned friends.

One high school student from LA said, “It’s better than being in the house. I’m not a coach potato. I want to have fun, go places. Being in a house is just like being restricted to certain things you can do.” A middle school male student from Modesto explained that “I like to let my anger out on the ball. I like being away from technology.” A middle school student from Lakeside stated “I like playing sports because I get to hang out with my friends and I also get to sing songs.” Several youth referred to being with friends as an important component to being outside.

**Question Six**

The sixth focus group question addressed “What don’t you enjoy about outdoor activities? Is there anything you don’t like about the outdoors or doing things outdoors?” Subjects referred to four axial codes in their responses: Environment, Physical, Personal, and Social. Environment was the most frequently cited, with the majority of participants mentioning weather. In the Personal category, participants mentioned safety.

A middle school student from Lakeside said, “I hate it when it’s too cold because we don’t get grass and we can’t really play football, stuff like that.” Another from Livermore explained that “Generally, I associate outdoor activities with exercise and sweating stuff, and I don’t like that, exercising and moving, I’m not a fan of that.” A high school student from LA stated “I don’t like losing, I like to win” in reference to being successful at an outdoor activity.

**Question Seven**

When asked “What keeps you from participating in outdoor activities? What keeps you from doing more in the outdoors (or being outside more)?” five axial codes emerged, including: Environment, Physical, Personal, Social, and Amenities. Social and Amenities were most frequently cited. Within the Social category, participants most often mentioned family influence and school/homework. Within the Amenities category, participants most frequently mentioned technology/electronics. Physical included health and injuries, and personal included constraints such as time schedule and laziness/effort.

One middle school student from Lakeside said “My mom’s been making me stay inside because of studying and everything.” A middle school male student from Modesto explained “Only when it’s day. Because when it’s dark, it’s creepy, well, like, you can’t see and you want to be able to see.” A high school student from LA stated “we can play basketball because we have a court, but other sports you can’t play baseball because we don’t have a baseball field, football you run into rocks, can’t play soccer because you could hit someone’s car in the parking lot.”

**Question Eight**

Subjects were told “There are people whose job is to manage parks. What can they do to get kids interested in doing things outdoors?” In their responses, subjects mentioned three axial
codes: Social, Amenities, and Other. Amenities was most frequently cited including wanting more courts, fields, and parks, as well as sports equipment, skate parks, and game centers. Within the Social category, participants most frequently mentioned safety, such as no drinking, no smoking, no drugs, no homeless people, more lighting, park security, and also referred to having clean bathrooms.

A high school student from Modesto said “Making better lighting at night, it’s pitch black.” One Livermore high school student suggested that “teenagers [should] have more of a voice, like, if they don’t like what’s being done, they can change it.” A high school youth from Modesto wants the managers of parks to provide “more family environment, you can’t take kids to a park when they’re like drinking or if it’s like [t]here for an example, it’s like for me I would be afraid to walk by this park alone.”

**Question Nine**
The final two focused interview questions asked about subjects’ outdoor influences. Subjects were asked “Have you participated in an outdoor activity because someone brought you to that location or taught you that activity? Was it your parents, school, organizations that you belong to?” Subjects also mentioned their dad, mom, sibling, family, friends, club/camp/center, and school/teacher. Of 91 responses (some students responded more than once), 40 (44%) referred to a family member, 31 (34%) of responses referred to a club/camp/center, 12 (13%) referred to a friend, and 8 (9%) referred to a school/teacher.

One middle school male Modesto student recalled that “One time, I went to this camp for school and we went there for three days of the week and we got to take hikes up this huge mountain and we got to, like, rock climb.” A student from LA High explained “My sister taught me how to play freeze tag in the park.”

**Question Ten**
The final question asked subjects “Do you recreate in the same places that your parents visited as kids? What do your parents say about this place?” In their responses, subjects referred to four axial codes: Location, Structure, Environment Base, and Activity. Environment Base and Location were most frequently mentioned. Within the Environment Base category, participants most often mentioned visiting the same beach their parents had visited.

**Limitations**

In analyzing these results, it is necessary to consider the strengths and limitations of the methods employed. By their nature, focus groups provide subjects with an interactive and open forum to express opinions and experiences but these focus groups were also limited to the information that youth were willing to reveal. Youth may chose not to share personal or embarrassing perceptions and experiences in a group setting. They may also not reveal their participation in illicit behaviors. Participation in the study was limited to community recreation center youth participants living in four urban areas of the state of California. The perspectives of youth living in rural and other urban areas, as well as those of youth who do not participate in their community recreation centers were not represented. Their experiences and perceptions of the outdoors could be wildly different from those of the youth represented in this study.
Discussion

Outdoor recreation researchers have concluded that communities need to create programs that meet youth needs, both in terms of variety and reliability (e.g. Theokas, Lerner, Phelps, & Lerner, 2006; Witt & Caldwell, 2005). The results from this research show that a large majority of youth want to have more access to outdoor recreational activities. Burns, Autry, and Graef (2007) state that “Connecting youth to the outdoors and to nature is a critical need within our society and it is critical for positive youth development” (p. 9).

The State of California has already made significant steps to empower youth in building a connection to the outdoors, especially through the development of the California Children’s Outdoor Bill of Rights (COBR), which strives to offer children the opportunity to participate in 10 specific outdoor activities before the age of 14 (California Roundtable on Recreation, Parks and Tourism, 2004). In this study, key themes emerged relevant to 9 of the 10 COBR activities: Splash in the Water, Play in a Safe Environment, Camp under the Stars, Explore Nature, Learn to Swim, Play on a Team, Follow a Trail, Catch a Fish, and Celebrate Your Heritage. No relevant themes surfaced on the final activity, Discover California’s Past.

Although the findings show that California youth want to engage in outdoor recreational activities, and often do so, there are frequently considerable constraints for the youth to overcome. For example, park safety, time, and the draws of technology keep kids inside and away from natural areas. Several youth mention a lack of community facilities and their desire to have greater availability of swimming pools, hiking trails, mountain biking/motocross trails with curves and jumps in their communities and through their recreation centers. Participants frequently mention family obligations (e.g. holiday celebrations, babysitting siblings, chores) as a leisure constraint. Some feel excluded from team sports because of their skill level, the skill level of other players, or the competitive nature of the sport.

Safety was a recurring theme among participants and perhaps a constraint in need of further investigation. The subjects express concerns including: the homeless, gangs, older youths, needles in play areas, drugs in public bathrooms, and lack of lighting at night. Other leisure constraints include parents not allowing youths to play outside because of a lack of safety and supervision. Some youths recommend having security guards or police stationed at parks as leisure constraint negotiations. Prior youth research exemplifies the importance of understanding how negative experiences can interfere with future participation (Dworkin & Larson, 2006). Future research should focus on how youths’ perceptions of safety, fears/concerns, and prior negative experiences affect their interest and desire for future outdoor recreation participation.

Additional research is needed to understand the outdoor recreation interests and constraints of a greater portion of California youth, specifically rural youths and youth that do not participate in community recreation centers.

Implications for Practice
Management of community outdoor recreational facilities can assist youth in their pursuit of participation in outdoor recreation through assessment of their capacity to provide desired facilities and recreational opportunities. Understanding youth attitudes and perceptions allows managers to meet youth needs, program for youth interests, and provides a strong foundation for marketing. Youth expressed desire for greater amenities in their communities, frequently mentioning more courts, fields, and parks, as well as sports equipment, skate parks, and game
Significant attention should be paid to youth concerns for safety in community areas through facility design, innovation, and instituting partnerships with local law enforcement agencies. For field practitioners seeking grant funding, this research may also serve as valuable rationale.

As participation in recreational activities has a positive impact on youth health concerns, understanding factors that affect youth participation is important. In addition to their desires for community resources, this research shows that as youth recreate with the people around them, adults have a strong influence on youth outdoor recreation behaviors. This influence extends to parents, siblings, extended family, education professionals, and youth organization.

**References**


An Agricultural Apprenticeship Program for Youth in Trinidad, West Indies: Can it Meet the Caribbean’s Urgent Need for Younger Farmers?

Wayne G. Ganpat
Ministry of Agriculture, Land and Marine Resources
Trinidad and Tobago, W.I.
waygan@flowtrinidad.net

Nicole Webster
Department of Agricultural Extension
Pennsylvania State University
An Agricultural Apprenticeship Program for Youth in Trinidad, West Indies: Can it Meet the Caribbean’s Urgent Need for Younger Farmers?

Wayne G. Ganpat
Ministry of Agriculture, Land and Marine Resources

Nicole Webster
Pennsylvania State University

Abstract: To address the aging farmer population in Trinidad, W.I., a situation common to the Caribbean region, a Youth Apprenticeship Program in Agriculture (YAPA) was initiated. An assessment of its effectiveness was conducted in 2007. Results indicated that present trainees went into agriculture to make “additional” income and for self employment, with “contributing to national food security” being ranked lower. They were generally satisfied with the extent of field work, the experience gained and trainers’ knowledge and skills. However, they would leave agriculture if they received other employment opportunities or if they were not provided with key resources such as land and soft loans. Past YAPA trainees had significantly changed (p<.05 level) attitudes regarding farming; being less optimistic than present trainees about the future of farming. Recommendations included greater involvement of young persons in the restructuring of the program and overall curriculum redesign to make it more technology oriented.

Introduction

Youth’s lack of motivation and willingness to engage in agricultural activities – a debilitating factor for a slow growth in the agricultural industry is a prevalent issue within both, the developed and developing countries (James, 2005; Odhiambo, 2001; Russell, 1993; The World Bank, 2001, 2006a, 2006b). This lack of motivation and unwillingness is largely due to the negative stigma associated with those involved in agricultural activities (Divyakirti, 2002). Youth across the globe have connected agricultural involvement to being part of the working class of manual laborers who earn modest means and rarely contribute to the overall well being
of society. It is these stigmas and perceptions that have disengaged the youth in the agriculture industry (FAO, 2001; Rivera, 2001; The World Bank, 2001). One country that has begun to address these issues through a youth development approach is Trinidad and Tobago. The Trinidad government reasoned that a participatory programme was needed to attract and sustain youths in agricultural pursuits – and therefore organized an initiative in an attempt to enhance food security, create viable employment options for young people in the agricultural sector and reduce the average age of its farm population.

This initiative is important because most other countries in the Caribbean are facing a similar problem of an aging farmer population and youth disinterest in agriculture. Moreover, unlike Trinidad and Tobago which has an energy based economy, the economies of most other countries in the region are agriculture based.

The Youth Apprenticeship Programme in Agriculture (YAPA) was started in 2003 with the primary goal of encouraging youths between the ages of 17 and 25 years to participate in agricultural activities in the country. Such agricultural activities would include the technical, professional, and business domains. Through their participation, it was hoped, that young people would come to realize the importance of agriculture in creating a self-sufficient and sustainable nation and in providing career and employment opportunities. More importantly, youth, in recognizing their potential, would forge new attitudes, engage the industry and ultimately realize a productive way of life.

The YAPA model consists of two phases. Phase one, a six to eight week programme conducted in cycles each year was designed to place young people as interns on a range of successful private and public sector agricultural farm enterprises. The purpose of this was to expose them to developing practical skills in farm management, livestock and crop production, and in organizational operations and processes. After the completion of Phase one, students apply for Phase two. This phase is conducted over a nine month period and participants are involved in crop and livestock production, food processing, aquaculture and apiculture. Computer literacy as well as training to improve the life skills of these young people is also taught. Members of staff of the Ministry of Agriculture (2004) are assigned to the role of coordinators to facilitate the teaching and practical aspects of the programme. It is expected that at the end of this phase, these young persons would be able to engage in productive farming or in an agribusiness enterprise.

Despite the general feeling and public pronouncements that the YAPA is a successful programme, development workers have several questions related to its effectiveness and replicability. Was it genuinely meeting the needs of youth across the country who were interested in agriculture and more importantly, was this a model that could be used in other Caribbean countries that were facing similar issues? The general objective of the study therefore was to assess whether the YAPA programme was meeting the needs of youth trainees, and more importantly to examine it as a model for youth engagement in agriculture across the Caribbean region.

**Methods**

The study was conducted during the course of a two day meeting of trainees in the Northern and Southern parts of the country in 2007. A survey instrument was administered to all youth trainees present. Fifty-seven (57) trainees out of a total enrollment sixty-six (66) were surveyed, representing a response rate of 86%. The self-reporting instrument sought to capture
some personal information, reasons for entering the program, trainees’ perceptions of some elements of the programs as well as satisfaction with key areas and their present attitudes toward farming. Reasons for possibly leaving the agriculture fields were also explored.

Perceptions, satisfaction levels and reasons were measured using five point rating scales, with highest scores (5) indicating very good perceptions, very satisfied, and most influential reasons for entering agriculture and lowest scores (1) reflecting the opposite. The attitude scale consisted of positive and negative worded statements. Trainees were asked to respond to the sentiments expressed in each statement with either strongly agree (SA), agree (A), undecided (U), disagree (D) or strongly disagree (SD). The response to each attitude statement was scored 1(SD) to 5 (SA) for positively worded statements and scoring reversed for negatively worded statements. Higher mean scores indicate positive predisposition and lower mean scores reflect negative predisposition toward the sentiment expressed in the attitude statement. Mean scores above 2.5 reflect a tendency to a positive disposition and means 2.5 and below reflect negative dispositions. The reliability of the scale was estimated at 0.65 (Cronbach alpha).

A second follow up survey was done among past YAPA trainees who had been out of the system for at least six months and who would have had time to face the “real word” of agriculture with all its uncertainties. Based on information provided, some 37 past trainees were contacted and interviewed. This survey sought to capture the present attitudes of these trainees and to compare these attitudes with those presently in the program. The same instrument was used. All results were analyzed using SPSS 11.0 and presented as descriptive statistics.

Results

Participation
Since the inception of the YAPA programme in 2003, some 5042 persons have graduated from Phase 1 of the program. There was an even distribution of gender throughout the years, nearly 56% males (2718) and 44% females (2324). During Phase 2, there was a reduction in the total number of participants. During this phase, only 221 individuals graduated and the majority of the participants were males (116). Year 1 of Phase 2 had the lowest enrollment of females (4), but by the end of year 2006, there were 66 females who had graduated from the programme. Lower numbers of participants in Phase 2 was mainly due to the Agriculture Ministry’s human resource and accommodation capacity to facilitate a nine month training course.

Characteristics of Sample Surveyed
The sample of YAPA participants in Table 1 reflects that the trainees consisted of 53% females and 47% males, with 60% coming from the Northern part of the country and 40% from southern regions. Seventy percent (70%) indicated that they had previous farming experience, 65% indicated that they studied Agricultural Science in school and 56% were from a farm family. The minority (37%) indicated that they had passed the subjects required for them to get a full certificate from the Caribbean Examinations Council (CXC), the recognized certification body for the region.
The characteristics of the sample of post YAPA trainees in Table 1 was similar to the sample of present trainees on the basis of gender, whether they came from a farm family, and previous farming experience. However, a slight majority was from the Southern region, and indicated that they had full CXC certificates. Compared to the present trainees a smaller amount of post YAPA trainees responded (16%) that they “did Agricultural Science in school.”

Table 2 provides details on the ranking of reasons to enter agriculture, satisfaction levels with several program areas, trainees’ perception of trainers and reasons not to pursue agriculture.

**Reasons to enter agriculture**
Reasons ranked highest were “to generate additional income,” an “opportunity for self employment,” belief that “farming is interesting/fascinating” and “love of working with nature.” While “to improve the nation’s food security” and to make farming the “main means of living” were rated as important, other reasons such as “the influence of friends,” and “the influence of family” rated high with participants. “The need for the stipend,” trainees’ unemployment status, and having studied Agricultural Science at school were the lowest ranked reasons, having the highest percentages of little or no influence on trainees’ decision to enter the programme.

**Satisfaction with program elements**
Overall, trainees were very satisfied with the amount of fieldwork, the experienced gained from the program, and the informal discussions about farming in the field. While the majority of trainees were also satisfied with the tools and equipment provided, and the knowledge and skills of the trainers, there was some dissatisfaction and these attracted lower mean scores.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Present YAPA (n=57) (%)</th>
<th>Post YAPA (n=37) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Region</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North</td>
<td>34 (59.6)</td>
<td>17 (45.9)</td>
</tr>
<tr>
<td>South</td>
<td>23 (40.4)</td>
<td>20 (54.1)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>27 (47.4)</td>
<td>16 (43.2)</td>
</tr>
<tr>
<td>Female</td>
<td>30 (52.6)</td>
<td>21 (56.8)</td>
</tr>
<tr>
<td><strong>From Farm Family?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>32 (56.1)</td>
<td>25 (67.6)</td>
</tr>
<tr>
<td>No</td>
<td>25 (43.9)</td>
<td>12 (32.4)</td>
</tr>
<tr>
<td><strong>Previous Farm Exp?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>40 (70%)</td>
<td>27 (73)</td>
</tr>
<tr>
<td>No</td>
<td>17 (45.9)</td>
<td>10 (27)</td>
</tr>
<tr>
<td><strong>Did Agri. Science?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>37 (64.9)</td>
<td>16 (43.2)</td>
</tr>
<tr>
<td>No</td>
<td>20 (35.1)</td>
<td>21 (56.8)</td>
</tr>
<tr>
<td><strong>Full CXC Certificate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>21 (36.8)</td>
<td>20 (54.1)</td>
</tr>
<tr>
<td>No</td>
<td>36 (63.2)</td>
<td>17 (45.9)</td>
</tr>
</tbody>
</table>
There were greater levels of dissatisfaction with “the opportunities afforded to them to visit farms,” “the respect provided to them by the trainers” and “the agricultural projects involved with.” Highest levels of dissatisfaction were with the co-operation of other trainees and the amount of classroom work. Trainees expressed most dissatisfaction with the facilities for “changing, washing, and lavatory, etc.”

