Editor’s Comments:

I am pleased to present the summer issue of *Journal of Youth Development ~ Bridging Research and Practice*. This issue examines Youth Sports Programs, Service Learning, After-School Partnerships and programming for Youth with Special Health Care Needs. Readers will also appreciate the discussion of pretest-posttest methodologies and a review of the latest educational resources. This is the final complimentary copy of our Journal. Non NAE4-HA members may visit our website to subscribe for an individual rate of $25 or institutional rate of $100 per six logins.

The support, vision and inspiration of the journal’s editorial board is greatly appreciated as we continue to progress with this new venture.

Editorial Board Members

Mary Arnold  
Oregon State University

Kirk Astroth  
Montana State University

Dale Blyth  
University of Minnesota

Lynne Borden  
University of Arizona

Ken Culp  
University of Kentucky

Patricia Dawson  
Oregon State University

Joseph L. Donaldson  
University of Tennessee Extension

Michelle Alberti Gambone  
Youth Development Strategies, Inc.

Patricia Dawson, Editor  
patricia.dawson@oregonstate.edu

Suzanne LeMenestrel, Chair  
National 4-H Headquarters  
CSREES, USDA

Richard Lerner  
Tufts University

Heather Johnston Nicholson  
Girls Incorporated Organization

Barbara Sugland  
Center for Applied Research & Technical Assistance

Todd Williams  
Texas A & M

Nicole Yohalem  
Forum for Youth Investment

Virginia Bourdeau  
NAE4-HA Finance Liaison  
Oregon State University
Contents

Feature Articles

Sports and Youth Development Programs: Theoretical and Practical Implication of Early Adolescent Participation in Multiple Instances of Structured Out-of-School (OST) Activity [Article 0701FA001]
Zarrett, Nicole; Peltz, Jack; Fay, Kristen; Li, Yibing; Lerner, Richard M.; Lerner, Jacqueline V.
Among today's youth, the most ubiquitous OST activity is sports. However, many of these youth are also participating in at least one other OST activity along with their participation in sports. Using longitudinal data from 1,622 youth (56.8% female) from the first three waves (Grades 5, 6, and 7) of the 4-H Study of Positive Youth Development (PYD), we employed a pattern-centered approach to assess differences in adolescent functioning depending on what types of OST activities youth were participating in along with their sports participation.

Our findings suggest that youth benefit from their sports participation differently depending on what other types of additional activities they participate in during their out-of-school time. In particular, a participation pattern characterized by high participation in sports and Youth Development Programs was found to be the most effective activity profile for promoting PYD and preventing youth problems. Implications of these findings in research and practice are discussed.

Effects of Coach and Parent Training on Performance Anxiety in Young Athletes: A Systemic Approach [Article 0701FA002]
Smoll, Frank L.; Smith, Ronald E.; Cumming, Sean P.
Coaches and parents play a major role in determining the consequences of sport participation in young athletes. This study focuses on the assessment of a systemic, empirically inspired intervention directed at coaches and parents. Parallel workshops derived in part from achievement goal theory were presented to the coaches and parents of 9 to 15 year old boys and girls participating in community-based basketball programs, and their effects were compared with a matched control condition. Multilevel analyses revealed significant Time x Condition interactions on all three subscales of the Sport Anxiety Scale-2 (SAS-2) and on a total anxiety score. Athletes in the intervention condition decreased in cognitive and somatic anxiety scores on the SAS-2, whereas athletes in the control condition exhibited increases in cognitive and somatic anxiety. Results suggest the potential efficacy of brief, economical interventions in enhancing the psychosocial impact of the youth sport environment.