Table 2
Ranking of reasons to enter agriculture, satisfaction levels of program areas, perception of trainers and reasons not to pursue agriculture based on mean scores (N=57)

<table>
<thead>
<tr>
<th>Reasons to enter Agriculture</th>
<th>Satisfaction Level with selected program areas</th>
<th>Perception of trainers</th>
<th>Reasons not to pursue agriculture in future</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To be able to generate additional income in the future</td>
<td>1. The amount of field work done</td>
<td>1. Their technical knowledge of agriculture</td>
<td>1. Get some other job offer</td>
</tr>
<tr>
<td>2. Saw an opportunity for self employment</td>
<td>2. The overall experience gained</td>
<td>2. Their practical farming skills</td>
<td>2. Insufficient technical support from the Ministry</td>
</tr>
<tr>
<td>3. Believe farming is fascinating/interesting</td>
<td>3. The informal discussions in the field about farming</td>
<td>3. In motivating young persons to be the best they can be</td>
<td>3. Do not get further assistance from agencies e.g. Loans</td>
</tr>
<tr>
<td>4. Love working with nature</td>
<td>4. The tools and clothing provided for field work</td>
<td>4. Their interest in helping me become a true farmer</td>
<td>4. Do not get land I heard was promised</td>
</tr>
<tr>
<td>5. To improve the nation’s food security</td>
<td>5. The classroom discussions</td>
<td>5. The level of respect shown to me</td>
<td></td>
</tr>
<tr>
<td>6. To make farming my main means of living</td>
<td>6. Opportunities to visit farms/ farmers to learn</td>
<td>6. Their management skills</td>
<td>6. The hard work, low returns to farming</td>
</tr>
<tr>
<td>7. Wanted to get into the Training at (ECIAF)</td>
<td>7. Projects, other than farming involved with</td>
<td>7 In setting a good example for trainees</td>
<td>7. Low prestige/status of agriculture,</td>
</tr>
<tr>
<td>8. Heard about a promise of land by Government</td>
<td>8. The respect provided by the trainers to you</td>
<td>8. In lending their support when I have home or other problems heavy on my mind</td>
<td>8. Friends/Family pressure to get out of agriculture</td>
</tr>
<tr>
<td>9. Parents/family are into farming</td>
<td>9. Agricultural projects involved with</td>
<td>9. Their concern about the problems I face outside the classroom</td>
<td></td>
</tr>
<tr>
<td>10. Needed the stipend being provided</td>
<td>10. Cooperation of YAPA trainees</td>
<td>10. Their sensitivity the issues young people face daily</td>
<td></td>
</tr>
<tr>
<td>11. Parents have land, other resources</td>
<td>11. The amount of classroom work done</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Influence of parents</td>
<td>12. The facilities for changing, washing, lavatory, etc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Studied Agricultural Science at school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Was not employed when I heard about the programme</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Influence of friends</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Perception of the trainers
The majority of trainees rated trainers’ knowledge of agriculture and their practical farming skills as good or very good, attracting highest mean scores. Their “management skills” were rated lower. Trainers’ interest in helping trainees, motivational skills and “respect shown” were also rated highly. Trainers’ abilities in the student welfare areas of “lending support to them,” being concerned “about the problems they faced outside the classroom” and “their sensitivity to young people’s issues” were ranked lowest.

Reasons not to pursue farming as a career
Overall, trainees indicated that getting “some other job offer” would be their top reason for not pursuing a career in farming followed by “insufficient technical support.” Mid-ranked reasons to exit the industry were if they “do not get further assistance, e.g. loans,” “do not get the land they heard was promised” and “the hard work/low returns to farming.” The “low status of farming” and “friends/family pressure to get out of farming” were the least likely reasons to influence their decisions to leave farming.

Attitude of present trainees
Overall mean scores showed that present trainees’ attitude towards agriculture was positive to a large extent (73%) with 46% having strong positive attitudes toward farming. A fair amount however (27%), assessed farming as being a negative. Table 3 shows details of attitude item responses for present and past YAPA trainees.

Positive predispositions
Table 3 reflects that the majority of trainees generally agreed that “agriculture plays an important part of the economy” and they wanted to get into agriculture to “make a significant contribution to food security.” As young persons, they felt that they could “influence agriculture development” and “change the face of farming in the country.” Most also felt that they could “make a successful career in farming.”

Their positive attitudes were also reflected in their disagreement to several negative statements presented to them. They disagreed strongly that farming “is only for those who do not do well in school” and “is a dead-end job” or is for “uneducated people.” They rejected that “they were sometimes ashamed to let people know they were in farming” and not averse to “encourage friends to be involved in farming.”

Negative Predispositions
Trainees’ negative attitudes were determined based on agreement to several negative statements presented to them. Trainees strongly agreed that “unavailability of land, water and credit are some of the major concerns in farming.” To a lesser extent, they felt that “government does not appear to have a clear plan to improve agriculture,” and to some extent that “they will pursue other options other than farming” if they have a choice.

Negative attitudes were also reflected in trainees’ strong disagreement to the positively worded statements “farming is the only career for me” and “the low status of farming doesn’t bother me” (see Table 3).
### Table 3
Means, Standard Deviations and percent responses to attitude statements for trainees presently in YAPA and those post YAPA (N=37)

<table>
<thead>
<tr>
<th>Attitude Statements</th>
<th>Pre</th>
<th>Post</th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Farming has no future in this country.</td>
<td>3.8 (.95)</td>
<td>4.1 (.95)</td>
<td>10.5</td>
<td>0</td>
<td>10.5</td>
<td>7</td>
<td>29.8</td>
</tr>
<tr>
<td>2. Farming is a dead end job.</td>
<td>4.3 (.62)</td>
<td>4.3 (.62)</td>
<td>5.3</td>
<td>0</td>
<td>1.8</td>
<td>7</td>
<td>28.1</td>
</tr>
<tr>
<td>3. I will pursue career options other * than farming if I have a choice.</td>
<td>2.4 (1.2)</td>
<td>2.7 (1.3)</td>
<td>19.3</td>
<td>2.7</td>
<td>38.7</td>
<td>17.5</td>
<td>35.1</td>
</tr>
<tr>
<td>4. More and more I feel helpless in the face of what is happening in farming today.</td>
<td>2.9 (1.3)</td>
<td>2.4 (1.3)</td>
<td>17.5</td>
<td>21.6</td>
<td>51.4</td>
<td>5.4</td>
<td>10.8</td>
</tr>
<tr>
<td>5. I will not encourage my friends to be involved in farming.</td>
<td>4.1 (1.0)</td>
<td>4.1 (1.0)</td>
<td>3.5</td>
<td>8.1</td>
<td>0</td>
<td>0</td>
<td>47.4</td>
</tr>
<tr>
<td>6. As a young person, I can influence agricultural development.</td>
<td>4.2 (.79)</td>
<td>4.2 (.62)</td>
<td>43.8</td>
<td>32.4</td>
<td>62.2</td>
<td>5.4</td>
<td>5.3</td>
</tr>
<tr>
<td>7. I believe I can make a significant contribution to the food security of this country.</td>
<td>4.3 (.79)</td>
<td>4.2 (.62)</td>
<td>42.1</td>
<td>27.0</td>
<td>47.3</td>
<td>67.6</td>
<td>2.7</td>
</tr>
<tr>
<td>8. I am sometimes ashamed to let people * know I/am involved in farming</td>
<td>4.1 (.96)</td>
<td>4.5 (.51)</td>
<td>5.3</td>
<td>0</td>
<td>1.8</td>
<td>3.5</td>
<td>48.6</td>
</tr>
<tr>
<td>9. I like farming because it is a natural * way of life.</td>
<td>3.7 (.10)</td>
<td>4.2 (.64)</td>
<td>19.3</td>
<td>32.4</td>
<td>57.8</td>
<td>2.7</td>
<td>8.8</td>
</tr>
<tr>
<td>10. The best future for farming lies in the continued use of new technology.</td>
<td>4.0 (.98)</td>
<td>3.9 (.89)</td>
<td>36.8</td>
<td>18.9</td>
<td>40.4</td>
<td>67.6</td>
<td>2.7</td>
</tr>
<tr>
<td>11 Farming is the only career for me.</td>
<td>2.3 (1.1)</td>
<td>2.8 (1.1)</td>
<td>7.0</td>
<td>10.8</td>
<td>5.3</td>
<td>10.8</td>
<td>21.1</td>
</tr>
<tr>
<td>12. The future of farming is bright * in this country</td>
<td>3.3 (1.2)</td>
<td>2.9 (1.2)</td>
<td>15.8</td>
<td>8.2</td>
<td>36.8</td>
<td>29.7</td>
<td>13.5</td>
</tr>
<tr>
<td>13. As currently practiced, farming is too much hard work</td>
<td>3.2 (1.4)</td>
<td>3.3 (1.2)</td>
<td>12.3</td>
<td>5.4</td>
<td>31.6</td>
<td>32.4</td>
<td>1.8</td>
</tr>
<tr>
<td>14. I will be more interested in farming if equipment is made available to reduce the hard work *</td>
<td>4.0 (1.8)</td>
<td>2.2 (.99)</td>
<td>43.9</td>
<td>5.4</td>
<td>35.1</td>
<td>8.1</td>
<td>3.5</td>
</tr>
<tr>
<td>15. Unavailability of land and water * and the absence of credit are some of the major concerns in farming.</td>
<td>1.5 (.97)</td>
<td>1.8 (.74)</td>
<td>68.4</td>
<td>29.7</td>
<td>22.8</td>
<td>64.9</td>
<td>2.7</td>
</tr>
<tr>
<td>16. There are just too many problems in agriculture today</td>
<td>2.7 (1.2)</td>
<td>2.6 (1.2)</td>
<td>12.3</td>
<td>13.5</td>
<td>43.8</td>
<td>45.9</td>
<td>12.3</td>
</tr>
<tr>
<td>17. The incentives to farming * are not encouraging</td>
<td>3.2 (1.3)</td>
<td>2.7 (1.1)</td>
<td>10.5</td>
<td>13.5</td>
<td>22.8</td>
<td>37.8</td>
<td>14.0</td>
</tr>
<tr>
<td>18. People do not recognize the importance of agriculture</td>
<td>4.3 (.88)</td>
<td>4.5 (.56)</td>
<td>45.6</td>
<td>48.6</td>
<td>43.8</td>
<td>46.8</td>
<td>1.8</td>
</tr>
<tr>
<td>19. I can make a successful career in farming given the chance.</td>
<td>4.2 (.88)</td>
<td>4.4 (.66)</td>
<td>42.1</td>
<td>46.8</td>
<td>43.9</td>
<td>45.9</td>
<td>8.8</td>
</tr>
<tr>
<td>20. Agriculture plays an important part in the economy.</td>
<td>4.5 (.95)</td>
<td>4.5 (.56)</td>
<td>73.7</td>
<td>54.1</td>
<td>17.5</td>
<td>43.2</td>
<td>7.0</td>
</tr>
<tr>
<td>21. It does not appear that Government has a clear plan to improve agriculture.</td>
<td>2.3 (1.4)</td>
<td>2.0 (1.0)</td>
<td>36.8</td>
<td>35.1</td>
<td>31.6</td>
<td>40.5</td>
<td>1.8</td>
</tr>
<tr>
<td>22. The low status of farming * does not bother me</td>
<td>2.5 (1.3)</td>
<td>3.1 (1.3)</td>
<td>8.8</td>
<td>5.4</td>
<td>24.6</td>
<td>51.4</td>
<td>0</td>
</tr>
<tr>
<td>23. Youths like me have too little say in what should be done to improve farming.</td>
<td>1.8 (.93)</td>
<td>1.9 (1.1)</td>
<td>45.6</td>
<td>35.1</td>
<td>43.9</td>
<td>51.4</td>
<td>1.8</td>
</tr>
<tr>
<td>24. Farming is only for those who do not do well in school.</td>
<td>4.6 (.75)</td>
<td>4.3 (.69)</td>
<td>0.2</td>
<td>2.7</td>
<td>3.5</td>
<td>2.7</td>
<td>5.3</td>
</tr>
<tr>
<td>25. Youth can change the face of farming in this country.</td>
<td>4.1 (.88)</td>
<td>4.4 (.55)</td>
<td>40.4</td>
<td>45.9</td>
<td>38.6</td>
<td>51.4</td>
<td>15.7</td>
</tr>
<tr>
<td>26. Farming is a profession for * uneducated people only.</td>
<td>4.2 (1.0)</td>
<td>4.6 (.49)</td>
<td>3.5</td>
<td>3.5</td>
<td>12.3</td>
<td>0</td>
<td>31.6</td>
</tr>
</tbody>
</table>

*Significantly different (P<.05) based on Mann-Whitney U
**Changed attitudes of past YAPA trainees**

Several significant differences were noted by the responses to several item statements between present trainees and past trainees. While both groups would “pursue other career options other than farming,” past trainees were less inclined to than present trainees, were less ashamed “to let people know that they were involved in farming” than present trainees, and were significantly stronger in their appreciation of “farming as a way of life” than present trainees. While both groups didn’t hold strongly that farming would be their only career, present trainees were significantly stronger in this belief than past trainees. Past trainees however, were significantly less optimistic than present trainees as reflected in their response to the statement that the “future of farming is bright.” On the statements that dealt with availability of equipment, provision of incentives and adequate access to resources, past trainees were less enthusiastic about these than present trainees. On the two statements that dealt with the perceived low status of farming being an obstacle and the low regard others hold about the agricultural profession, past YAPA trainees were less inclined to be turned off by these negativities.

**Discussion**

**Reasons for entering the program**

The consistent priority reason trainees chose to enter the YAPA programme shows that they consider agriculture as an extra activity to generate additional income. Making a career out of farming is ranked lower. Trainees, wanting to use the YAPA as a stepping-stone for further formal education in Agriculture, while important, was not a foremost reason. The receipt of land to do farming appeared not to be the overriding determinant of their decision to enter the programme.

The stated policy of creating a new cadre of farmers has to be redefined to explicitly state that it is full-time farming that is desired. The criteria for YAPA participation must be clearly stated and understood by participants prior to entry. The idea of part time farming, for additional income needs to be re-evaluated. Firstly, the curriculum should be reconstructed to place greater emphasis on attitude adjustment and entrepreneurship. However, and perhaps of greater importance, the Ministry should take decisive actions that demonstrate that they seriously want to invest in youth. Actions such as the provision of access to resources to develop meaningful economic size units must be taken. Without such support trainees can only hope to pursue the business of agriculture on a part-time basis.

**Perception of program elements**

The obvious strengths of the training component are the field exercises, the equipment provided to do the field aspects and the quality of the discussions that take place in the field about farming. Programme directors need to take a look at the knowledge and skills of the trainers. While most may have excellent knowledge and skills, those that are deficient need to be either upgraded or redirected elsewhere. The need for all training staff to respect trainees must be emphasized. Proper orientation for staff chosen to be involved in the YAPA and probably a code of conduct may help in this regard. Orientation for trainees, coupled with sessions that deal with group interaction, cooperation etc., interspersed throughout the programme, will also help to improve the level of co-operation among trainees.

Where the physical facilities for storage, changing, washing etc., are inadequate, they must be improved immediately. A programme that has an average 50% female involvement should not
be conducted in the absence of adequate and gender appropriate sanitary facilities at training or farming sites in general.

Trainees call for “more classroom work,” suggests a cry for greater understanding of principles and concepts. Rather than inflict these trainees with long sessions in classrooms, coordinators and trainers need to involve them in participatory learning activities. In this regard, staff may need training to conduct these types of “action and reflection” techniques. A shift of emphasis is needed to place as much emphasis on why things are done, as is presently placed on how to do things. Many trainees come without having any experience in farming or any formal training in agriculture. Knowledge development as a necessary precondition for skills development must be trainers’ goal. We should seek to develop a cadre of “intelligent farmers” rather than skilled labourers, and promote an atmosphere in which innovation is encouraged. Technology use must be the focus of training to reduce the drudgery and stigmas associated with present day farming in the region.

**Perception of trainers**
Trainees generally have confidence in the technical knowledge and skills of the trainers. They also indicated that trainers were good motivators and were genuinely interested in helping them become true farmers. Trainees rated trainers’ managerial skills, level of respect shown and setting a good example modestly. Trainers’ ability to deal with non-agricultural and personal problems of trainees was perceived as inadequate. Several opportunities exist to improve the level of respect shown by trainers to trainees and the need to set good examples. This can be accomplished by a proper orientation for the facilitators and other persons involved in training and interacting closely with trainees before the start of the programme. It should include the setting of norms and expectations and a code of conduct.

YAPA trainers cannot be expected to adequately treat trainees’ personal problems without proper training. The programme must engage trained counselors at the start of the programme and periodically to assist trainees in this regard.

**Reasons for not pursuing agriculture**
The overall results tend to suggest that the trainees did not see farming/agriculture as a long-term career. If they got another job, they would leave farming. Most likely they would farm on a part-time, limited scale on available land. This strong reason for leaving agriculture would be strengthened even further if they do not get technical support from the Ministry of Agriculture, loans to pursue farming and of course, land on which to farm.

These are the overriding reasons and suggest that these are key ingredients for young persons continued involvement in farming. These factors should be in place immediately upon graduation of successful trainees from the YAPA 2 programme. Any time lapse is a huge window for them to seek out other job opportunities. Land for farming is critical in the Caribbean region where most countries have small land masses with many competing interests for available land. However, creative measures can be implemented such as intensive, technology driven agriculture and group or cooperative farming methods.

**Attitudes**
While overall, most trainees had positive attitudes to farming, fair amounts had negative attitudes. Their positive attitudes are reflected in their contextual view of agriculture, their zeal to contribute, influence agricultural development and generate some income from farming. They rejected the suggestions that agriculture is only a dead-end job, is not a career to be
pursued, is only for those who fail in academic subjects, and is not a profession of which one can be proud.

Those trainees with negative views were disenchanted with the perceived lack of a clear plan by government for youth’s role in the development of the sector, the perceived unavailability of resources to assist them and their lack of voice on the matter. They expressed some helplessness in the situation and indicated that farming will not be the only career for them.

If these respondents represent the pool from which young farmers will come, then action should be taken to improve their present dispositions. Young people should be more involved in development plans for the sector. It is insufficient for government to plan a youth program without the active, full engagement of young persons in its design. Further, agriculture needs to be presented to them as a professional career, not an activity to be pursued in addition to some other ‘main’ career. It must be shown to be economically viable and competitive with their alternative use of resources or career options. Incorporating an agribusiness component as a main part of the programme and actions to provide them with adequate resources to start farming as soon as they complete the program successfully will be steps in the right direction.

**Changed attitudes**
Past YAPA trainees did not appear to be negatively affected by of the fact that they were not being actively supported to pursue their careers in agriculture. Probably, the six month time frame for assessment was too short, but it seems that urgent positive action by Government and other agencies could capitalize on this goodwill and that failure to act would have serious implications for further youth engagement in the sector. Government simply cannot afford to take such a risk at this time given the situation of the aging farmer population in the region. Furthermore, this has implications for the entire region, as other countries face a similar challenge and are looking for a youth engagement model to follow.

**Conclusion**
The YAPA programme was designed to meet a significant need in the area of agriculture skill development as a stepping stone towards youth engagement of the farming sector in Trinidad. However, findings from this study suggest that significant changes need to happen in order for YAPA to truly meet its mission. While trainees (we only reported trainees' opinions in this study) expressed some concerns with the overall programme, they were also mindful in noting the positive aspects. It can be determined from participants’ comments that the YAPA has met a number of their expectations and has played a role in the development of the agriculture sector and youth development. Notwithstanding, the negativities revealed by study, participants expressed the need for restructuring and redirection of the entire programme.

The Government must be responsive to the needs of all YAPA participants and use their feedback in order to institute changes. Addressing these changes will definitely enhance the intended structure and help participants leave with a more meaningful experience. Furthermore, by addressing the aforementioned issues, the Trinidad government sets itself up to be a leader in the development of a model that meets the looming agricultural issues within the Caribbean region, since the problem of inadequate youth engagement in agriculture is regional.


Investigating an Intervention Program Linking Writing and Vocabulary Development for Homeless Children

Richard Sinatra  
The School of Education  
St. John’s University  
Jamaica, NY  
sinatrar@stjohns.edu

Robert Eschenauer  
The School of Education  
St. John’s University  
Jamaica, NY  
eschenar@stjohns.edu
Investigating an Intervention Program Linking Writing and Vocabulary Development for Homeless Children

Richard Sinatra and Robert Eschenauer
St. John’s University

Abstract: The presented study investigated the effects of a four-week academic and activity – enriched summer program on vocabulary development and writing achievement of homeless children residing in traditional shelter facilities. When compared to controls, the experimental students did not reveal gains in vocabulary and spelling as measured by two norm referenced tests. They did however demonstrate highly significant gains in writing ability based on the New York State standards criteria, reflecting five qualities of writing. On two project-developed instruments designed to measure improvement in book vocabulary and tennis skills, they showed significant increases based on analyses of their pre- and posttest scores. The program closed achievement gaps, fulfilled standards criteria, and may be the first of its kind in the homeless literature whereby students’ writing development was compared to matched controls as vocabulary development occurred based on literary readings.

Introduction

Children living in our cities’ transitional shelter facilities experience major disruptions in their academic lives and are characterized as homeless due to residence instability (Mahwinney-Rhoads & Stahler, 2006). While poverty, residence relocation, and parent’s lack of education are the major conditions leading to homelessness (Books, 2004; Keogh, Halpenny, & Gilligan, 2006; Swick, 1999), families enter the shelter system due to the many contributing factors of parental loss of employment and public benefits, formal and informal eviction, domestic violence, instability of family life, health-related problems, substance abuse, and family death (Smith, Floares, Lin & Markovic, 2005). Each year just over 50% of the homeless NYC children transfer to a new school with just over 20% of that group transferring twice and 16% transferring three times or more (Nunez, 2004; Sanlmy, 2004).
This cycle of instability of residence, movement, and accompanying school absenteeism triggers haphazard schooling conditions for homeless children, placing them at risk for learning and literacy success. They face new school administrative climates, new teachers with new expectations, new peer groups who are often unsympathetic to their conditions, and new entry points in the various school curricula (Anooshian, 2003; Gibbs, 2004; Vissing, 2003). They may enter content topics without the requisite background knowledge and the accompanying vocabulary necessary to understand particular topics. Catching up becomes especially difficult without consistency in curriculum offerings and coordinated approaches to achieve standards’ benchmarks. In New York City alone, homeless children perform well below reading and math, about 25 percent repeat a grade, and many are unnecessarily placed in special education classes (Institute for Children and Poverty, 2003).

**Review of the Literature**

A literature review reveals a research gap addressing specific interventions designed to improve academic performance for homeless children. This gap is most noticeable during the out-of-school-time of summer in light of the compelling evidence of summer academic loss for disadvantaged students. Throughout the homeless children literature, social isolation, rejection, school indifference, and peer victimization have been a common thread (Anooshian, 2003; Gibbs, 2004; Mawhinney-Rhoads & Stahler, 2006; Swick, 1999; Vissing, 2003). Using a case study approach, Mahwinney-Rhoads and Stahler (2006) investigated the first modified comprehensive school approach established in the nation for homeless children. While the authors conducted site visits, examined school materials and documents, made observations, and informally interviewed teachers and staff, no data was provided relative to student outcomes or achievement. In the description of an alternative school for homeless adolescents in Victoria, Texas, Gibbs (2004) discussed how flexible daily scheduling and a career oriented approach assisted some youngsters in a highly positive way. However, once again, apart from individual case study accounts, no data was provided relative to the larger population of 200 students and 10 teachers.

Research has documented that during the months of June through August, disadvantaged and poverty-level children loose academic and learning gains when compared to their more economically advantaged peers (Alexander, Entwisle, & Olson, 2001; Allington & McGill-Franzen, 2003; Borman & Boulay, 2004; Bracey, 2002). In a research syntheses of 39 studies, Cooper, Nye, Charlton, Lindsay and Greenhouse (1996) found that during the summer months a loss of about three months occurred in reading and language achievement between low and middle-class students. Comprehension and reading recognition scores declined more for low-income students while reading recognition scores showed a significant gain for advantaged students. These researchers theorized that the gain in the learning of new words for middle-class students was due to the influence of home and community environments which provided opportunities to learn new words. In a second line of research Kim (2004) found that the reading of four or five books during the summer had a potentially large enough effect to prevent reading achievement loss from Spring to Fall. With a potentially disjointed school year, summer academic declines may be even greater for a homeless children population.

Additionally, all children in New York State have to meet the requirements of the English Language Arts (ELA) Standards and Assessments for fourth and eighth grades as well as the state technology standards. The standards require that students

1) engage in wide and varied readings;
2) produce written papers and computer projects about issues of topics in which they had to produce evidence of understandings; and

3) create a multi-media computer project in which they had to write, format, gather, and organize information (Board of Education of the City of New York, 1997, 2001).

The integrated reading/writing act of the ELA assessments was evaluated through the use of the State rubric criteria. The scoring ranged from a Level 1 meaning “inadequate writing”, Level 2 indicating “below acceptable writing standards,” Level 3 revealing “acceptable standards for writing,” to a Level 4 described as being “advanced writing proficiency.” Over the four-year period from 2005 to 2008, 41% of 4th graders and 61% of New York City 8th graders achieved below the 3.0 writing proficiency benchmark.

Research has demonstrated that children with and without learning problems have improved in reading comprehension and planning for writing when they have been shown how text ideas are organized in narrative and expository readings and when they have been provided with visual models of text organization (Davis, 1994; Swanson & DeLaPaz, 1998; Vallecorsa & de Bettencourt, 1997; Wong, 1997). Providing writers with visual frameworks of text organization gives them a framework for producing, organizing, and editing compositions and has had a positive influence on report writing (Englert, Raphael, Anderson, Anthony, & Stevens, 1991; Guastello, Beasley, & Sinatra, 2000). Moreover, instruction in writing improves reading comprehension, especially when writing occurs in unison with reading (Blancorosa & Snow, 2006). Many of the studies in the literature also reported positive effects of concept map use for vocabulary and reading comprehension development when small groups of children and youth were taught in controlled settings (Bos & Anders, 1990; Boyle, 1996; Englert & Marriage 1991).

While disadvantaged children involved in summer programs need academic reinforcement to boost summer learning, they also need to engage in other activities that they ordinarily would not experience in their home and community environments, such as activities that require physical exertion, learning of rules, changing of roles, and development by coaches and mentors (Entwisle, Alexander, & Olson, 2001). Others note that the best programs should include a wide range of options, provide hands-on activities related to a thematic interest, and have an academic focus aligned with work connected to the classroom (Pardini, 2001). In an analysis of seven studies of out-of-school time programs Chaput (2004) found that participation in a variety of offerings was associated with more beneficial outcomes in academic achievement, literacy gains, and decreased drug involvement.

The present study, conducted with homeless children residing in traditional shelter facilities operated by the New York City Department of Homeless Services (DHS), investigated the effects of an academic and activity – enriched summer program on vocabulary development and writing achievement.

Methods

Participants
Experimental students participating in the summer intervention program came from nine DHS transitional facilities located in Brooklyn and Queens, New York. Control students were located at five additional DHS Brooklyn facilities.

The 81 students of the experimental group who attended with some regularity were composed of 34 males and 47 females ranging in age from nine to 14 years with most falling between the
10 and 13 year-old levels. Initially 211 students from the nine facilities expressed an interest in attending the program. Due to requirements of the Department of Education regarding mandatory summer school to avert grade retention, many students were not able to attend. Ninety-four students did begin the program. However, by the end of the first week 13 students dropped primarily due to an inability to adjust to program requirements, e.g., four period structure with different task requirements. Almost all of the experimental students were Black and Hispanic with one Asian and three Caucasian participants. They had just completed grades three through eight with most completing 5th through 7th grades. Twenty percent reported that they were Special Education students and 25 percent indicated they had repeated a grade.

The 35 control group students had completed grades three through nine with most at the 5th and 6th grade levels. Sixteen were male and 19 female with all but one (Asian) Black and Hispanic. They ranged in age from nine to 15 with one third at the 12 year-old-age level. Seventeen percent noted that they were Special Education students and 30 percent reported they had repeated a grade. Like the experimental students, many more controls (149 total) initially indicated an interest in participating but due to factors of mandatory summer school, residence relocation, and opportunity to engage in other programs, they did not.

**Staff**

Experimental students were served by a staff of 32 adults composed of full time St. John’s University personnel, alumni, graduate and undergraduate students. Lead teachers of each program component were either New York Certified teachers or specialists in their fields. For instance, tennis instruction was provided by a Division I Tennis Coach and his team players; leadership training was conducted by a Major and his staff of the Military Service Department and by the Director and her staff of the university’s Student Leadership Department; and chemistry and biology laboratory experiments were taught by four graduate students of their respective departments. Undergraduate students generally served as teacher assistants in many of the program components.

**Measures**

Both, the experimental and control subjects were tested on the following instruments:

- the Spelling subtest of the Wide Range Achievement Test 4 (WRAT-4),
- the Vocabulary subtest of the Stanford Diagnostic Reading Test 4 (SDRT 4),
- the Book Vocabulary Test (BVT), and
- the Writing Task (WT).

The experimental group subjects were tested at St. John’s University and the control subjects were tested at their various shelter sites.

Since spelling has been demonstrated to have an important connection to writing (Hammill & Larsen, 2009; Hofler, Erford & Amoriell, 2001; Mather & Woodcock, 1997), the Spelling subtest of the WRAT-4 (Wilkinson & Robertson, 2006) was included in the assessment to evaluate the subject’s ability to encode dictated words. It was hypothesized that subjects’ spelling performance would increase as a result of the intensive writing activity occurring in both the literacy classrooms and computer lab.

The increase or decline in a student’s vocabulary during the months of summer has been directly related to the opportunities to learn new words (Cooper et al., 1996). The two vocabulary measures, SDRT 4 (Karlsen & Gardner, 1996) and the BVT, a project developed test
of target words from students’ literary readings, were included to assess differences that could result from the daily use of new vocabulary in each of the program components and from the integrated reading and writing activities of the literacy classroom. It was hypothesized that the experimental group would be stronger in vocabulary than the controls.

The student’s overall writing ability was evaluated through a combined rubric from the *New York State Testing Program English Language Arts Rubric for Reading/Writing* (2000) and the *New York State Testing Program Writing Mechanics Rubric* (2000). The writing mechanics section was added to four sections of the reading/writing rubric to make five components or qualities of writing evaluation: meaning, development, organization, language use, and mechanics. Each area was evaluated using the rubric ranging from 1 (inadequate) to 4 (advanced). During the pre-WT students wrote about a favorite experience they had during the previous year. At the post-WT students were asked to write about a favorite experience they had during the summer vacation or during their lifetime. It was hypothesized that the overall writing ability of the experimental group would be significantly greater than that of controls.

The experimental group was pre- and posttested on the first and last days of tennis instruction. It was hypothesized that the posttest evaluation would be significantly better than the pretest performance. Students participated in 10 trials of tennis strokes. During forehand and backhand, instructors bounced a ball to be returned to the opposite side of the net. At volley, students needed to return the tossed ball to the instructor. Finally experimental students were asked to evaluate the program by responding in writing to open-ended questions.

**Procedures**

*Program Preparation:* A number of meetings were held with DHS central staff and facility site directors regarding program goals and offerings. Parents from the experimental group facilities attended an orientation day and a campus tour. Schedules for pre and post testing of control group students at their respective sites were established by DHS central staff.

Training sessions also occurred for the staff, and groups met to establish an integrated thematic focus. For instance the three literary teachers integrated their thematic book readings with *Kidspiration*® projects established by the computer teacher, and staff such as the military personnel used mature vocabulary words, such as *trust, courage, responsible, integrity, respect,* and *loyalty* to support one of the program themes.

During this phase, reliability and validity procedures were established as well. Because papers were written by both experimental and control students to be scored by the New York State Rubric system, two trained raters, not affiliated with the project, were engaged to score the project student’s pre and post papers. Prior to the project, these raters were given 25 papers written on the topic of telling about a favorite experience by students from the upper elementary to the junior high grades. After rating the papers separately and achieving an interrater reliability coefficient of .634, additional training and calibration sessions occurred until a coefficient of .845 was established between the two raters. A rating of .91 was established during the project with papers from both experimental and control students.

Prior to project implementation, the three literary teachers were asked to target predictable new vocabulary words from each of the eight books students would read. From a list of 69 words, 30 were selected to be used on the Book Vocabulary test. The words were judged to be “tier two” level words (Beck, McKeown, & Kucan, 2002; Grover, 2006). Such words as *brilliant,*
postpone, announce, hesitate, supervise, submit, and sort are found in more mature reading materials rather than in initial reading offerings, are used in the oral language of mature speakers, and are of high utility of usage across content subjects. The test, modeled after the SDRT4 vocabulary battery with a stem containing the book word, a synonym phrase providing meaning, and three distracter words or phrases, was then given to seven licensed literary teachers for review and establishment of content validity. After their recommendation of five changes, the test was used for pre and post testing purposes.

Program Components: The control group students participated in daily activities at their respective facility sites. They attended nearby Boys and Girls Clubs or the facility game rooms to engage in recreational-type activities, and they were often bused on day trips to local amusement and recreational parks. These students did not have to attend mandatory summer school or remedial classes and were not exposed to a daily schedule of dedicated curriculum offerings.

Experimental students had a Monday to Friday schedule for a four-week period. Their day focused on academic and enrichment offerings and was broken down into four 75 minute curriculum periods with lunch (provided by the New York City Department of Education) midday at 45 minutes. By age, students were formed into four groups of roughly 20 students each. Groups remained intact through the project so that collegiability and teamwork could occur among students from the different facility sites. Through a week’s schedule, each group experienced the curriculum offerings of literacy instruction, computers, tennis, TiViTz® (Scully, 2004), Robotics, a leadership reaction course, leadership training, chemistry lab, and biology lab.

During each period, students were formed into smaller groups, teams, or partnerships dependent upon the activity. In Robotics, partners using the Science and Technology sets of Lego® Education (2007) constructed models based on building instructions. Each model assembled by the teamed pair demonstrated various physical science and technological concepts, including forces and motion, simple machines, measurement, and energy. Also in TiViTz®, partners competed with one another on a checkers-like game board while performing arithmetic calculations. Wearing safety-goggles in the chemistry and biology labs, teams of students performed experiments such as making ice and discovering DNA. While engaged in the Leadership Reaction Course held on the university's great lawn, teams completed scenarios requiring physical activity, teamwork, and leadership direction by the day’s selected child. In additional leadership workshops offered by the university’s undergraduate student leaders, students experienced group sessions on the topics of self-esteem, decision making, character development, and bullying.

The three literacy teachers formed smaller groups of six to seven students, with each group remaining every day with the one teacher over the program. In efforts to influence homeless children in a positive way and to provide guidance in helping them overcome the influences of inner-city factors and the factors influencing homelessness, the books children read were focused on three socially relevant themes. The themes asked children to be aware of the dangers of substance abuse (say NO to drugs, alcohol, and cigarettes), to be a good person, (be of good character at home, at school, and on the athletic fields), and to show respect for the environment and the community (don't litter and pollute). Rudman (1995) described the literary readings offered to children as an “issues approach” in which problems found in literature mirror what actually occurs for people in society. Also known as the practice of “bibliotherapy,” an issues approach offers a thematic way to provide guidance and protection
through story reading. Each group read eight trade-books. Two dealt with the Say NO! theme, four with the good-person theme, and two with the environmental theme. Students were instructed in each book’s new vocabulary. They reconstructed each book reading with appropriate story and concept maps in preparation for writing. Finally they wrote eight papers based on map and book information, and revised each paper after teacher feedback regarding the qualities of writing. New vocabulary was stressed throughout each book reading and students were asked to apply their new word knowledge in their writing activities.

**Results**

The results of the experimental and control groups’ performance on the study measures were analyzed by independent *t*-tests. When the pretests scores on each variable were compared to determine whether there were any significant differences between the groups at the beginning of the study, it was found that there was only a significant difference between the groups on the SDRT 4 Vocabulary task. The control group (*M* = 24.88, *SD* = 3.44) was significantly stronger on this task than the experimental group (*M* = 22.29, *SD* = 5.8) (*t* = 2.15, *p* = .04). This significant difference was maintained on the posttest (*t* = 2.33, *p* = .03) but on the gain score analysis there was no significant difference between the improvement of the groups (*t* = .550, *p* = .584). The gain score analysis on the WRAT 4 Spelling test scores had a similar finding in that there was no significant difference between the groups (*t* = .719, *p* = .475).

However, the results of the gain score analysis of the Writing task revealed a significant difference between the experimental group (*M* = .32, *SD* = .773) and the control group (*M* = -.24, *SD* = .710) (*t* = 2.613, *p* = .011). While there were no significant differences between the mean pretest scores of the experimental group (*M* = 2.69) and the control group (*M* = 2.66), an analysis of the posttest scores of the experimental group (*M* = 2.98) compared controls (*M* = 2.42) indicates that the experimental students were quite near to the benchmark standard of 3.00 and scored significantly higher than the control group (*t* = 3.39, *p* = .003). Fifty-two percent of the experimental students scored at or above the 3.0 standard compared to 25 percent of controls. The large effect size (*d* = 0.97) also reveals the practical significance of the writing emphasis.

The pretest - posttest analyses for the BVT and tennis tasks were completed using dependent *t*-tests and in each case revealed that the posttest results were significantly higher than the pretest (BVT: *t* = 6.505, *p* = .000; tennis forehand: *t* = 17.34, *p* = .000; backhand: *t* = 9.89, *p* = .000; volley: *t* = 13.234, *p* = .000).

The Student Project Evaluation completed by 66 students consisted of open-ended questions. The students rated tennis – 40%, computer – 19%, science – 16% and literacy – 17% as their favorite activities. Six students enjoyed “meeting new people” and one noted that “this program is more fun than school.” In response to the question that asked them to talk about some of the new things they learned in the program 26% identified tennis, 19% science, and 11% the leadership exercises. When asked how the activities of the program would help them in school or in their own life, 21% indicated that they would be willing to help others or the teacher in school; 18% indicated that the program will help them in the area of literacy. Other individual responses referred to the fact that they learned to say “no” to drugs or to smoking, and how peer pressure could affect their life. When asked to write about any experience that may have enriched their life in some way, some wrote about the “experience of learning new words, learning how to get a job, of going to biology to learn new things, of best experience in Robotics, and of doing good in school.” One child wrote, “I was about to fight someone but
learned not to waste time on nonsense things. Also learned that it is ok to walk away from
a fight and that most people aren't worth the drama.” Another wrote: “making good decisions
can make your life incredible.” Two spoke of the importance of teamwork: “Meeting with the
army people, they put us through some difficult courses and we were successful because we
worked as a team.”