Emerging Adulthood: Theory, Assessment and Application [Article 0701FA003]
Reifman, Alan; Arnett, Jeffrey Jensen; Colwell, Malinda J.
The later attainment of traditional adult roles by today's youth compared to their counterparts of earlier decades has garnered considerable scholarly and public attention. This article
describes a recent concept related to the transition to adulthood, known as emerging adulthood, including a discussion of relevant theory and historical background research. We then introduce a measurement instrument, the Inventory of the Dimensions of Emerging Adulthood (IDEA), which assesses identification with transition-to-adulthood themes. Results of initial scale-development studies were largely supportive of the measure’s reliability and validity. Respondents in their 20s identified with relevant themes to a greater extent than did their younger and older counterparts. Marital status differences on the IDEA emerged, but college and non-college respondents were largely similar. Finally, we provide suggestions for how parent educators can make use of the IDEA instrument in advising parents and their emerging adult children.

Service-Learning and Leadership Life Skills: An Experimental Study [Article 0701FA004]
Locke, B. Darlene; Boyd, Barry; Howard, Jeff W.; Fraze, Steven
This study examined the effect of service activities on the development of leadership life skills in youth and (queried) if having a reflection component as part of the activity makes a difference. Additionally, the study examined the impact of selected demographics including age, gender, type of service completed monthly and 4-H membership on the development of leadership life skills. Participants in the study were from two samples. One group represented the El Paso National Youth Service Day, the other represented the District 11 4-H Leadership Lab in Branham, Texas. Participants were randomly assigned to a control (no reflection) or treatment (with reflection) group. Youth participants self rated their leadership life skills using a 33-question post-test only questionnaire. Demographics were reported in nine additional questions.

The major findings of the study are as follows: 1) Overall, the participants reported their perceived leadership life skills to be high in four of the five subscales; 2) The inclusion of a reflection component did not significantly affect perceived leadership life skills; 3) Type of service, whether direct or indirect, had a significant impact on perceived leadership life skills; 4) 4-H membership had a significant impact on the Personal Leadership Development subscale.

Helping Schools: Youth Development as a Form of Supplemental Education [Article 0701FA005]
Carroll, Jan B.; Goodwin, Jeff; Oliver, Melissa
This study measured the impact of 4-H Youth Development on Colorado’s youth. Active youth were compared to those who did not participate in out-of-school activities. Data were collected from 5th, 7th, and 9th grade students. Results of the study confirm active students, including 4-H Youth Development members, were less likely to engage in at-risk behaviors. 4-H Youth Development can function as a form of supplemental education, contributing to academic, civic, and social success of young people.

Program Articles

The Promise of Autonomy Supportive Contexts to Promote Youth Participatory Competence [Article 0701PA001]
Cargo, Margaret; Nedcheva, Tatiana; Nguyen, Nguyet; De La Durantaye, Michel
A municipal youth citizenship initiative was implemented with the aim of providing adolescents with autonomy supportive contexts to plan and implement activities that were meaningful to youth and contributed to the collective good. The study purpose was to assess whether autonomy support, operationalized as instrumental practitioner support, influenced youth perceptions of participatory group competence beyond individual level factors. Youth
participated in groups of 8 to 20 peers with practitioners facilitating youth participation in collective decision-making, planning and activity implementation. Cross-sectional surveys were completed by 79 of 113 eligible youth participants actively involved in the citizenship initiative implemented during the 2003-04 school year. Practitioner support was significantly related to participatory group competence, beyond perceived self-efficacy and age. Study findings suggest that there may be some merit to the implementation of youth citizenship initiatives that create autonomy supportive contexts and allow youth the opportunity to develop their participatory competence. Experiences such as this may allow young people to flourish as individuals and citizens and thus realize their full potential.

**NikeGO: a Corporate-Sponsored Program to Increase Physical Activity and Foster Youth Development [Article 0701PA002]**

*Martin, Sarah Levin; Martin, Maurice; White, Molly*

NikeGO was initiated in 2002 by the Nike US Community Affairs Division to address a growing need: to provide youth a safe environment in which to be physically active. Nike collaborated with several organizations across the country and offered an array of programs to foster developmentally appropriate physical activity among youth through their influencers (e.g., teachers, coaches). These programs reached youth in underserved areas ranging from urban inner cities to rural Native lands through various channels and settings including schools, Boys and Girls Clubs, YMCA’s, youth sports organizations, and others. Objective and subjective measures were used to determine the reach of the program, the dose of physical activity, the “fun” level of the activities, changes in youths’ self-esteem and self-concept, and the likelihood of continued participation. Many older youth gained leadership skills in the process. Overall, the programs have been successful in reaching “hard to reach” youth and engaging them in the positive, developmentally sensitive, health behaviors.