Discussion

Students in the four-week program were exposed to differing program offerings designed to
improve their academic, athletic, computer and leadership skills in efforts to close educational
gaps and improve social functioning. The evaluation component addressed research questions
that emphasized writing, spelling, vocabulary, and tennis skill development. When compared to
controls the experimental students did not reveal gains in vocabulary and spelling ability as
measured by two norm referenced tests, but did demonstrate highly significant gains in writing
ability based on the New York State rubric criteria. On two project-developed instruments
designed to measure improvement in book vocabulary and tennis skills, experimental students
showed significant increases based on dependent t-tests analyses of their pre- and posttest
scores. Furthermore, written responses on the Student Evaluation form indicated that many of
the students benefited and learned from the program offerings especially in the areas of tennis,
computer and literacy development.

Structured academic and computer offerings supplemented with athletic and other learning
activities would appear to be quite beneficial for homeless students when offered during the
out-of-school-time of summer. This type of program may succeed because it offers consistency
and routine to a population used to a highly mobile life style that has experienced a disjointed
school year. Here there was no sense of “catching up” with the skill work and assignments of
one's classmates. Instead, students read, wrote, and did computer work each day and added to
their skills as they acquired new vocabulary, writing techniques, and information to add to their
knowledge base. Athletic participation with the tennis activity may have provided both a
motivational and learning complement to the academic offerings.

The design approach presented in this paper offered homeless students two types of
educational reform as suggested by Mawhinney-Rhoads and Stahler (2006):

1. that of supplemental support services to enhance academic success beyond traditional
   school hours and
2. that of transitional schooling held exclusively for homeless students in a controlled
   setting.

By serving homeless students on a college campus, we created homogeneity of social class,
increased the likelihood of peer, teacher, and coach acceptance, established high expectations
for all students to succeed academically, and had a plan to evaluate their academic
achievements.

By focusing on writing and its connection to reading, we also wished to lessen the gap of
summer loss and provide the students with skills that would help them in the formal arena of
schooling when they returned in the fall. We believed that the benchmark standard of writing
an acceptable paper was a task of worth and value. The National Commission on Writing (2003)
recommended that the time students devote to writing should be at least doubled, that writing
should occur across the curriculum, and that writing should occur during out-of-school time.
The writing activities accomplished in our approach with pens, pencils, and keyboard asked
students to reflect upon socially relevant issues and consider the use of new word meanings found in the trade book readings.

Engaging small groups of students in a guided reading/writing methodology, the literacy teachers had students read, discuss, interact, map, write, revise and create a project based on each book offered. The books were used as a “magnifying glass” to enlarge and enhance the message of the themes (Vacca & Vacca, 2002). Vocabulary, developed out of the readings, was emphasized by teachers so that students could apply their new word knowledge in their writings. The literacy engagement over the four weeks was cumulative and recursive in that written products were outcomes of each trade book reading. With this approach, students’ expectations were that reading, reconstructing through mapping, vocabulary development, writing and revision were connected as one unifying event. The routine and writing expectations continued in the computer lab. Using Kidspiration® 2 students planned, mapped, authored, used visuals, and linked to internet informational resources to create projects connected to the three themes.

The literacy approach described in this study reveals that gains in writing proficiency can occur during a summer program for less-than-proficient writers when they are engaged in intensive writing instruction. Secondly, direct vocabulary instruction of “tier-two” level words found in the students’ literary readings provides unique and beneficial opportunities to enhance vocabulary knowledge.

**Recommendations**

The intervention program for homeless students described in this paper attempted to provide educational and enrichment opportunities to a very needy population. Other researchers and program developers may wish to strengthen the research design and program offerings. Our research design attempted to close achievement gaps and fulfill standards criteria so that students would have stronger academic skills when they returned to school in the Fall. Future researchers may want to use other instruments and program designs to measure effectiveness in arithmetic processing, vocabulary development, spelling, writing, and computer skills. For instance, if the TiViTz® and the Science and Technology Sets of Lego® Education were implemented in greater depth, rather than on alternating days as done in this study, students may reveal greater ability to perform arithmetic calculations when compared to controls. If a Book Vocabulary Test is constructed to measure vocabulary growth of experimental program students, the same test should be used with the control group population. To measure enhancement in overall writing and subsets of writing such as spelling and vocabulary usage, others may wish to use a norm-referenced instrument such as the *Test of Written Language 4* (TOWL-4) (Hammill & Larsen, 2009).

Because of residence instability and school changes, developing ongoing and supportive relationships with the students’ many schools would be a challenge. However, such a relationship may work well if programs for the homeless students were established after school at facility sites and on weekends at a resource-enriched site. Secondly, regardless of the timing of out-of-school time programs, interaction and connection with the students’ parents should be considered to be highly beneficial.

The contribution of athletic activities to learning outcomes could also be more systematically measured. While athletic participation often provides both a motivational and learning complement to academic offerings (Entwisle, Alexander, & Olson, 2001; Zaff, Moore, Papillo, &
Williams, 2003), we did not determine if participation in the tennis activity had any relevance to improved social and academic behavior. Possibly more effective use of the students’ Project Evaluation form and personal interviews would indicate that students perceived sports participation to be a positive complement to the academic experience.

Limitations and Conclusions

This project, especially in the evaluation component, experienced the major limitation of regular, sustained attendance. Committing to attend the program, in many instances, was controlled by other more immediate factors. Like others, even with the best program intentions and support from DHS central staff and facility directors, student absenteeism created gaps in program effectiveness and measurement of goals (Gibbs, 2004; Harvard Family Research Project, 2006; Mawhinney- Rhoads & Stahler, 2006).

Incentives were offered to both experimental and control students to maintain program completion. Control students received university t-shirts, caps, and pens, and experimental students were encouraged to maintain sustained attendance with use of a number of incentives. Those that attended 17 days or more (20 days total) were awarded with a $1,000 scholarship voucher to attend St. John’s University for each of four years. Accompanied by many of their parents, all students attending the awards ceremony received a new tennis racket, a certificate of completion, and enjoyed a special lunch.

In conclusion, the intervention program described in this paper presented diverse opportunities for homeless students to improve their educational, social, and athletic skills. The program may also be the first of its kind in the homeless literature whereby students’ writing development was compared to matched controls as vocabulary acquisition occurred based on literacy readings. The experimental students did demonstrate that they were able to overcome the traditional summer loss phenomenon experienced by disadvantaged and poverty-level children and were better prepared to meet the state writing standards.

Acknowledgement: This project was made possible through a generous grant from St. John’s University in extending its mission under the Vincentian Institute for Social Action initiative to serve the disadvantaged and the poor. The authors also acknowledge the support that the New York City Department of Homeless Services (DHS) provided to conduct this study. The analyses and interpretations expressed herein represent the opinions and conclusions of the authors and do not necessarily reflect the opinions of DHS or its staff.

References


Effectiveness of School Based Recruitment Procedures and Modular Data Collections

Rashid Ahmed  
Population Health Research Group  
University of Waterloo  
Waterloo, Ontario, Canada  
r4ahmed@uwaterloo.ca

Scott T. Leatherdale  
Department of Health Studies & Gerontology  
University of Waterloo  
Waterloo, Ontario, Canada

Steve R. Manske  
Department of Health Studies & Gerontology  
University of Waterloo  
Waterloo, Ontario, Canada

Jessica Reid  
Department of Health Studies & Gerontology  
University of Waterloo  
Waterloo, Ontario, Canada

Robin Burkhalter  
Population Health Research Group  
University of Waterloo  
Waterloo, Ontario, Canada
Effectiveness of School Based Recruitment Procedures and Modular Data Collections

Rashid Ahmed, Scott T. Leatherdale, Steve Manske, Jessica Reid and Robin Burkhalter
University of Waterloo

Abstract: Purpose: The School Health Action, Planning and Evaluation System (SHAPES) is a school-based data collection and knowledge exchange system designed to improve the health of youth. This paper outlines the design of the SHAPES study, examines the impact of different school recruitment models on participation rates, and examines the impact of using two different research modules during data collection on the prevalence of core behaviours being measured. Methods: In total, 76 schools were recruited from seven health regions and data were collected using the SHAPES Tobacco (TM) and Physical Activity Modules (PAM). Results: It was found that school recruitment rates were higher when both, the researchers and the health unit, worked together to recruit schools. Significant differences were found between students who completed the TM and students who completed the PAM with respect to body mass index, smoking susceptibility, the number of friends who smoke, and the number of active friends. Conclusions: This paper provides valuable real-world insight for future researchers interested in performing population-level, school-based studies of youth risk behaviours. Our experience suggests that a modular approach to data collection is feasible and that recruitment rates are improved when researchers work in collaboration with health unit staff who have existing relationships with schools.

Introduction

Age-related increases in smoking (Leatherdale, Manske, Wong & Cameron, 2005; U.S. Department of Health and Human Services, 1994) and declines in physical activity (Caspersen, Pereira & Curran, 2000; Sallis, Prochaska & Taylor, 2000) among North American youth are causes for concern. Not only are these modifiable behaviours associated with an increased risk of cancer outcomes (Adami, Day, Trichopoulos & Willett, 2001; Colditz, DeJong, Hunter, Trichopolous & Willett, 1996; Colditz, Sellers & Trapido, 2006; U.S. Department of Health & Human Services, 1999, 2004), but they are linked to an increased risk of developing other
chronic diseases, including cardiovascular disease and diabetes (U.S. Department of Health & Human Services, 1999, 2004). Considering that tobacco use and physical activity patterns tend to be established during childhood and adolescence (Centers for Disease Control & Prevention, 1997; U.S. Department of Health and Human Services, 1994), it is critical to promote smoke-free and physically active lifestyles among the school-aged population.

In 2006, the Ontario Ministry of Health Promotion (MHP) launched provincial strategies in the areas of youth tobacco control and physical activity promotion (as described on http://www.mhp.gov.on.ca). Recognizing that the vast majority of youth spend a significant amount of time at school (Manske, Cameron & Brown, 1997), these strategies included school-based prevention actions led by secondary schools and public health units. However, while schools are increasingly pressed to address smoking and physical inactivity through prevention initiatives, much of the evidence available to guide their programming decisions are derived from artificially controlled research that is not aligned with the realities of ‘real world’ school practice (Boyle, Purciel, Craypo, Stone-Fransisco & Samuels, 2004; Dusenbury & Hansen, 2004; Green, 2006; Ringwalt, Ennett, Vincus, Thorne, Rohrbach & Simons-Rudolph, 2002). The disconnect between the research evidence and the needs of teachers, school administrators and/or school health practitioners, may explain why fewer than 30% of schools implement evidence-based prevention interventions (Ringwalt, et al., 2002). Research has demonstrated that evidence tends not to be utilized unless it is applicable to local circumstance (Green, 2001; Green & Mercer, 2001). Accordingly, program providers in Ontario require locally relevant data to guide their intervention planning and actions associated with the new provincial prevention strategies.

The School Health Action, Planning and Evaluation System (SHAPES) is a school-based, data collection system which can be used to provide school stakeholders with the locally relevant data required to inform prevention planning (Cameron, et al., 2007; Leatherdale, Manske, Wong, & Cameron, 2009) Taking into consideration the mutual needs of school stakeholders and researchers, the SHAPES research platform has been designed to:

• engage local health and education systems in planning, tailoring, and evaluating school health initiatives based on evidence;

• engage researchers in using aggregated data to assess environmental influences on youth behaviour; and

• provide a platform to study the processes and structures required for effective knowledge transfer and exchange in school settings (refer to www.shapes.uwaterloo.ca for additional information).

Research tools have been developed and tested to collect tobacco use and physical activity/inactivity at the student- and school-levels (Wong, Leatherdale & Manske, 2006). Knowledge exchange tools (i.e., customized school-specific feedback reports) have also been developed to translate the student- and school-level data for school stakeholders (Cameron, et al., 2007; Leatherdale, et al., 2009). These feedback reports have been designed to provide schools (administrators, staff and students) and community partners (e.g., public health officers, parents) with school-specific understanding of what is happening at the school (i.e., student behaviours, existing programs and policies), and offers contextually appropriate suggestions for interventions designed to improve the health behaviours of their students. In essence, SHAPES creates an innovative linkage between research and practice by providing school stakeholders with the evidence they need, when they need it, in a form that is useful and understandable for guiding and evaluating school-based prevention programming; valuable insight for the emerging MHP provincial strategies.
School stakeholders often have their own agendas and ways of prioritizing current issues related to youth health. For example, while one school may want to learn more about the frequency of physical activity among their own students to address obesity issues associated with their student population, another school may require more information about the prevalence of smoking among their students in order to advance their tobacco control programming.

The SHAPES system has been specifically designed to address such issues by using a modular approach to data collection (Figure 1). Having different survey modules to address different health behaviours (i.e., SHAPES-Tobacco Module [TM] questionnaire or the SHAPES-Physical Activity Module [PAM] questionnaire) allows the SHAPES tools to be implemented in whatever manner best addresses the needs of school stakeholders. Depending on the needs of stakeholders, students in a school can complete either the TM, the PAM, or both (randomly sampling students in a school where half complete the TM and half complete the PAM). Since the TM also contains the core physical activity measures and the PAM also contains the core smoking measures, this stratified sampling approach would allow schools to have data on the smoking and physical activity behaviour of all their students, while having sufficient data about the correlates of each behaviour from half of the school population for each behaviour. This multi-modular approach can substantially reduce the data collection burden placed on schools. However, there is a need to examine the impact that a modular approach to data collection may have on student responses (i.e., are the prevalence rates for the core behaviours similar across both modules) in a large applied study sample.
Figure 1
Measures within the Tobacco and Physical Activity Modules

**Tobacco Module Only:**
Smoking behaviours of parents and older siblings, participation and awareness of smoking related programs, quitting behaviour, preferred places to smoke, when and where smoking occurs, the school environment with regards to smoking and advertising of cigarettes.

**Physical Activity Module Only:**
Participation in physical activity and various sedentary activities, parental participation and attitudes towards physical activity, the school environment with regards to physical activity and self perception of athletic ability, self perceived body weight.

**Both Modules:**
Age, gender, grade, peer smoking and physical activity, smoking behaviour, susceptibility to smoking, school connectedness, height and weight, and physical activity.
The SHAPES-Ontario (SHAPES-On) project is a recent large scale application of using a modular approach to data collection using the SHAPES tools. SHAPES-On was purposefully designed to inform aspects of the MHP provincial tobacco control and physical activity promotion strategies. As such, data were collected from students in participating schools using both the TM and PAM. At the request of the MHP, SHAPES-On data were not only collected to provide school stakeholders with data to inform their prevention activities, but they were collected to provided regional public health planners with data about the smoking and physical activity behaviours of youth in their public health region to facilitate the implementation of local public health interventions. Linking with public health in the SHAPES-On provides another opportunity to learn from an applied large scale data collection because some of the participating public health units (PHU) in regions requested to be part of the school recruitment process and others did not participate in the school requirement process. Considering the challenges associated with recruiting schools to participate in research studies, this allows us to examine the impact that partnering with public health stakeholders can have on school recruitment.

The present paper:
1) outlines the methodology and descriptive statistics for the SHAPES-On study;
2) examines the impact that different school recruitment models had on school and student participation rates; and,
3) examines the prevalence of different behaviours in the study sample depending on which SHAPES module students completed.

**Methods**

**School Board Recruitment**
As requested by the MHP, the six lead health units for the Ontario Tobacco Strategy [Tobacco Control Area Networks (TCANs)] were selected to participate. An additional health unit requested to participate due to previous involvement in a SHAPES project (refer to Leatherdale, Sparks & Kirsh, 2006). All public and Catholic school boards within the sampled health unit regions were eligible to participate. Independent schools and boards (including private and religious schools) were excluded. The outcomes for school board recruitment are shown in Table 1.

**School Recruitment**
Once participating school boards in each region were identified, we then approached schools within those boards in each region to participate. Procedures to approach schools varied across the different regions. In Region 1, the research team randomly approached 15 schools to participate. Since there were less than 15 schools in Region 2, all schools were approached to participate. In Region 3, the research team randomly selected 15 schools to participate but the PHU provided additional support so that the research team could approach an additional seven schools. In Region 4, the PHU worked with the research team to approach 19 schools that the PHU had previously established working relationships with. In Region 5, at the request of the PHU, the research team approached all 28 schools in the region to participate. In Region 6, the PHU worked with the research team to approach nine schools in the region which were purposefully selected by the PHU. In Region 7, the research team approached all 12 schools since there were less than 15 schools in the region. The outcomes for school recruitment are shown in Table 2.
Data Collection

School board and school recruitment began in February 2005. Data collection was conducted in all 76 schools starting in May 2005 and ending in April 2006. Prior to implementation, all protocols and materials were approved by the University of Waterloo’s (UW) Office of Research Ethics. Active information with passive parental permission was used for ascertaining consent from students and parents. This consent approach involved mailing information letters to parents which contained project details, project staff contact information and a 24-hour, toll-free number to call to withdraw permission for their son/daughter. These letters were prepared at the University of Waterloo, folded, stuffed and sealed in envelopes, and stamped with postage. These letters were then couriered to schools in time to allow parents at least two weeks to withdraw permission prior to survey administration. School staff produced the address labels for letters to be mailed to parents. The use of this procedure 1) protected student/parent privacy as the addresses were not released to UW, as well as 2) increased the likelihood of parental receipt of the letter. Students could refuse to answer any question, or the entire survey without prejudice.

In each participating school, classes within each grade were randomly assigned to have consenting students complete either the TM questionnaire or the PAM questionnaire. On the day of data collection, teachers administered the survey during a designated class period according to the provided instructions. Students completed the questionnaires in their classrooms. The survey took about 15 to 20 minutes to complete. To protect confidentiality, teachers were asked not to circulate among students as they were filling out the questionnaire or refer to students’ copies of the questionnaire.

Measures

Vigorous physical activity (VPA) was defined as jogging, team sports, fast dancing, jump-rope, and other physical activities that increase the individual’s heart rate and cause deep breathing and sweating. Moderate physical activity (MPA) was defined as lower intensity physical activities such as walking, biking to school, and recreational swimming. Responses for VPA and MPA were provided by indicating the number of hours (0-4h) and 15-min increments (0-45 min) that each type of physical activity was performed for each day of the previous week. Detailed information pertaining to student activity intensity classification can be found in Wong, et al (2006). Body Mass Index (BMI) was calculated as self-reported weight (kg) divided by height (m) squared (BMI=kg/m²).

The smoking stage categories used were consistent with existing research (Leatherdale et al., 2005); with current smokers having smoked at least once in the 30 days preceding the survey, and ever smokers having smoked previously but not in the last 30 days. Smoking susceptibility among never smokers (never smoked a cigarette, not even a puff), was derived by three measures which asked students:

a) “do you think in the future you might try smoking cigarettes?”

b) “if one of your best friends were to offer you a cigarette, would you smoke it?” and

c) “at any time during the next year do you think you will smoke a cigarette?”

Students responded to these questions on a 4-point Likert scale and students who answered ‘definitely not’ to all three questions were considered non-susceptible; they were considered susceptible if they gave any response except ‘definitely not’ to at least one of the items listed above (Pierce, Choi, Gilpin, Farkas, & Merritt, 1996).
**Analysis**

For hypothesis testing we used t-test or Chi-square test based on the variable format. We based statistical significance on 95% confidence intervals or a p-value < 0.05.

**Results**

Table 1 shows the recruitment of schools by who recruited the school, the health unit (HU), the researchers (University of Waterloo (UW)), both the health unit and researchers working together (joint), or other options (board sent out information approving the project to principals, and the school recruited themselves before they had received a package; recruitment by the researchers for spring 2005 and health unit recruitment for spring 2006). Region 5 has the highest recruitment rate of all regions excluding Region 4 and 27 of the 28 schools that were approached in Region 5, were approached jointly. Region 4 is an exception because the health unit contacted the researchers and requested to participate. The region with the lowest recruitment rate, Region 6, did not approach any schools jointly. From these rates, it is apparent that for this project schools were more likely to be recruited when both the researchers and the health unit worked together to recruit the schools. This may be due to the fact that researchers’ strengths complement health units’ strengths with regards to recruiting schools. When these strengths are combined it follows that the best results would be achieved.

<table>
<thead>
<tr>
<th>Region 1</th>
<th>Total # of schools recruited (n)</th>
<th>Total (n)</th>
<th>HU (n)</th>
<th>UW (n)</th>
<th>Joint (n)</th>
<th>Other (n)</th>
<th>Total (n)</th>
<th>HU (n)</th>
<th>UW (n)</th>
<th>Joint (n)</th>
<th>Other (n)</th>
<th>Total (n)</th>
<th>HU (n)</th>
<th>UW (n)</th>
<th>Joint (n)</th>
<th>Other (n)</th>
<th>Total (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>190</td>
<td>35</td>
<td>36</td>
<td>45</td>
<td>2</td>
<td>118</td>
<td>20</td>
<td>12</td>
<td>43</td>
<td>1</td>
<td>76</td>
<td>15</td>
<td>24</td>
<td>2</td>
<td>1</td>
<td>42</td>
</tr>
</tbody>
</table>

Abbreviations:
HU = health unit
UW = University of Waterloo
Joint = both the health unit and researchers (University of Waterloo) working together
Column 1 of Table 2 shows the total number of student enrolled in all secondary schools in the recruited boards. The enrolment data were obtained from the Ministry of Education in Ontario. The second column of Table 1 is the total enrolment of eligible classes in recruited schools. Column 3 and 4 reports the total number completed survey and response rate respectively. Student level response rates were derived from student eligibility and classroom questionnaire completion totals, where eligibility was based on the presence of 1 or more students, in a given grades 9 through 12 class, on the day of survey administration. Region 5 has a relatively high student response rate, which may be related to the joint recruitment efforts of the researchers and the health unit. Region 6 has the lowest student and school response rate where none of the schools were recruited jointly. As expected Region 4 has the highest student response rate similar to school recruitment rates.

A total of 66,357 students were eligible for the survey and among them 51,739 completed the survey with a response rate of 78.6%. Students from ineligible grades (5-8) were excluded (n=316). As such, the final data set for SHAPES-Ontario consisted of data from 51,739 grade 9 to 12 students; 26,344 completed the Tobacco Module and 24,990 completed the Physical Activity Module.

Table 3 highlights differences in the core behavioural measures between the TM and PA samples. Students who completed the TM were significantly different from students who completed the PA Module with respect to BMI, the susceptibility score, the number of friends who smoke and the number of active friends. Among the males who completed core sections within each module, students were found to be significantly different with respect to most demographic variables, with the exception of the number of friends who smoke, whether the student had ever smoked and whether the student smoked in the last 30 days. Among the female responses to core questions, students were significantly different with respect to MVPA, the number of friends who smoke and the susceptibility score. The males who completed the TM reported a higher MVPA than the males who completed the PA Module. Conversely, the females who completed the TM reported a lower MVPA than the females who completed the PA Module. The sequence of questions in a questionnaire does matter since it is different between the two modules. The physical activity questions are at the end of the TM and similarly, the smoking questions are at the end of the PA Module.
Discussion

In Canada, schools are experiencing unprecedented requests for data collection with their students. National and provincial surveys have been unable to collect any data in certain major metropolitan areas because of the response burden being placed on schools (Health Canada, 2005). Clearly, coordination and collaboration among surveillance agencies is one part of the solution. But another part is being relevant to the education system. The modular design of SHAPES (i.e., TM and PAM) also helps to make our school-based research less demanding on the participating schools. Using classroom-based cluster-randomized sampling, we are able to collect representative data from an entire school pertaining to physical activity and tobacco while maintaining a 20-minute limit on total time to complete the questionnaire. By using a modular approach, we can more economically and efficiently collect data for a wider variety of behaviours without increasing the burden on participating schools or their student population. Our results suggest that although there is some minor variation in the responses to core measures across the two groups of students who completed the different modules, this variation was generally smaller than what would have been expected if there were significant differences between the groups.

Another important issue such as participation of local public health staff also played an important role in school recruitment. Our results suggest that although randomly selecting schools to participate resulted in acceptable response rates, the school recruitment process was most successful when partnering with a HU who had existing working relationships with schools. Interestingly, the worst school recruitment rates were when we partnered with a HU who did not have past experience working in partnership with schools. This insight is important for school based researchers for two reasons.

- First, considering the substantial costs associated with recruiting schools (both financial and time costs), there may be substantial benefits from partnering with a PHU (or similar regulatory body with responsibilities to work with schools) who has strong working relationships with schools in instances where budgets are limited or there are time constraints.

Table 3
Descriptive Statistics for the Sample of Students Attending a School which required Passive Consent.

<table>
<thead>
<tr>
<th></th>
<th>Tobacco Module</th>
<th>Physical Activity Module</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>BMI (kg/m(^2))</td>
<td>22.2 (3.7)</td>
<td>21.4 (3.4)</td>
</tr>
<tr>
<td>MVPA (min per day)</td>
<td>173.9 (119.6)</td>
<td>127.9 (93.7)</td>
</tr>
<tr>
<td>Ever smokers</td>
<td>38.3 (5100)</td>
<td>41.6 (5320)</td>
</tr>
<tr>
<td>Smoked in last 30 days</td>
<td>17.3 (2311)</td>
<td>18.3 (2348)</td>
</tr>
<tr>
<td>Susceptible (never smokers)</td>
<td>27.9 (2263)</td>
<td>30.1 (2237)</td>
</tr>
<tr>
<td>Number of friends who smoke</td>
<td>1.0 (1.6)</td>
<td>1.1 (1.5)</td>
</tr>
</tbody>
</table>
| Number of friends who are active | 3.7 (1.5) | 3.2 (1.5)               | 3.5 (1.5)    | 3.6 (1.4)**   | 3.2 (1.4)               | 3.4 (1.4)** 

* The mean (standard deviation) is given for continuous variables and % (n) for discrete variables.
* * p < 0.05; ** p < 0.01; *** p < 0.001
* The total was calculated for individuals who responded to the gender question.
• Second, considering the potential benefits for future research, it may be wise for researchers to work as brokers for helping to foster relationships between HU and school stakeholders where strong relationships do not yet exist.

This may not only benefit future research projects in relation to having access to schools, but it may also have the larger benefit of fostering links between schools and the HU who could be providing prevention services and resources within the schools.

An important issue faced by researchers working in applied school-based projects is the balance between internal and external validity. In the past, researchers have typically focused their efforts on issues associated with internal validity (e.g., designing studies as randomized controlled trials); however, the lack of ‘real world’ effectiveness resulting from such over-controlled studies has led to a conceptual shift for increased attention to be paid to external validity (Glasgow, Bull, Gillette, Klesges, Dzewaltowski, 2002; Green & Glasgow, 2006). As such, a critical first step is the need for a greater practical understanding of the impact of recruitment procedures on external validity in applied research studies. For instance, an applied study such as SHAPES-Ontario, which utilizes a non-randomized sampling procedure, faces a challenge in overcoming selection bias. However, in conducting applied research in collaboration with practitioner organizations, practical issues may trump “pure science.” This is particularly true for studies that involve government, education and public health organizations which are often required to comply with a relatively short turnaround period between the receipt of funding and associated deadlines for data collection (i.e., want to quickly see the impact of particular programs targeted to particular school districts). Designs that compromise aspects of external validity may have increased ‘real world’ value to the practice organizations, since they have results that are pertinent to their direct needs.

Conclusion

Much research which deals with youth and school environment lacks the credibility of their estimate due to low rates of recruitment of schools and participation from students. We believe this paper provides practitioners and school personnel with valuable information about the risk behaviour profile of a large youth population, while also providing researchers with novel research designed to improve recruitment procedures for future large-scale, school-based data collections. Finally, research collaboration with local public health was found to increase the likelihood of school participation compared to sole researcher recruitment strategies.

Acknowledgement

The data used in this analysis were drawn from the SHAPES-Ontario project, funded by the Ontario Ministry of Health and Long-Term Care/Ministry of Health Promotion and by Cancer Care Ontario (grant awarded to S. Manske & S. Leatherdale). Dr. Leatherdale is a Cancer Care Ontario Research Chair in Population Studies. The project was conducted by the Population Health Research Group at the University of Waterloo, with in-kind contributions from participating Public Health units. The concept for the SHAPES data collection and feedback system was developed by the National Cancer Institute of Canada / Canadian Cancer Society’s Centre for Behavioural Research and Program Evaluation.

Footnote:
1. Additional modules have since been developed, for eating behaviour, mental fitness and drug and alcohol use.
References


© Copyright of Journal of Youth Development ~ Bridging Research and Practice. Content may not be copied or emailed to multiple sites or posted to a listserv without copyright holder’s express written permission. However, users may print, download or email articles for individual use.
Engaging Youth in the Curriculum Development Process with Technology: The Nebraska State 4-H Youth Curriculum Committee

Michelle J. Garwood  
Nebraska 4-H Curriculum Special Projects Coordinator  
University of Nebraska-Lincoln Extension  
Lincoln, NE  
mgarwood2@unl.edu

Patricia J. Fairchild  
Nebraska 4-H Curriculum Design & Youth Entrepreneur Specialist  
University of Nebraska-Lincoln Extension  
Lincoln, NE  
pfairchild2@unl.edu
Engaging Youth in the Curriculum Development Process with Technology: The Nebraska State 4-H Youth Curriculum Committee

Michelle J. Garwood and Patricia Fairchild
University of Nebraska-Lincoln

Abstract: Technology is changing the way youth learn and lead. This paper illustrates a successful case study of a program that actively engaged youth in the decision-making process through the use of an online community and virtual conferencing. Synergy was generated when the youth were mentored (virtually and in-person) by members of a parallel adult committee. Utilizing technology resources proved to be the key to building a vibrant, innovative and inclusive program that could overcome the barriers of time and travel constraints.

Introduction

In 1990 a marketing study was conducted to determine why youth typically leave the 4-H program. Results suggested that one major reason was that young people were “tired of being in an organization run by adults who thought they knew what was best for kids” (Hoover & Weisenbach, 1999). Since that time, many efforts have been made at the national, state, and local levels to invite youth to the decision-making table. The 4-H program has been on the cutting edge of the youth governance movement that has been sweeping the nation during the past two decades.

Curriculum development is a strong component of the Nebraska 4-H program with more than twenty nationally-recognized manuals on the market. In recent years, the curriculum program has undergone substantive changes, including the review and revision of all existing curricula and the development of a curriculum committee to oversee all curriculum-related activities. During this period of transition and change, the need for youth voice was recognized as being essential for creating exciting, dynamic, cutting-edge educational material that meets the needs of today’s youth. This is consistent with scholars’ contentions that adults often come up short in fully understanding the interests of youth (Males, 1996).
Research suggests that young people and adults bring different strengths to the decision-making table. When youth and adults work cooperatively, productivity and creativity are heightened. (Zeldin, Kusgen, McDaniel, Topitzes, & Calvert, 2000). The mutual benefits of youth-adult partnerships are noted by several researchers. Youth typically see an increase in skills and form a sense of belonging while adults gain a greater understanding of youth needs. Stereotypes begin to break down and the organization and community begin to serve youth at a higher level (Bruce, Nicola, & Menke, 2006; Gambone, Yu, Lewis-Charp, Sipe, & Lacoe, 2004; MacNeil, 2000; Zeldin, Camino, & Calvert, 2003).

As a result, Nebraska has established the State 4-H Youth Curriculum Committee. This group of thirteen youth ranged in age from 14-21, and is the first of its kind in the country. Instead of adding two or three seats for youth on the adult curriculum committee, Nebraska has created an independent, yet inter-connected, youth advisory board that seeks to complement the existing professional group. The committee is also unique in that it conducts much of its business virtually and relationships between members are developed through an online community.

Committee Structure

The 13 youth in the committee represent every 4-H curriculum content area (e.g., Animal Science, Communication and Expressive Arts, etc.) and Extension district in the state. Thus, the structure of the youth committee mirrors that of the professional group with geographic and content areas being represented.

Members from the professional committee mentor the youth in a variety of ways. In its initial year, the professionals partnered with youth members who shared common content areas of interest to work together on curriculum development projects. The youth were invited to contribute fresh ideas, review current material, and assist with piloting efforts. The youth were also mentored at the first-annual retreat by professionals who lead leadership lessons and guided the youth as they developed a program of work for the year. Through these experiences, the youth not only connected with caring adults who shared similar interests, but they became exposed to the Extension career field and the University. Much of this mentoring took place with the assistance of technology.

Establishing Community Across the Miles With Technology

A major challenge for youth programs today is keeping youth engaged, connected, and involved (Quinn, 1999). There are a number of activities (structured and unstructured) for young people to choose from today and they are known to “vote with their feet.” The challenge is especially daunting with a group of youth who are scattered across several hundred, mostly rural miles.

Luckily, technology is now available that can help shatter the geographical barrier. Many workplaces have already successfully shifted to a more virtual organizational structure, which can serve as a model for youth development organizations (Wheeler, 2000). Today, millions of youth from all over the world participate in virtual communities such as My Space or Facebook. The popularity of online communities served as inspiration for creating a virtual community for the Youth Curriculum Committee.

The University of Nebraska-Lincoln has established an online community for classes and organizations. Blackboard is a secure system that is academically based and has a variety of
features that enable virtual learning and collaboration. The Youth Curriculum Committee was established as an "Organization," a type of Blackboard Community with the following features: Announcements, Leader Profiles, Member Profiles, Handbook, Technology Support, Meeting Information, Assignments, Resources, External Links, Photo Scrapbook, Discussion Boards, Small Group Portals, Calendar, Document Sharing, Chat, E-mail, and Pod casting.

The Blackboard curriculum community is managed by a State 4-H Office staff member. Administrative rights can be given to specific individuals and involves the ability to post information, monitor discussion boards, track participation, establish small group portals, etc. Those designated as "participants" can participate in discussions, chat, share documents, e-mail, and view information, but can not post documents, announcements, etc.

Blackboard served as a place for youth and their professional mentors to get to know each other despite being hundreds of miles apart. They enjoyed the freedom to be expressive and established identity through their profiles and discussion posts. As the community developed, youth were encouraged to take ownership of the community by designing the site banner, submitting photographs, and leading discussions and small group work.

Blackboard also made it possible to accomplish work in-between meetings. Decisions were made via e-mail, discussion board, or chat. Small groups were established and members were encouraged to send working documents back and forth. Curriculum was reviewed and critiques were posted to the discussion board. Online meetings were recorded and made available to those who were absent.

Meeting Virtually

Conducting online meetings is another way to eliminate the barriers of distance and hectic schedules (Young & Sazama, 1999). Today’s technology is making the experience more realistic than ever. The University and 4-H program utilizes Breeze conference technology to conduct professional meetings. Therefore, it was a natural choice to utilize Breeze to connect the youth committee members.

The first Curriculum Committee meeting was held on April 9, 2007. Care was taken to identify a meeting date that generated the least conflict between school and activity schedules. It was the first time that all of the youth members had been exposed to Breeze. To participate, members were required to log in to the Breeze meeting website. Once they had entered the meeting, they were asked to submit a phone number so the conference operator could connect them to the audio portion of the meeting.

In order to help the youth members become comfortable with the virtual meeting format, business was kept to a minimum (50 minutes) and mainly focused on introductions, a Q and A session about the technology and a brief introduction to the work that would be pursued throughout the year. The meeting was fast-paced, high energy, and encouraged youth look forward to the year ahead. Plans began to take shape for an in-person retreat within the next couple of months where the youth would come together and do major planning and team-building. Small assignments were given to keep the youth connected and interested between the initial meeting and the retreat.

As the members became more comfortable with the virtual meeting environment, they were asked to take ownership of more aspects of the meeting. For example, youth were asked to
contribute reports and presentations on their work, ask for input from other members, participate in chat, conduct polls, connect with web cams, and contribute to the agenda.

**Youth Teaching Youth with Technology**

Not only did the youth committee utilize technology to conduct meetings and exchange ideas, they utilized it to teach and inspire their peers across the state. In addition to developing curricula, committee members challenged themselves with the task of promoting 4-H projects through technology-related activities.

The Nebraska State Fair Cyber Fair, established in 2001, is a website and yearly event involving cutting-edge technology exhibits that help families explore and interact with 4-H curriculum. This year the youth curriculum committee played an integral role in adapting the state event to several smaller satellite events across the state. The youth taught their peers about the online learning opportunities available through this program and made plans to expand the site in the future. Future plans include the development of educational pod casts and online tutorials that will help youth learn about topics from entrepreneurship to clothing design.

**Conclusion**

The saying goes, “if you build it, they will come.” Across the nation, youth are demanding to have a voice in the organizations and institutions that affect their daily lives. Nebraska 4-H curriculum has “built” the playing field for youth to participate in the decision-making process and thirteen youth have stepped up to the plate. The time has come to let the synergy of youth-adult partnerships shape the future of the program. Technology will be the key to building a vibrant, innovative and inclusive program that can overcome the barriers of time and travel constraints.