**A Person-Centered, Asset-Based Community Development Framework for Youth with Special Health Care Needs/Disabilities in Transition to Adulthood [Article 0701PA003]**

*Boyd, Heather H.; Swedeen, Beth*

In the United States, 12.8 percent of children under 18 have special health care needs. Ninety percent of youth in America with special health care needs and/or disabilities can now be expected to reach adulthood. Youth with special health care needs and/or disabilities are less likely to experience successful transition to adulthood in comparison to youth without special health care needs. This article presents a person-centered, asset-based community development approach that assisted youth in achieving transition and inclusion-oriented outcomes. Examples are drawn from a Healthy & Ready to Work demonstration project in Wisconsin. At the center of our approach to transition were community connectors -- adults who knew the personal interests and assets of youth and who found opportunities in the community that matched individual youth interests. Implications for youth development professionals as successful community connectors are described.

**Cyber Town at the Woodrow Wilson Center [Article 0701PA004]**

*Dennis, Lisa M.*

Cyber Town is a technology based after-school program that concentrates on reading and technology literacy. The program provides at-risk minority youth a safe environment where they learn skills that will make them competitive in the digital age. Qualitative and quantitative data are collected on all after-school program participants enabling program staff with the ability to individualize technology aided instruction. Youth are instructed at appropriate instructional levels these levels are determined through reading level assessment software programs, teacher recommendations, and reading scores. The program provides a model others can utilize
in operating similar computer based programs. It illustrates that when working with youth, educators may discover deeper problems than originally anticipated and adaptations must be made to meet the needs of those young people.

**Research and Evaluation Strategies**

**Assessing Program Outcomes: Rationale and Benefits of Posttest-then-Retrospective-Pretest Designs** [Article 0701RS001]

*Marshall, James P.; Higginbotham, Brian J.; Harris, Victor W.; Lee, Thomas R.*

The importance of program evaluation for decision making, accountability, and sustainability is examined in this article. Pros and cons of traditional pretest-posttest and posttest-then-retrospective-pretest methodologies are discussed. A case study of Utah’s 4-H mentoring program using a posttest-then-retrospective-pretest design is presented. Furthermore, it is argued that the posttest-then-retrospective-pretest design is a valid, efficient, and cost-effective way to assess program outcomes and impacts.

**4-H & FFA Livestock Projects: Life Skills Gained and Knowledge Learned** [Article 0701RS002]

*Holmgren, Lyle N.; Reid, Chad R.*

Junior Livestock shows are one of the most popular 4-H and FFA projects in Utah. Thousands of youth participate in these shows from every county in Utah. County extension agents and FFA advisors spend much time with livestock committees, leaders, parents, and youth engaged in livestock shows. Can public funds spent on salaries be justified for county 4-H extension agents and FFA advisors who work with junior livestock shows? To help answer this question, 413 youth involved in livestock shows in Utah were surveyed in 2001. Youth were asked to share skills learned from their livestock projects. Value statements along with specific content skills were measured in the survey. The results indicate that from their 4-H and FFA projects, youth learned to accept responsibility, follow instructions, gain self-confidence, follow instructions, “do the right thing” as well as a variety of other values and content skills.

**Resource Review**

**College 101: Strategies for First Year Success – A Program for High School Seniors** [Article 0701RR001]

*Raison, Brian*

Making the transition from high school to college can be one of the biggest challenges in life. The first year dropout rate stands at 26% nationally. Adolescent decision-making literature suggests that youths can achieve greater success and reduce negative consequences during their first year of college if they 1) increase knowledge of new social scene and academic protocols, and 2) work through a conjectural decision-making process prior to actual encounters.