At this time, the Youth Committee is only designed to work with in the 4-H program at our University, although the model for the committee could be used in any youth organization needing to increase youth participation in decision-making processes. It is especially helpful for groups spread out over a wide geographic area or who have extremely busy members who struggle to connect in person on a regular basis.

**References**


Young, K.S., & Sazama, J. (1999). *Fourteen points: Successfully involving youth in decision-making.* (Available from Youth on Board, 58 Day Street, Third Floor, P.O. Box 440322, Somerville, MA 02144).


The Rhode Island Teen Institute:
Positive Youth Development in Practice

Robert Apsler
Social Science Research & Evaluation, Inc.
Lincoln, MA
rapsler@ssre.org

Sandra Puerini Del Sesto
Initiatives for Human Development

Scott W. Formica
Social Science Research & Evaluation, Inc.
sformica@ssre.org

Maureen Mulligan
Initiatives for Human Development
The Rhode Island Teen Institute: Positive Youth Development in Practice

Robert Apsler and Scott W. Formica
Social Science Research & Evaluation, Inc.

Sandra Puerini Del Sesto and Maureen Mulligan
Initiatives for Human Development

Abstract: This article describes the application of the positive youth development approach to promote and enhance leadership skills among middle and high school age peer leaders. The article reviews the goals of the positive youth development approach and describes how this approach was adopted and implemented by the Rhode Island Teen Institute (RITI), a comprehensive, residential prevention program founded in 1989. Data are presented from pretests and posttests administered during each of seven annual Institutes delivered between 2002 and 2009 with 775 youth. Participants in the RITI demonstrated significant gains in their leadership skills; an effect that persisted at a 3-month follow-up survey administered with high school age youth. Other significant findings and anecdotal effects are also discussed, such as creation by RITI graduates of a youth-led prevention program for elementary and middle school children.

Introduction

The Rhode Island Teen Institute (RITI) typifies the relatively new positive youth development approach to enhancing youth leadership. This article begins with an overview of positive youth development followed by a description of the RITI implementation and a report of evaluation findings.

The Positive Youth Development Approach

Programming aimed at assisting adolescents has evolved from a focus on ameliorating problems to incorporating principles of what has become known as positive youth development (Anderson, Sabatelli, & Trachtenberg, 2007). Traditionally, many community youth programs
sought to prevent specific problems, such as drug and alcohol use/abuse, teen pregnancy, or suicide. Often funded by federal, state, and local agencies and foundations dedicated to reducing the incidence of a particular type of problem behavior, many of these programs concentrated their messages/strategies on a single risk area. Judgments of program impact were based on delaying or reducing the incidence/prevalence of the targeted behavior.

The positive youth development (PYD) movement operates from a very different perspective. PYD programs seek enhancement of a broad range of skills in young people in order to equip them to make positive decisions and lead healthy lives. For example, Networks for Youth Development (1998) conceptualized a positive youth development approach that involves helping youth develop “competencies that will enable them to grow, develop their skills, and become healthy, responsible, and caring youth and adults.” The earlier prevention field focus on risk factors is being replaced in many settings with a view of adolescents as possessing the potential to grow and prosper given appropriate support and training (Damon, 2004). Lerner and Benson (2003) summarized the philosophy of PYD as follows:

> Preventing a problem from occurring does not guarantee that youth are being provided with the assets they need for developing in a positive manner. Even if prevention efforts were completely successful, it is not the case that ‘problem-free means prepared’; that is, preventing problems among young people does not mean that they are capable of making positive, healthy contributions to family community, and civil society. (p. 7)

While it is easy to differentiate between the problem-prevention and PYD approaches to community youth programs, a review conducted by the National Research Council and Institute of Medicine (2002) concluded that the two philosophies are complementary. The newer orientation should not be touted as replacing the older prevention approach. Instead, the PYD movement should be viewed as creating a larger framework for working with young people.

**Goals of Positive Youth Development**

A definition of PYD remains elusive (Kress, 2006), underscored by variation in the theoretical underpinnings among youth programs. For example, Parrish and colleagues (2008) turned to research on resilience as a framework for their teen institute program, Tetloff and Griffith (2008) employed empowerment theory for the basis of their program, while Larson (2006) stressed the importance of internal motivation as central to conceptualizing PYD.

Nevertheless, advocates of PYD increasingly agree about general goals and objectives. The National Research Council and Institute of Medicine (2002) conducted the most comprehensive effort at articulating these goals and objectives. To do so, they examined and synthesized the writings of numerous developmental theorists. Through this process, they discovered a high level of consistency regarding a set of characteristics they labeled core assets for both current and future well-being:

- A sense of safety and having one’s basic physical needs met;
- A sense of social security and attachment – confidence that one’s emotional needs will be met (social connectedness);
- A sense of competence and mastery (a sense of personal efficacy and mastery motivation);
- A desire to learn and curiosity about one’s world (intrinsic motivation);
- A sense of identity and meaning in one’s life (personal and social identities);
- A positive self-regard and general mental health; and
- A positive sense of attachment to social institutions.

Following its examination of both the theoretical and empirical literature bearing on youth development, the National Research Council and Institute of Medicine review group (2002) arrived at eight factors deemed important to successful PYD programs/strategies:

- Physical and Psychological Safety
- Clear and Consistent Structure and Appropriate Adult Supervision
- Supportive Relationships
- Opportunities to Belong
- Positive Social Norms
- Support for Efficacy and Mattering
- Opportunities for Skill Building
- Integration of Family, School, and Community Efforts

**The Rhode Island Teen Institute**

**Background/History**

The Rhode Island Teen Institute (RITI) was founded in 1989 by Initiatives for Human Development (IHD) in response to a community need for substance abuse prevention services. IHD is a statewide prevention agency that delivers a variety of prevention programs for youth and adults throughout Rhode Island. Based on a positive youth development model and strategies that can be implemented outside of schools, the RITI rests on two premises. First, its founders believed that in order to foster positive behaviors among youth, prevention programs must provide teens with the psychosocial tools necessary to: 1) make healthy decisions and 2) act on them when confronted by challenges to their safety and wellbeing. A second premise was that youth can be effective in changing negative social norms that promote harmful behaviors.

To mobilize youth as prevention advocates, the RITI begins by identifying youth leaders. The program seeks formal and informal leaders who are involved in both, positive and negative activities. Students’ natural abilities to motivate and lead their peers are enhanced and directed toward prevention efforts in their local communities. The RITI utilizes adults working with youth as well as Teen Institute graduates to identify and recruit peer leaders of secondary school age. The RITI identifies these leaders in a broad range of community settings, enhances their existing leadership skills, reinforces or fosters their commitment to wellness, and trains them to organize peers to work for prevention in their communities. The RITI integrates youth with peers from all geographic, cultural, and socio-economic groups in Rhode Island and connects them with their local communities. The middle school component consists of a 3½ day residential training serving roughly 50 youth per Institute. The high school RITI serves approximately 50 youth per Institute in a 5-day training.

Groups of youth are recruited from public/private secondary schools and community sites throughout Rhode Island. Sites are encouraged to select leaders of all types who possess the power to motivate their peers. Middle school groups consist of ten youth and two adults. High school groups range in size from three to eight youth and no adults but are sponsored by an adult from their community. All Institute activities are facilitated by 16 - 20 trained youth and adult staff, all of whom graduated from the high school program.
The initial training component consists of:

1) *general sessions* and workshops presented by trained professionals on issues of conflict resolution, communication skills, problem identification, and decision-making about substance use and other high-risk behaviors;

2) small group processing (*family groups*) designed to develop interpersonal skills, increase positive group identification, enhance and develop relationships with peers, adults and teen mentors;

3) adventure-based activities based on the Project Adventure or “ropes course” model (*action groups*) designed to develop communication and problem solving skills, promote teambuilding and trust building, and teach conflict resolution through physical challenges;

4) alternative activities (*large groups*) designed to connect youth from different cultures and communities and foster a healthy, noncompetitive environment;

5) *action planning* designed to help teams develop action plans to address issues in their community based on a local needs and resource assessment, and

6) follow-up community planning meetings and large group Teen Institute *reunions* that serve as an opportunity for re-connecting, networking, and further training.

Following participation in the initial training, groups begin implementing the prevention action plan they developed at the Institute. Each group participates in onsite meetings with the Project Coordinator and youth staff member who worked with the group to develop the action plan during the training. RITI staff provide ongoing technical assistance to the groups by facilitating post-training planning meetings, enlisting onsite support, and assisting groups in identifying and recruiting community resources.

Approximately three-months following the initial training, all participants are invited to participate in a one-and-a-half-day Teen Institute Reunion. The goals of the reunion are to:

1) allow youth groups to report on progress made on their action plan;

2) align youth with existing statewide prevention activities and an annual statewide RITI action plan;

3) reconnect youth with the positive experience of their initial training;

4) broaden the established statewide youth advocacy network developed over the years by RITI; and,

5) foster non-use peer groups.

Following the Teen Institute Reunion, youth can participate in additional training activities to become

1) Teen Institute youth staff,

2) facilitators in their own schools or communities,

3) community substance abuse task force members, and/or

4) leaders and community advocates.
Implementing the Positive Youth Development Model in the RITI
PYD is implemented at the RITI through its: 1) five components, 2) general Institute culture, and 3) norms established by the staff. Different combinations of the five components and the RITI culture bear on each of the eight factors identified by the National Research Council and Institute of Medicine review group (2002) as central to successful PYD programs/strategies:

Physical/Psychological Safety. RITI staff model acceptance of all participants and encourage active participation by all attendees (within established rules/boundaries). This norm carries over into each of the RITI’s core activities. For example, staff foster personal disclosure within boundaries that protect participants during the general sessions, set clear boundaries for respecting participants’ privacy during family group sessions, and establish rules that foster participation while protecting participants from negative consequences during action planning groups. The RITI promotes meaningful participation and learning in the context of rules that ensure a constructive rather than destructive process.

Clear and Consistent Structure and Appropriate Adult Supervision. Adult and youth staff are present during all groups and activities. Upon arrival at the Institute, participants are introduced to all staff members and made aware of the leadership structure. Boundaries and rules relating to personal disclosure and safety are stated clearly, repeated regularly, and provided to participants in writing. Staff members supervise activities and ensure that boundaries and rules are enforced consistently. This process reinforces the physical and psychological safety net described above by providing youth with a reliable and consistent structure within which to operate and explore in a predictable environment.

Supportive Relationships. Staff at the RITI model supportive relationships at all levels, starting with the staff themselves. Experienced staff model supportive relationships for the participants as well as for less experienced staff members. Youth staff represent a cross-section of the youth in attendance. They model what can be accomplished by a heterogeneous group of youth with common interests. The collaborative activities in all groups and activities at the RITI foster respectful and supportive relationships across race, culture, age, and geography.

Opportunities to Belong. General session activities intentionally allow youth to explore common ground through conversation and learn the importance of respecting alternative points of view. This theme is reiterated during action groups and family groups. The action groups provide youth with the opportunity to take part in team/trust building exercises that promote a sense of belonging without competition. Similarly, family groups consist of heterogeneous pairings that bring together strangers from different communities and backgrounds. These groups help youth develop social skills, such as the abilities to engage others, build connections with peers, and share opinions with others. This experience fosters compassion for others, positive group involvement, bonding, and a sense of belonging.

Positive Norms. All communication at RITI must be positive. Youth are informed that negative or personal messages outside of the boundaries/rules are not acceptable. Positive reinforcement and problem solving, not sanctions, encourages participants to correct their mistakes and to work through their differences. Youth staff support positive norms by modeling positive social behaviors and safe risk-taking and by reinforcing group rules and boundaries when they lead activities and co-facilitate groups. Positive norms are further reinforced through the action planning process. Action plans involve promoting education and advocacy in such areas as non-violence, social acceptance, and healthy choices for individuals and communities.
**Support for Efficacy and Mattering.** The action planning process epitomizes the RITI philosophy that personal self-efficacy and mattering are central components of actualizing change. RITI staff promote self and group empowerment by supporting youth participants in their selection of an action plan goal, defining ways to successfully implement the plan when they return to their schools and communities, and identifying supportive resources.

**Opportunity for Skill Building.** All RITI activities build youths’ skills and capacities to make non-destructive decisions and affect positive change in their communities. Emphasis is placed on building skills in areas that will support youth in their personal growth and future efforts – decision-making skills, sense of control over one’s life, communication skills, teamwork skills, and leadership skills. Youth who attend the RITI are taught to make the following distinctions as the basis for learning these skills: facilitation versus leading, supporting vs. caretaking, modeling vs. enabling, intervening respectfully and appropriately vs. intervening in an authoritarian manner, enthusiasm vs. silliness, flexibility vs. rigidity, patience vs. impulsivity, articulating problems vs. stating personal opinion, and respect for and appreciation of differences vs. criticism and negative judgment.

**Integration of School and Community Efforts.** The RITI action plans created by each group serve as the legacy of the Institute and represent an intersection and integration of state, community, school, and family efforts to affect positive change. The action planning process requires youth to:

1. assess their targeted environment for prevention programming needs;
2. identify resources, barriers, and training needs;
3. develop a concrete, realistic plan;
4. implement this plan; and
5. evaluate its effects.

During the RITI reunion events, staff facilitate discussions with youth about what worked when implementing their action plan, what didn’t work, and lessons learned.

**Methods**

**Design**
The RITI was evaluated with a pretest-posttest repeated measures design. Participants completed an anonymous pretest questionnaire when they arrived at the Institute and a posttest at the end. A participant-generated code allowed matching responses on the pretest and posttest while preserving participant anonymity. High school participants also completed a follow-up questionnaire during the Teen Institute reunion event approximately three months following their initial participation.

**Sample**
The sample consisted of 621 youth who participated in the middle school Teen Institute from 2003 through 2009 and 154 youth who attended the high school Teen Institute and the reunion event between 2002 and 2008. The Teen Institute specifically targets youth with the ability to lead their peers, either for better or worse, and who are willing to consider adopting a healthy, substance-free lifestyle. Middle and high school participants were selected for the program based on the recommendations of adults working with youth at the local level or from Teen Institute graduates. Participants were recruited from schools, community-based programs,
churches, neighborhood groups, and community prevention task forces. Care was taken to ensure that participants at each Institute represented the geographic and cultural diversity of Rhode Island.

**Measures**

The pretest and posttest questionnaire included five scales intended to measure decision-making skills, sense of control over life, communication skills, teamwork skills, and leadership skills.

**Decision-making skills** (α=.80 middle school, α=.83 high school) were assessed at the middle and high school levels using a five-item scale from Botvin, et al., (1995) that asked about considering one’s options before making a decision, taking the time to accurately understand a problem before making a decision, and reviewing bad decisions. Respondents indicated the frequency with which they engaged in various decision-making skills on a 5-point scale ranging from “Never (1)” to “Always (5).”

**Control over life** was assessed at the middle school level (α=.71) using a six-item scale adapted from Jessor (1998) that consisted of items about being able to cope with problems and perceived control over one’s environment. Respondents rated their agreement with statements such as, “I have control over most of the things that happen to me” on a 4-point scale ranging from “Strongly Disagree (1)” to “Strongly Agree (4).” At the high school level, respondents completed the original four-item Jessor scale without any modifications (α=.68).

**Communication skills** at the middle school level (α=.72) were measured using a seven-item scale adapted from Botvin, et al., (1995). Respondents rated their agreement with statements such as, “When I disagree with others, I ask questions if they say something that isn’t clear” on a 4-point scale ranging from “Strongly Disagree (1)” to “Strongly Agree (4).” At the high school level, respondents completed the original eight-item Botvin scale without any modifications (α=.78).

**Leadership skills** (α=.82 middle school, α=.78 high school) were measured at the middle and high school levels using a four-item scale, created by the external evaluators, that included items, such as, “I know how to persuade other teens to join me in changing my community.” Respondents were asked to rate their agreement with a set of statements on a 4-point scale ranging from “Strongly Disagree (1)” to “Strongly Agree (4).” At the high school level, respondents completed a truncated 3-item version of this scale (α=.70).

**Teamwork skills** were measured at the middle school level (α=.73) using a six-item scale, created by the external evaluators, that included items, such as, “I am a good team member always listens to the opinions of others in the group.” Respondents were asked to rate their agreement with a set of statements on a 4-point scale ranging from “Strongly Disagree (1)” to “Strongly Agree (4).” At the high school level, respondents completed a truncated 3-item version of this scale (α=.70).

**Analysis**

Data were analyzed using SPSS Statistics Version 17.0. Paired t-tests were used to compare pretest to posttest differences among middle school participants. High school data were analyzed using repeated measures analysis of variance (ANOVA) to compare pretest, posttest, and three-month follow-up responses.
Results

Middle school participants improved significantly from pretest to posttest on all five scales (see Table 1). Effect size estimates (Cohen’s d) for single participant research designs were calculated for each of the scales (Sigurdsson & Austin, 2004; Swanson & Sachse-Lee, 2000). Among middle school participants, effect sizes were medium – only for teamwork skills was the effect size negligible.

Table 1
Paired t-test Results for Middle School Youth (n=621)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Pretest Mean (sd)</th>
<th>Posttest Mean (sd)</th>
<th>df</th>
<th>t</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision-Making Skills</td>
<td>3.79 (.78)</td>
<td>3.92 (.73)</td>
<td>577</td>
<td>4.87</td>
<td>.17</td>
</tr>
<tr>
<td>Control Over Life</td>
<td>3.37 (.42)</td>
<td>3.44 (.48)</td>
<td>578</td>
<td>4.13</td>
<td>.17</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>3.04 (.44)</td>
<td>3.17 (.56)</td>
<td>577</td>
<td>6.29</td>
<td>.26</td>
</tr>
<tr>
<td>Teamwork Skills</td>
<td>3.28 (.59)</td>
<td>3.34 (.61)</td>
<td>565</td>
<td>2.06</td>
<td>.09</td>
</tr>
<tr>
<td>Leadership Skills</td>
<td>2.99 (.59)</td>
<td>3.22 (.58)</td>
<td>567</td>
<td>9.84</td>
<td>.39</td>
</tr>
</tbody>
</table>

* p<.05; **p<.01

Table 2 presents the high school results and shows a significant main effect of time of measurement for decision-making skills and leadership skills. Post hoc comparisons were performed using the Bonferroni adjustment for multiple comparisons. The pretest mean of 3.82 for decision-making skills increased significantly to a posttest mean of 4.04 (p<.01). The improvement was largely maintained at the 3-month follow-up (M = 3.96, p<.10). The pretest score for leadership skills increased from a mean of 2.99 to a posttest mean of 3.34 (p<.01). The improvement in leadership skills was maintained at the 3-month follow-up (M = 3.26, p<.01). The main effect of time of measurement was not significant for perceived sense of control over life, communication skills, teamwork skills. Effect size estimates (Eta Squared) were calculated for each of the scales. The strongest effects were for leadership skills and decision-making skills.