This program presents key points high school seniors “must know” in advance of their arrival on campus. It is research-based with first-hand advice from real college students including on-the-street video interviews. Topics cover: Choosing Classes, Test Strategies, Social Scene Changes, Budgeting, Roommates, Safety, Talking with Professors, Time Management, and more. The program is designed for any student planning to attend any 2 or 4-year college. Youth professionals can teach this loosely-scripted 1 or 2-hour PowerPoint-based seminar “out of the box.” The $159 curriculum package is free to the first 250 responders.
Sports and Youth Development Programs: Theoretical and Practical Implication of Early Adolescent Participation in Multiple Instances of Structured Out-of-School (OST) Activity

Nicole Zarrett  
Institute for Applied Research in Youth Development  
Tufts University  
Medford, MA  
nicole.zarrett@tufts.edu

Jack Peltz  
Institute for Applied Research in Youth Development  
Tufts University  
jack.merless@tufts.edu

Kristen Fay  
Institute for Applied Research in Youth Development  
Tufts University  
kristen.e.fay@tufts.edu

Yibing Li  
Institute for Applied Research in Youth Development  
Tufts University  
yibing.li@tufts.edu

Jacqueline V. Lerner  
Institute for Applied Research in Youth Development  
Boston College Lynch School of Education  
lernerj@bc.edu

Richard M. Lerner  
Institute for Applied Research in Youth Development  
Tufts University  
richard.lerner@tufts.edu
Sports and Youth Development Programs: Theoretical and Practical Implication of Early Adolescent Participation in Multiple Instances of Structured Out-of-School (OST) Activity

Nicole Zarrett, Jack Peltz, Kristen Fay, Yibing Li, Richard M. Lerner
Tufts University

Jacqueline V. Lerner
Boston College Lynch School of Education

Abstract: Among today’s youth, the most ubiquitous OST activity is sports. However, many of these youth are also participating in at least one other OST activity along with their participation in sports. Using longitudinal data from 1,622 youth (56.8% female) from the first three waves (Grades 5, 6, and 7) of the 4-H Study of Positive Youth Development (PYD), we employed a pattern-centered approach to assess differences in adolescent functioning depending on what types of OST activities youth were participating in along with their sports participation.

Our findings suggest that youth benefit from their sports participation differently depending on what other types of additional activities they participate in during their out-of-school time. In particular, a participation pattern characterized by high participation in sports and Youth Development Programs was found to be the most effective activity profile for promoting PYD and preventing youth problems. Implications of these findings in research and practice are discussed.
Introduction

Theory and research converge in pointing to structured out-of-school (OST) activities as important assets in the positive development of youth (Chaskin & Baker, 2006; Mahoney, Larson, & Eccles, 2005). Participation in structured OST activities has been associated with higher academic and occupational achievement, reduced rates of delinquency, and the development of identity and initiative (e.g., Barber, Eccles, & Stone, 2001).

Research regarding youth activities has examined activity participation in various ways, including time devoted to a particular activity domain, and aggregate scores of the number of activities in which youth engage. These studies have demonstrated that different activities can and often do influence youth development differently (Eccles, Barber, Stone, & Hunt, 2003; Larson, Hansen, & Moneta, 2006); and the more activities youth are involved in, the higher their scores on various indicators of positive youth development (PYD) (e.g., Mahoney, 2000; Zaff, Moore, Papillo, and Williams, 2003).

However, whether we count the number of activities youth are involved in, or consider the different types of activities in which youth engage, there is increasing evidence that within any one school year a large percentage of youth participate in more than one OST activity context (Shanahan & Flaherty, 2001; Theokas, Lerner, Lerner, & Phelps, 2006). Some researchers have begun to examine how youth organize their out-of-school time across multiple structured and unstructured activities during the course of a day, week, or year. Their findings suggest that across activities there are a variety of common activity participation patterns among adolescents. Moreover, the relation of participation in activities to each other varies in the degree to which they foster development (Bartko & Eccles, 2003; Peck, Roeser, & Zarrett, in press; Zarrett, 2006). Therefore, considering youth patterns of participation across activities is important for understanding what activities, in combination with one another, best promote PYD (Bartko & Eccles, 2003; Zarrett, 2006).