Table 2
Repeated Measures ANOVA Results for High School Youth (n=154)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Pretest Mean (sd)</th>
<th>Posttest Mean (sd)</th>
<th>Follow-Up (sd)</th>
<th>F</th>
<th>Eta2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision-Making Skills</td>
<td>3.82 (.72)</td>
<td>4.04 (.67)</td>
<td>3.96 (.65)</td>
<td>7.62*</td>
<td>.073</td>
</tr>
<tr>
<td>Control Over Life</td>
<td>3.48 (.39)</td>
<td>3.54 (.46)</td>
<td>3.52 (.48)</td>
<td>1.19</td>
<td>.012</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>3.26 (.38)</td>
<td>3.33 (.41)</td>
<td>3.29 (.38)</td>
<td>1.89</td>
<td>.019</td>
</tr>
<tr>
<td>Teamwork Skills</td>
<td>3.31 (.49)</td>
<td>3.42 (.52)</td>
<td>3.36 (.47)</td>
<td>2.78</td>
<td>.028</td>
</tr>
<tr>
<td>Leadership Skills</td>
<td>2.99 (.50)</td>
<td>3.34 (.44)</td>
<td>3.26 (.47)</td>
<td>29.30*</td>
<td>.232</td>
</tr>
</tbody>
</table>

*p<.01

Discussion

Consistent with the RITI’s core goal of developing youth leaders, evaluation results show that the program’s strongest effect at both middle and high school levels occurred in the area of leadership skills. Other statistically significant changes included:

1) improved communication skills and greater perceived sense of control over life among middle school participants and
2) increased decision-making skills at the high school level. Data from high school students indicated that improvements in leadership skills persisted at least three months following participation in the program.

Although the measures for perceived sense of control over life, communication skills, and teamwork skills did not differ significantly from the pretest value among high school participants, these three measures did move in the desired direction.

In addition to the quantitative findings presented above, the RITI has amassed a rich store of qualitative data over its nearly twenty year existence. Past participants in the Institutes frequently contact RITI staff to provide them with updates on their lives. For some, RITI became a pivotal experience where, for the first time, they experienced an environment of safety and support. Graduates report viewing themselves as “change-makers” in their community as a result of their RITI experiences. More than half of youth who complete RITI remain involved in some form of community-based activity related to prevention. For example, Teen Institute youth were instrumental in enacting stricter tobacco legislation in Rhode Island. Their action plans advocated for laws regulating second hand smoke in restaurants and on public beaches. RITI graduates helped diffuse significant racial problems that arose at a Rhode Island school. These youth worked with school staff to plan a successful “diversity” project that focused on the celebration of cultures involving all youth in the school. In addition, they initiated a program for negotiating problems before they escalated. One of RITI’s most enduring successes is the founding by Teen Institute youth of a non-profit organization in one of Rhode Island’s largest cities. The organization provides a variety of prevention programs for elementary and middle school youth that include an innovative theatre program and community service. The organization, which is completely youth-led, works closely with the city’s substance abuse prevention task force. Started in 1998, the organization continues to flourish with an average of 32 youth working each year as volunteers in the program.

**Conclusion**

The Rhode Island Teen Institute demonstrates how the positive youth development approach can be practically applied to promote and enhance leadership skills among middle and high school age peer leaders. To fully measure the program’s effectiveness, RITI is working with external evaluators and community sponsors to implement evaluation strategies that measure program impact on the attitudes and behaviors of RITI graduates over long time periods and quantify their anecdotal success experiences. RITI and the communities that sponsor youth are also working to assess the impact that RITI-supported prevention activities have on the norms, practices and policies that promote positive youth development at the local and state level.

**Recommendations for Replication**

Agencies and organizations wishing to replicate the RITI are encouraged to adhere to the following broad parameters in the areas of staffing, setting, and ongoing support.

From its inception, the RITI has operated under the guidance of one full-time Master’s level Coordinator and a part- or full-time program assistant. These staff members are responsible for making all program logistical arrangements, liaising with other agencies and schools to identify program participants, and identifying and securing adult and youth staff for the retreats. Operating costs are minimized by relying on a fully volunteer workforce – youth and adult staff generally choose to assist RITI because of their commitment to youth in their communities and their belief in the program.
Youth staff members play a major role in the implementation of the RITI. Adult staff make presentations during the general sessions and supervise the adventure-based activities, while youth staff take a prominent role during small group processing, alternative activities, and the action planning components. Adult staff are trained as facilitators and sources of support - they empower youth staff to take ownership of the program and its operation. Ideally, adult staff reach a point during implementation where they step back and allow the program to operate under the direction of the youth staff while lending support and guidance, as needed.

RITI staff believe that the setting of the Institute must be a safe, informal camp-like setting - apart from where youth and staff live - to promote a “retreat” atmosphere for the program. This helps promote the sense of physical/psychological safety that is core to the positive youth development approach, helps participants focus on their personal growth, and helps to promote a sense of shared experience and adventure. These conditions would not be possible if, for example, participants and staff returned to their homes and communities each evening.

The long-term legacy of RITI is operationalized through its action planning component, where participants return to their community with a plan for addressing local issues identified through a needs and resource assessment (e.g., tobacco prevention, food assistance programs). Adult support at the local level from a school or supervising agency provides the reinforcement and assistance that youth need to overcome obstacles, identify resources, and plan effectively to meet the goals of their action plans. At the program level, this ongoing support is also facilitated by holding semi-annual or annual reunion events to keep participants connected to the overall RITI and to other program graduates across the state.

Acknowledgements
This work was supported by grants from the State of Rhode Island Department of Mental Health, Retardation and Hospitals, Division of Behavioral Healthcare Services. Opinions expressed in this article are those of the authors and do not necessarily represent the official position or policies of the funders.

References


Can 4-H/FCS Curricula and Program Activities Increase Self-Esteem in At-Risk Youth Ages 8-15?

Walter Barker
4-H Youth Development
University of Nevada Cooperative Extension
Las Vegas, NV
barkerw@unce.unr.edu

Elizabeth Curry
Family & Consumer Sciences (FCS)
Kansas State University
Colby, Kansas
lcurry@oznet.ksu.edu
Can 4-H/FCS Curricula and Program Activities Increase Self-Esteem in At-Risk Youth Ages 8-15?

Walter Barker
University of Nevada Cooperative Extension

Elizabeth Curry
Kansas State University

Abstract: Nationally, 4-H programs develop educational strategies and provide opportunities for youth and adults to work in partnership as they develop life skills. This reported study looks at some curricula that enhance self-esteem in at-risk youth ages 8 to 15. The Coopersmith Self-Esteem Instrument (CSI) measures changes in participants’ self-esteem while the Massachusetts Youth Screening Instrument (MAYSI), used only at the onset of the study, alerted the staff of potential mental/emotional distress and other behavior that might require an immediate response. Girls showed a higher increase in self-esteem over the boys in the reported study.

Introduction

The ultimate goal of the national 4-H program is to develop educational strategies and provide opportunities for youth and adults to work in partnership as they develop life skills including: a positive self-concept, an enquiring mind, concern for the community, healthy interpersonal relationships and sound decision making. The program also includes other goals of helping youth become healthy, self-directing and contributing members of society. Four-H focuses mainly on positive youth development through its programs while incorporating an experiential model of learning. Self-Esteem, self-concepts are critical life skills that lead to positive outcomes. This study examines some of the curricula/program activities that lead to positive youth development, specifically as it relates to self-esteem, and seeks to find out whether these curricula/program activities do improve self-esteem in youth ages 8 to 15.
Literature

Social science literature is filled with research on self-esteem and behavioral changes. Several researchers have reported relationships between low self-esteem and negative or risky behavior in some youth. Kawabata and others (1999), in a study on self-esteem and smoking (risky) behavior among elementary and junior high school students, found a relationship between the two variables. Low self-esteem has been shown to be closely associated with various forms of crime and violent behaviors, and programs that foster self-esteem can contribute to reduced violence (Reasoner, 1994).

The association between self-esteem and youth behaviors has served as rationale for the creation of many self-esteem-enhancing, intervention programs. Subsequently, several researchers have, in recent years, attempted to report on the impact of different types of self-esteem enhancing programs. DiGuido and others (1997), for example, showed successes in the use of life-skill programs to promote positive self-esteem in youth. In her study on school teachers, Miller (1999) discovered an increase in self-esteem and self-confidence among students who were actively involved with an educational technology program. Kemp (1998) reported that while students with very low self-esteem showed an increase after participating in outdoor adventure, students with moderate self-esteem had significant increases and those with high self-esteem showed no or lower levels. Finally, Bijstra and Jackson, (1998) reported that social skills training decreased social anxiety, increased social activity and improved self-esteem in early adolescents.

Methodology

This study was designed to investigate the effects of youth activities on increasing self-esteem. Several control factors were built into the study design, including youth of low economic condition, social conditions with poverty, children spending time alone, children with at least one parent incarcerated, those exposed to alcohol and drug abuse, and youth with poor academic performance. The study was voluntary and each youth participant received life-skill and computer competency training as program activities to improve their self-esteem.

Kansas State 4-H Youth, in partnership with Kansas State Family and Consumer Sciences (FCS), Northwest area and associated agents, Area Juvenile Intake/Assessment Services, parents, local youth organizations and a local internet business, collaborated in the two-year study. The youth were selected from environments that were considered high risk. The purpose was to see if 4-H and FCS curricula and program activities would increase their self-esteem. Thirty (30) youth, males and females, ages 8-15 year olds, selected by the local "Big Brothers/Big Sisters" organization took part in the study. Most of those who took part in the study had at least one parent out of the home and some had at least one parent incarcerated. It was expected that attendance during participation should be 80% or greater.

The Coopersmith Self-Esteem Instrument (CSI) was used to assess the levels of self-esteem, before and at the end of the study, while the Massachusetts Youth Screening Instrument (MAYSI) instrument measured the levels of risk of the selected youth participants at the onset of the study. The MAYSI instrument was used only at the onset to alert the staff of potential mental/emotional distress and other behavior that might require an immediate response (Alcohol/Drug Use, Angry-Irritable, Depressed-Anxious, Somatic Complaints, Suicide Ideation, Thought Disturbance, and Traumatic). This instrument helped to guide instructors in terms of
where to expect potential troubled youth, and when to be ready to reduce tensions arising from those who were identified.

Participants in the study were engaged in two, two-hour workshops from each set of the curriculum used. Parents, where ever possible, were encouraged to take part in each activity although many were unavailable to take part. Participants met once weekly, after school, and as much as necessary out-of-school, during the spring and summer breaks. Each participant maintained a portfolio of the different activities.

The first year of the study (Part one which is reported here) began in Spring 2004 and ended Fall 2005. A set of 4-H curricula was selected from the “National Juried Experiential Learning 4-H Youth Development Curricula,” January 1999, as the foundation for the project. In addition, concepts and activities from other Family and Consumer Sciences curricula that support the curricula were used. Activities were selected from True Colors, Teambuilding, Youth Leadership, Communication (fun skill building), Environmental Science (Junior Master Gardener, 2001), Youth and Adults working together (Moving Ahead), Financial Management (Money $ense for Kids), Anger Management (Rethink Anger), social interaction (area county fairs and day camps) and Understanding Computers (camp Yahoo). Activities were customized with pieces from multiple curricula. Participants, for the first time, were given an opportunity to attend several local county fairs and interact with other 4-H youth. These curricula and program activities were used to develop life skills such as teamwork, temperament clarification, communication, leadership, and sound decision-making and technological skills.

Data collection and analysis included observation, portfolio analysis, interview analysis, and the pre and post evaluation of the CSI instrument to measure participant’s self-esteem. Each participant maintained a portfolio that included summaries of what they did, what they learned, and how they would use what they learned in their home, in school, with their peers, and in the community where they lived. Portfolios and interview analysis were analyzed on the reflective changes which occurred as a result of the program activities. The MAYSII instrument, which they completed only at the onset, was analyzed to identify possible risk behaviors arising from drug and alcohol use, angry/irritable responses, depressed or anxious feeling, somatic complaints, suicide ideation, thought disturbances, or traumatic experiences. The Coopersmith Self-Esteem (CSI) was used before and after the program activities. Both instruments have established validity.

**Results**

General observation showed that youth participants enjoyed the program activities and looked forward to attending. Even where there were some absentee, for sometimes uncontrolled circumstances, those affected by it were eager to seek out information during their absence. Several positive comments, such as “this is awesome,” were frequently heard by youth and adults as well.

Portfolios revealed very little, perhaps because of the level of writing skills exhibited by those taking part. However, interviews with participants, parents and volunteers showed very positive remarks.

The results of the MAYSII evaluation (Table 1) were very useful. It alerted instructors of potential mental/emotional distress and other behavior problems from the caution levels and provided information while working with some participants. It also can be used to develop
ideas of how to provide greater positive environments. Observations reported by some instructors, without their knowledge of the purpose and results of the findings of the MAYSII instrument, corroborated the value of the instrument.

**Table 1**
Results of the MAYSII Evaluation

<table>
<thead>
<tr>
<th>INDIVIDUALS</th>
<th>ALCOHOL/DIAGNOSIS USE</th>
<th>ANGRY/IRRITABLE</th>
<th>DEPRESSED/ANXIOUS</th>
<th>SOMATIC COMPLAINTS</th>
<th>SUICIDE IDEATION</th>
<th>THOUGHT DISTURBED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#82 (M, H)</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#67 (M, H)</td>
<td>0</td>
<td>0</td>
<td>3*</td>
<td>0</td>
<td>0</td>
<td>1*</td>
</tr>
<tr>
<td>#63 (M, H)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#37 (M, W)</td>
<td>0</td>
<td>8*</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#76 (M, W)</td>
<td>0</td>
<td>8</td>
<td>8*</td>
<td>6*</td>
<td>4*</td>
<td>3*</td>
</tr>
<tr>
<td>#1 (M, H)</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#29 (M, W)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#28 (M, W)</td>
<td>0</td>
<td>9*</td>
<td>7*</td>
<td>5*</td>
<td>5*</td>
<td>3*</td>
</tr>
<tr>
<td>#B (M, W)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#A (F, W)</td>
<td>0</td>
<td>8*</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>#93 (F, W)</td>
<td>0</td>
<td>7*</td>
<td>5*</td>
<td>3</td>
<td>5*</td>
<td>0</td>
</tr>
<tr>
<td>#97 (F, W)</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#86 (F, W)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#32 (F, W)</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#21 (F, W)</td>
<td>0</td>
<td>8*</td>
<td>7*</td>
<td>5*</td>
<td>4*</td>
<td>0</td>
</tr>
<tr>
<td>#5 (F, W)</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#31 (F, B)</td>
<td>0</td>
<td>6*</td>
<td>5*</td>
<td>6*</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>#12 (F, W)</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#95 (F, W)</td>
<td>0</td>
<td>6*</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>#94 (F, W)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Caution: to alert the staff of potential mental/emotional distress and other behavior of participants that might require an immediate response
The results of the CSI (Tables 2 and 3) showed increases in self-esteem in those participating in the study, in both male and females. Girls, however, showed a higher increase in self-esteem over the boys. Overall, eighty percent (80%) of the total participants showed an increase in self-esteem.

### Table 2
Results of Self-Esteem (Pre-test/post-test scores) of Males in the study

<table>
<thead>
<tr>
<th>INDIVIDUAL (Males)</th>
<th>PRE-TEST</th>
<th>POST TEST</th>
<th>CHANGE / % CHANGE</th>
<th>CHRONBA CH's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>16</td>
<td>18</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>#82</td>
<td>21</td>
<td>22</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>#63</td>
<td>26</td>
<td>26</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#67</td>
<td>37</td>
<td>39</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>#37</td>
<td>36</td>
<td>38</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>#26</td>
<td>28</td>
<td>29</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>#76</td>
<td>16</td>
<td>18</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>#29</td>
<td>29</td>
<td>31</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>#28</td>
<td>15</td>
<td>18</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

### Table 3
Results of Self-Esteem (Pre-test/post-test scores) of Females in the study

<table>
<thead>
<tr>
<th>INDIVIDUAL (Females)</th>
<th>PRE-TEST</th>
<th>POST TEST</th>
<th>CHANGE / % CHANGE</th>
<th>CHRONBA Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>#93</td>
<td>26</td>
<td>29</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>#94</td>
<td>43</td>
<td>43</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#31</td>
<td>20</td>
<td>23</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>#32</td>
<td>44</td>
<td>45</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>#95</td>
<td>42</td>
<td>43</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>#12</td>
<td>31</td>
<td>31</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#8</td>
<td>39</td>
<td>40</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>#86</td>
<td>38</td>
<td>39</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>#97</td>
<td>37</td>
<td>37</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#5</td>
<td>35</td>
<td>35</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>#21</td>
<td>25</td>
<td>26</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Implications:

Based on the results, it appears that certain 4-H and FCS curricula, delivered in certain environments and to youth between ages 8 and 15 years of age does contribute to an increase of self-esteem in youth exposed to risky environments. There should be a caution, however, that this is a preliminary study, and continued replications of these results can help to validate the effect of certain 4-H and FCS curricula, along with activities on increasing the self-esteem in youth.

The MAYSI instrument is used extensively in juvenile rehabilitation systems and is used to classify and place youth into behavioral categories (Stewart & Trupin, 2003). The instrument is not a diagnostic tool, rather a risk assessment of estimating a youth’s likelihood of displaying risky behaviors when exposed in program activities. It provides a way to anticipate the behavioral change, and to provide an environment to offset the behavior. The findings from this study provide support for the importance of identifying the likelihood of risky behaviors with youth early in a program. When youth professionals identify risk behaviors such as having a parent incarcerated or exposure to alcohol and drug abuse, they could provide these youth with additional assistance that could help them achieve more positive outcomes and increase their life skill development. In addition, attention could be focused on positive approaches to learning rather than an emphasis on consequences, placement and intervention, increasing again the likelihood of positive behavioral change and outcomes. Of course, caution must be exercised not to share such assessments with other youth engaged in the learning environment. In addition, there is a need for additional research of the MAYSI instrument to see if there are differences among race/ethnicity and gender.

Based on the findings of this study, it also appears that the activities included in these type of curricula help improve the reported self-esteem of youth when they get involved in such programs. This seems to be particularly true for females, which reinforces the importance of such programs for young women, not just focusing primarily on young men. When youth do get involved, these programs provide opportunities to develop life skills beyond what ever environment they experience.

Further research is encouraged. Examples for potential studies include Would Self-Esteem decline over time with non-continuance of the use of 4-H & FCS curricula and program activities? And would continuous use of 4-H & FCS Curricula & Program Activities continuously increase Self-Esteem?