Among today’s youth, the most ubiquitous OST activity is sports (Larson & Verma, 1999; Theokas et al., 2006; Ewing, Seefeldt, & Brown, 1996). In comparison to non-participants, youth who participated in organized sports reported greater increases in liking school between 10th and 12th grades, received more frequent educational and occupational support, had higher academic performance in high school, had more total years of tertiary education by age 25, and attained a job at age 24 that offered autonomy and a promising future (Barber, et al., 2001). Female athletes reported lower rates of sexual activity and/or early sexual intercourse, net of the influence of race, age, SES, quality of family relations, and participation in other extracurricular activities (e.g., Miller, Sabo, Farrell, Barnes & Melnick, 1998). Participation in sports was also linked to lower use of cigarettes, marijuana, cocaine, and “other drugs” (Page, Hammermeister, Scanlon, & Gilbert, 1998), lower rates of depression, and lower incidence of suicidal behavior; these associations were not found with participation in art, community service, or school activities (e.g., Barber, et al., 2001).

However, many of these youth are also participating in at least one other OST activity along with their participation in sports. Little research has explored how sports participation may benefit youth differently depending on what other activities they participate in during their out-of-school time. The present study extends previous research (Theokas et al., 2006) on the benefits of sports participation by using a more holistic, pattern-centered approach to identify, and then compare:
1. youth with different types of common 7th grade sport-dominant activity patterns to each other; and,
2. to youth with other non-sport related patterns, on multiple indicators of functioning, including PYD, Contribution, risk behavior, and depression.

**Method**

Full details of the methodology of the 4-H Study have been presented in earlier reports (e.g., see Jelicic, Bobek, Phelps, Lerner, Lerner, in press; Lerner, Lerner, Almerigi, et al., 2005). Accordingly, we present here those features of methodology pertinent to the focus of the present report.

**Participants**

This report is based on a subsample of 1,622 of the original 3,500 adolescents (56.8% female; 43.2% male) from the 4-H Study of Positive Youth Development (Lerner et al., 2005), and includes the sample of youth who participated in at least two of the first three waves of assessment (5th, 6th, and 7th grades). In the first wave of data collection, participants in the 4-H study came from sites located in 13 states that provided regional, rural-urban, racial/ethnic, and religious diversity. Participants were 1,722 fifth grade adolescents (48% males, mean age =11.1 years, SD = .52; 52% female, mean age =10.9 years, SD = .45) and 1,139 of their parents. At Wave 2, youth were retested during the sixth grade. In addition, in order to control for the influence of prior testing on the findings, an additional sample was added. A total of 1,872 sixth graders (43% male, mean age =12.2 years, SD = .07; 57% females, mean age =12.1 years, SD = .33) and over 1,300 of their parents participated in Wave 2 data collection, sampled from 18 states across the nation. At Wave 3, in addition to retesting Wave 1 and Wave 2 participants, a new group of participants was again added to the sample. A total of 1,600 youth (40% male, mean age =13.2 years, SD = .08; 60% female, mean age =13.2 years, SD = .90) and over 1,182 of their parents from 17 states were tested.

The sample was largely European American (63.7%), but included some variation in race/ethnicity (Latino/a =11.9%, African American =6.1%, Asian American =3.7%, Native American =2.3%, Multi-ethnic/racial =4.2%, Other =.6%). Because the autocorrelation for the family per capita income between the three waves was highly significant (r =.81, .87, .89 p < .001, for Waves 1 and 2, Waves 2 and 3, and Waves 1 and 3, respectively), the average family per capita income was computed for each participant, based on available data (1, 2, or 3 waves). The mean of this composite variable was $13,996 (SD=$9,241).