References


Coopersmith, S., Self-Esteem Inventories (S.E.I) *Mind Garden Inc. www.mindgarden.com*


Extension Staffing Models to Serve 4-H Clientele in Changing Times

Donna R. Gillespie
University of Idaho Extension
Rupert, ID
donna@uidaho.edu

Cindy A. Kinder
University of Idaho Extension
Gooding, ID
ckinder@uidaho.edu
Extension Staffing Models to Serve 4-H Clientele in Changing Times

Donna R. Gillespie and Cindy A. Kinder
University of Idaho Extension

Abstract: In response to budget cuts in 2002, 4-H staffing models were restructured. The response by University of Idaho Extension was intended to continue meeting the needs of Idaho’s citizens with fewer UI Extension faculty. This staffing reorganization led to the formation of the District III 4-H Team who united to bring stronger 4-H programs to south central Idaho and expand programs to underserved audiences.

Information from surveys and interviews over the past seven years reflects the effectiveness, challenges and successes of the District III 4-H Team. In Making the Best Better: 4-H Staffing Patterns and Trends in the Largest Professional Network in the Nation (2007), author Kirk A. Astroth notes a nationwide change in 4-H leadership at the county level from 4-H faculty to program assistants or coordinators. The information gathered in our research may help other states determine staffing models to meet the needs of clientele in these changing times.

Introduction

In response to budget cuts in 2002, University of Idaho (UI) Extension 4-H programming in District III was restructured. The restructuring reflected recommendations made by UI Extension Advisory Board members from around the state as well as other 4-H Youth Development stakeholders, including volunteer leaders, Extension Educators and key community leaders. This proactive response by UI Extension was designed to find new ways to continue serving the public as effectively as possible with fewer UI faculty and lead to the formation of the District III 4-H Team. The Team is comprised of eight County 4-H Program Coordinators and two Area 4-H/Youth Extension Educators who united in an effort to bring stronger 4-H programs to south central Idaho (District III) and expand programs to underserved audiences.
How was this model different than before? How could less staff have greater impact and expand audiences? Do statistical results show increased numbers?

Staffing models such as the District III 4-H Team are not new to Extension, although the names and terminology are changed to reflect the region or program being defined. There has been a nationwide change in 4-H leadership from 4-H faculty to program assistants or coordinators at the county level (Astroth, 2007). Clustering has been in existence in Minnesota since 1987 (Hutchins, 1992). Minnesota Extension adopted a regional and county delivery model in 2004 because of the fiscal crisis which affected all state agencies, educational institutions and local governments (Morse, 2006). In Indiana paid paraprofessionals were incorporated into the county 4-H staffing model as an alternative to the reduction in the number of professional youth agent positions (Ritchie & Stitsworth, 1987). As with all youth development programs, challenges and opportunities continue. Extension has continued to evolve, adapt and meet these challenges.

### Methodology

The District III 4-H Team is made up of eight neighboring County 4-H Program Coordinators who are responsible for the daily operation and support of local programming, including working with County 4-H councils, livestock committees, data collection and entry, county youth camps, county fairs and other organizational duties. Two Area 4-H Extension Educators serve the Team by providing programming, professional development, and guidance for policy implementation to the County 4-H Program Coordinators/Assistants.

Team meetings are held monthly, from September through April, to address the District’s needs for program support and provide training to reach the goals outlined in the University of Idaho 4-H Youth Development Statewide Strategic Plan. In addition, Team members are encouraged to attend other professional development opportunities such as statewide 4-H trainings and the Idaho 4-H Leaders Forum. Team meeting topics have included team building, understanding and using the logic model, animal quality assurance, personal productivity, diversity training, teen activities, effective meetings, judge exchanges, skill-a-thons, and many more. The Team also addresses questions and concerns about county leader associations, livestock sale committees and advisory councils.

In 2003, after one year of operation, a survey was conducted with Team members to evaluate the effectiveness of the new staffing model. A survey of District III 4-H volunteers, members and families was conducted in 2005 to determine if after three years a strong Team effort had actually improved district-wide programming for area clientele. In addition, interviews were conducted in 2007 with all county Extension faculty and staff to evaluate the changes in county operations and the level of support from non-4-H faculty, including budget and time concerns of county chairs or county Extension Directors.

### Findings

**Team Member Responses:**

Results from the 2003 survey with Team members indicated that they rank monthly staff meetings as a positive change and extremely valuable. They also felt their county 4-H programs were improving because of the Team effort. Respective staff members are more knowledgeable about 4-H issues, and consequently better able to handle them. Team members
also appreciate the support for district-wide activities and the consistency of information provided by the Area 4-H Extension Educators.

Team members were asked several questions that compared their work before and after the formation of the Team. The coordinators showed an increase in partnerships with other coordinators on district activities and the majority felt more confident in the activities they conducted after the Team effort began.

All Team members attended 100% of the monthly meetings held the first year; which is an indication that they are educational and a worthwhile use of their time. In addition, all Team members also shared information gained with other faculty and staff at their respective county meetings, and all reported that their office perceived the monthly meetings as worthwhile.

Other comments from the 2003 survey:

- The District Team keeps us up-to-date with changes in the state and how they affect the programs in our counties.
- I have more freedom in making decisions concerning our county 4-H program.
- When I have a question I feel I can throw it out to the Team and get feedback. Then I can proceed without so much trial and error. My program is more consistent with other counties.
- I feel the volunteers can ask me questions and I will find the answer. Confidence in me as a resource has improved.
- I am able to get other ideas, forms or information quickly and it saves time in having to develop something that has already been done.
- No one has ever asked me in my 15 years what I need to know or learn to do a better job. The Area 4-H Extension Educators are providing what we want and need. Thanks!

**Clientele Responses:**
The 2005 survey asked District III 4-H volunteers, members, and families to designate which county and district councils and boards they were active in and to evaluate their leadership. A list of 22 District III activities was also provided and participants were asked to indicate if they attended the activity, if they did not attend but received the information and from what source they received it. Information about how district-wide activities encourage families to stay involved and how these activities benefited youth in the community was also collected. Participants were encouraged to rate the response they received when asking questions about 4-H.

The surveys returned were 60% from volunteer leaders, 30% parents and 10% youth. Respondents stated they were active in District III 4-H Leaders Council, Horse and Pony Council, Central Idaho 4-H Camp Board, county leader councils, county 4-H advisory boards, teen councils and/or market animal sale committees. Seventy seven percent indicated they had seen a positive change in leadership of these councils and boards due to the programming efforts of the Team.

The 2005 surveys also showed that 4-H families were receiving information from several sources including County 4-H Program Coordinators, Area 4-H Extension Educators, other UI Extension Educators and county office secretaries. When asked how they would rate the responses they received to their questions, 85% said they received a clear answer, and 15% indicated the answer they received may have been unclear but the source knew where to go to
find the answer. Eventually, 100% of the participants received clear, accurate information in response to their 4-H questions. No one indicated that they were unable to find help or that their questions went unanswered.

Other comments from the 2005 survey:
- District-wide activities have made me a better leader and have helped spur interest in members.
- The positive change in leadership has made me more involved, the county more diverse and all more active and involved.
- The district effort involves more kids in great activities.
- There are more opportunities through strong communication.
- I have little experience in 4-H but with the great organization – and I do mean “organized” I am able to make a quick call and make sure I am on the proper track and aligned with 4-H guidelines.
- The leadership effort keeps me encouraged to stick with the 4-H program as a volunteer and parent of 4-H.
- Our county is kept informed on what is going on with other counties in District III.
- With more communication there are more programs and better run programs.
- I have seen positive reinforcement, leadership and knowledge and more scholarship opportunities.

**County Extension Office Responses:**
In 2007, the two Area 4-H Extension Educators visited each of the eight county Extension offices included in the Team and met with county chairs, other Educators with 4-H responsibilities and the 4-H County Coordinators/Assistants. They felt this was the next step for the Team and wanted to make sure the needs of the county and constituents were being met. The meeting format included asking participants to:
- Provide a brief update of what the Team has accomplished in the past four years
- Assess your county needs and how the Team fits into them
- Discuss the goals set by the Team and how we are addressing them
- Review Team expectations. What does the Team do for your county? Are we meeting your needs?

Results of the interviews proved to be as varied as the counties in which they were conducted. County chairs expressed both support of the program and caution about time spent out of the county, compensatory time and travel budget issues. Team members’ comments seemed to vary based on the support they were receiving from their county and their length of service.

**Other comments from the 2007 survey:**
- A Team member expressed concerns over “pressure” to participate in district activities and their county chair asked about professional development offered at the Team meetings.
- A county chair indicated that he was “protective” of the hours the Team member worked out of the county since the county supported part of her salary. The Team member hadn’t done a good job explaining the Team concept to the rest of the faculty and staff and didn’t appear comfortable asking for help from the Area 4-H Extension Educators.
The county chair said she is a “total advocate” of the Team approach but felt the “professionalism” of the Team members is not as well supported from other faculty as it should be. The Team member said the district activities planned by the Team are “the greatest” and saved her time and effort while providing more opportunities for her 4-H families.

The county chair (oversees two counties) was a member of the Team and both her county Team members felt the professional development opportunities were very helpful. They have both been on staff several years and commented that they remember how little communication there was before the Team was formed.

A Team member indicated that when she was first employed the Team played an important part and she learned a lot, but not as much now. She did also indicate that the professional development offered at the meetings was always helpful. The county chair expressed concern about compensatory time issues and too much involvement in district activities. He also felt the Area 4-H Extension Educators, who are tenure-track faculty, were taking too much credit for the work the county staff did.

A county chair reported he was very satisfied with the Team because of the reports he got back from his Team member. The Team member said that the district activities supported by the Team added value to her county program.

The Team member felt the Team was more of a time saver than extra work and wasn’t comfortable asking for help from other counties before the Team was formed, but shares information all the time now. The county chair was also a member of the Team, she supports the concept and pointed out that other Extension faculty were now working in district teams.

**Conclusion**

A perceived but undocumented shift in 4-H staffing has been present since 1990 (Astroth, 2007). Concerns of the complicated relationships between traditional 4-H Extension Educators and County 4-H Program Coordinators and the programs they can maintain are ongoing. One thing for certain is that 4-H staffing models are adapting to meet budget restrictions, personnel availability, and the continuing changes in stakeholder demands. With restructuring, Minnesota Extension was able to make shifts that lead to greater program impacts and greater access to specialized field staff (Morse, 2006). Astroth also noted that turnover is high in youth work so organizations struggle to retain workers, increase satisfaction, and reduce burnout (Astroth, 2007).

The District III 4-H Team is a unique group of Extension Educators, County 4-H Program Coordinators and County 4-H Program Assistants who have met these challenges head on to deliver quality youth development programs to area families. Although the group is not without challenges, including out of county travel, varying professional development needs, differences in personalities, learning styles and most importantly county support, it has continued to function since 2002. The most important lessons learned by the Area 4-H Extension Educators who guide this group are to maintain communication at all levels, including non-4-H faculty and county chairs and to continue to encourage active participation by all Team members to insure adequate professional development opportunities and job satisfaction.
References


Evaluating Youth Programs: An Overview of Practitioner Led Evaluations

Mat D. Duerden  
Dept. of Recreation, Park & Tourism Sciences  
Texas A&M University  
College Station, TX  
duerden@tamu.edu

Peter A. Witt  
Dept. of Recreation, Park & Tourism Sciences  
Texas A&M University  
College Station, TX
Evaluating Youth Programs:
An Overview of Practitioner Led Evaluations

Mat D. Duerden and Peter A. Witt
Texas A&M University

Abstract: Youth programs are prime contexts for the intentional facilitation of positive development. However, not all youth programs achieve positive outcomes equally. In order to promote the identification and dissemination of the characteristics and processes of effective youth programs, increased focus needs to be given to program evaluation. This article briefly reviews the main tenets of evaluation science in order to provide practitioners a roadmap for conducting their own evaluations. This includes an overview of different types of evaluations and key issues to consider when constructing an evaluation strategy such as targeting outcomes and developing program logic models.

Introduction

Programming is a central component of positive youth development (PYD; Whitlock & Hamilton, 2001, as cited in Small & Memmo, 2004). Youth programs are one of the key contexts in which adolescents can receive the necessary supports, opportunities, and services that they need to develop into fully functioning adults (Furstenberg, Elder, Cook, & Eccles, 2000; Whitlock, 2004). This focus on quality programming and positive outcomes requires a stronger emphasis on program evaluation (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002). Quality evaluations can provide important information relative to program improvement, identification and dissemination of best practices, and empirical support for current program efforts. Drawing from the work of Rossi, Lipsey and Freeman (2004) and others, this paper presents an overview of the field of evaluation science and offers suggestions for how practitioners can evaluate their own programs.
Purpose of Evaluations

Evaluations produce information that can be of use to a variety of stakeholders (Rossi, et al., 2004). Practitioners gain information regarding program implementation, outcomes, and insights that can be utilized as part of a comprehensive program improvement model. Program funders can use evaluation findings to make important decisions regarding whether to fund or continue to fund programs. Evaluation findings can be used by policy makers to judge the effectiveness of an initiative and inform future policy decisions. Lastly, potential and current program participants can use evaluation findings to inform their decisions pertaining to participation.

Conducting an Evaluation

Initial Steps

The foundational steps to conducting an evaluation include identifying the main objectives of the project (e.g., program improvement, accountability, knowledge generation, political purposes or public relations); the questions that need to be answered; and the goals and targeted outcomes of the program (Rossi, et al., 2004). A clear understanding of program objectives is especially important since this knowledge facilitates an assessment of the program’s theoretical foundation which in turn helps determine the most appropriate type of evaluation to conduct.

The logic behind why a program is expected to produce targeted outcomes is known as program theory (Rossi, et al., 2004) and it usually exists in one of two forms. If you have a clear understanding of what a program does and why it works your theory is articulated but if you struggle to explain the processes and impact of their program the theory is only implied (Weiss, 1997). In the case of a program with only an implied theory, practitioners need to develop a more articulated theory before attempting to conduct an evaluation (Rossi, et al.). Developing a logic model for the program represents one approach for both identifying the outcomes and articulating theory. This is a topic that has received considerable attention elsewhere and readers are encouraged to refer to existing logic model resources (Baldwin, Caldwell, & Witt, 2005; McLaughlin & Jordan, 1999; Renger & Titcomb, 2002) for further information on this topic.

Types of Evaluation Strategies

Once practitioners have identified/clarified program objectives and theory, they are ready to select an appropriate evaluation strategy. The following sections will outline a number of evaluation strategies as described by Rossi, et al. (2004). The strategies build sequentially, with each providing information necessary to the implementation of the next.

Needs assessment. The first type of evaluation strategy is the needs assessment, which involves, as the name implies, assessing the actual need for the program. For example, if the program in question is a teen pregnancy prevention program, a needs assessment would seek to establish the prevalence of pregnant teens and potentially at-risk populations within the program’s service area.

Program theory assessment. Program theory assessments involve developing a working, theoretical model of the program. An effective assessment of this nature takes into consideration each separate aspect of the program theory, namely the impact theory, service utilization plan, and organizational plan (Rossi, et al., 2004). The impact theory justifies why the
program should produce its targeted outcomes. The service utilization plan describes how the program will provide key services to its targeted population. Lastly, the organizational plan details how available program resources will be organized to accomplish tasks prescribed in the service utilization plan.

**Program process assessment.** This type of assessment is usually focused on answering questions regarding whether or not services are being provided to the target population and how well the program’s service delivery processes match program design expectations (Rossi, et al., 2004). The two main types of program process assessment are continuous program monitoring and implementation evaluations (Rossi, et al.). The first of these, program monitoring, involves the ongoing assessment of key indicators (e.g., number of participants served per week) related to program processes.

The second, implementation evaluations, consists of assessing what is usually referred to as implementation integrity, which is simply the degree to which a program is run as originally planned. Implementation integrity consists of the following components: program adherence, dosage, quality of delivery, and participant satisfaction (Dane & Schneider, 1998). Program adherence measures if the program is implemented as planned; dosage refers to the amount of program services each participant receives; quality of delivery deals with the qualitative nature of program delivery; and participant satisfaction is a subjective measure of how satisfied individuals are with the program’s services. Information needs to be gathered in each of these domains in order to effectively assess implementation integrity.

Implementation evaluations allow practitioners to better understand the processes that produce program outcomes (Chen, 1998). They also help guard against attributing outcomes, or lack thereof, to a program when in fact the outcomes were caused by some external, unaccounted for factor (Dobson & Cook, 1980). Such a situation arises due to implementation failure, which signifies that a program did not produce its desired outcomes, not because of a faulty conceptualization and design (i.e., theory failure) but because it was not implemented correctly (Rossi, et al., 2004).

Implementation findings help practitioners to describe the necessary program components and degree of program integrity needed to produce outcomes, thus enabling more successful replications of the intervention (Durlak, 1998). Implementation data also enables practitioners to more accurately determine key components of the program responsible for observed changes (Durlak, 1998). Implementation evaluations can produce applicable information that can potentially improve program performance and effectiveness.

**Impact assessments.** Once the program theory has been articulated and a strategy is developed to assess program implementation, evaluators can turn their focus to measuring outcomes. For this step, the initial development of a logic model will be very useful because targeted outcomes will have already been identified. The focus of impact assessment should be on measuring those outcomes for which the program will have the most immediate impact. For example, while an overarching goal of an after-school program may be to help students enter college, the program’s more immediate impact will be better assessed by an assessment of homework completion rates.

**Data Collection**
After selecting the type of evaluation, an articulated program theory can provide a blue print to identify what type of information should be gathered. Practitioner’s knowledge regarding their
While the temptation to answer as many questions as possible can be strong, practitioners need to balance the desire for information with a clear assessment of how much times participants will actually be willing to spend completing a survey. Decisions related to the mode of data collection are also important. Survey research has traditionally relied on pen and paper questionnaires but the availability of low to no cost online survey methodologies is increasing the popularity of this option.

**Interpretation and Implementation of Findings**

Although the thought of conducting statistical analyses may cause some trepidation, a wealth of knowledge can be gained through simple descriptive statistics (e.g., mean, standard deviations, etc.). While more complicated analyses can also provide important answers, important and applicable information can be gained from evaluation results without relying on complex statistical procedures. In fact, practitioners may face more difficulties implementing than interpreting their findings. A plan needs to be put in place before the evaluation commences to promote the eventual application of findings. Without such a piece, even the best crafted evaluation’s impact will be greatly diluted.

**Summary**

Although providing youth with opportunities to participate in programs is a worthwhile goal, considerable time, money, and effort can be wasted on ineffective programs. Practitioners should thus be engaged in the evaluation of programs. The guidelines presented in this article should help make this process more accessible and serve as a starting point for future, practitioner driven, evaluations. The healthy development of youth is at stake and this fact alone makes it essential that high quality program evaluations become a hallmark of PYD. The better understanding we have of PYD best practices and processes, the more effective programs can be implemented and more youths’ lives can be positively impacted.

**References**