**Measures**

*Indexing Structured OST Activities.* As shown in Table 1, the present report categorized 21 OST activities into eight activity types for our analyses. The list of activities included Youth Development (YD) programs such as 4-H and Boys & Girls Club, after-school clubs (e.g., school government, chess club), team and individual sports, the performing arts (e.g., music, drama), arts and crafts, service activities (e.g., volunteering), and paid work. At Grade 7, youth reported the amount of time they spent participating in each activity during the current school year/summer (0 =never to 5 =every day).
**Table 1**
The 21 Structured Activities and Eight Activity Types in Grade 7

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>Individual Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>YD Programs</td>
<td>4-H Club</td>
</tr>
<tr>
<td></td>
<td>Boys Scouts and Girl Scouts:</td>
</tr>
<tr>
<td></td>
<td>YMCA and YWCA</td>
</tr>
<tr>
<td></td>
<td>Big Brothers and Big Sisters</td>
</tr>
<tr>
<td></td>
<td>Boys and Girls Club</td>
</tr>
<tr>
<td>Sports</td>
<td>Team sports (such as soccer or football)</td>
</tr>
<tr>
<td></td>
<td>Individual sports (such as martial arts or tennis)</td>
</tr>
<tr>
<td>Performing Arts</td>
<td>School Band</td>
</tr>
<tr>
<td></td>
<td>Drama</td>
</tr>
<tr>
<td></td>
<td>Dance</td>
</tr>
<tr>
<td></td>
<td>Music</td>
</tr>
<tr>
<td>Arts and Crafts</td>
<td>Arts and Crafts</td>
</tr>
<tr>
<td>Interest Clubs</td>
<td>Academic Clubs (such as math club)</td>
</tr>
<tr>
<td></td>
<td>School Government</td>
</tr>
<tr>
<td></td>
<td>School Newspaper</td>
</tr>
<tr>
<td></td>
<td>Hobby Clubs (books, chess)</td>
</tr>
<tr>
<td>Volunteering</td>
<td>Mentoring/Peer Advising:</td>
</tr>
<tr>
<td></td>
<td>Volunteer Work</td>
</tr>
<tr>
<td>Religious Activities</td>
<td>Religious Education</td>
</tr>
<tr>
<td></td>
<td>Religious Youth Group</td>
</tr>
<tr>
<td>Paid Work</td>
<td>Employment</td>
</tr>
</tbody>
</table>

*Indexing Adolescent Functioning.* We examined the relation of participation to various indicators of adolescent well-being. We first examined overall PYD, shown to be a second-order latent construct constituted by psychological, behavioral, and social characteristics reflecting “Five C’s:” competence, confidence, character, connection, and caring (Lerner et al., 2005). In turn, research suggests that among thriving youth a sixth C, Contribution (e.g., to family and community) develops (Lerner et al., 2005). Therefore, we also examined the degree to which youth contributed to their families/communities (Contribution), measured as a composite score of twelve items divided into four subsets: leadership, service, helping, and ideology.

Other indicators of functioning assessed included: participation in risk behaviors, including questions regarding the frequency of substance use (e.g., alcohol) and other delinquent behaviors (e.g., “how many times have you hit or beat up someone?”) in the last year, and depressive feelings (CES-D; Radloff, 1977), such as how often a youth felt sad during the past week. The construction, reliability, and validity of these measures are described in Lerner et al. (2005).
Results

We first explored adolescents’ 7th grade activity participation across multiple OST activities using Cluster Analysis (Ward’s Method, Ward, 1963). This pattern-centered approach enabled us to identify the common activity participation patterns of youth, and more specifically, to determine the different types of sports-dominant activity patterns in which youth engage. Within the 10 cluster solution that emerged, we found three different types of sports-dominant participation profiles. In the first of these sports clusters, youth were more involved in sports relative to their participation in other activities (they had lower than average reports of time spent in all other activities measured). For ease of presentation, this group of youth was referred to as the “Sports-Only” profile, but the reader should keep in mind that a brief one or two word label cannot adequately capture the entire profile of activity involvement.

The second sport cluster, “Sport+YD” is distinguished by high rates of participation in both sports and Youth Development programs, and by slightly above average time spent volunteering and in religious-based activities. The third sport cluster, which we named the “High-Engaged” group, is characterized by spending above average time in all the activities measured. In fact, the time High-Engaged youth devoted to sport is similar to the amount of time Sport+YD youth spent in sports; both groups spent more time in sport than youth in all other groups including the Sport-Only youth (see Table 2 for means). A fourth activity profile, “Work+Religion,” involved youth who spent considerably less time devoted to sports in comparison to the other sport profiles, but was characterized by above average participation in sport relative to the non-sport profiles that emerged. Therefore, in our comparison analyses we also considered these youth as having another type of sport-dominant activity profile.

Six non-sport activity profiles also emerged. The fifth activity profile included youth characterized by high involvement in school clubs, “Clubs.” The sixth cluster was primarily characterized by youth who participated in performing arts, “PerfArt,” and the seventh profile was characterized by youth who mainly participated in arts and crafts, “ArtCraft.” The eighth profile included youth who spent much of their time in religious-related activities, “Relig,” and the ninth profile, “Work,” included youth who spent most of their free time in paid work. The tenth profile, “Low-Engaged,” involved youth who spent considerably lower than average time in all activities we examined.

For our comparative analyses, the youth from several of these non-sport OST activity profiles were combined and considered the “Other-Activities” profile, with the exception of the “Low-Engaged” youth and the “Work” youth. Youth who had either of these types of activity profiles were examined separately because of previous research suggesting that youth who spend excessive time in paid work and those who spend little time in structured OST activities fare worse than other youth on indicators of positive functioning (e.g., Bachman & Schulenberg, 1993; Zarrett, 2006) (see Figure 1).
### Table 2
Means and Standard Deviations of Adolescents’ rate of participation in activities by 7th Grade Activity Participation Profiles

<table>
<thead>
<tr>
<th>Activity</th>
<th>High Engaged</th>
<th>Sport+YD</th>
<th>Sport</th>
<th>Work+Religion</th>
<th>School</th>
<th>Performing Arts</th>
<th>Arts &amp; Crafts</th>
<th>Religion</th>
<th>Work</th>
<th>Low Engaged</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>YD Programs</td>
<td>.82 (.78)</td>
<td>1.75 (.93)</td>
<td>-.54 (.36)</td>
<td>-.13 (.74)</td>
<td>-.30 (.62)</td>
<td>-.28 (.60)</td>
<td>-.30 (.59)</td>
<td>-.49 (.41)</td>
<td>-.34 (.58)</td>
<td>-.46 (.48)</td>
<td>-.19 (.89)</td>
</tr>
<tr>
<td>Sport</td>
<td>.84 (1.12)</td>
<td>.84 (.77)</td>
<td>.47 (.71)</td>
<td>.31 (1.06)</td>
<td>.10 (.93)</td>
<td>.07 (.91)</td>
<td>-.11 (.92)</td>
<td>-.24 (.80)</td>
<td>.09 (.93)</td>
<td>-1.14 (.16)</td>
<td>-.04 (1.00)</td>
</tr>
<tr>
<td>School</td>
<td>2.17 (1.94)</td>
<td>-.29 (.43)</td>
<td>-.41 (.12)</td>
<td>-.33 (.44)</td>
<td>1.54 (.70)</td>
<td>-.15 (.63)</td>
<td>-.11 (.69)</td>
<td>-.34 (.29)</td>
<td>-.35 (.26)</td>
<td>-.42 (.13)</td>
<td>-.06 (0.94)</td>
</tr>
<tr>
<td>Perf Arts</td>
<td>.65 (1.06)</td>
<td>-.32 (.83)</td>
<td>-.76 (.45)</td>
<td>.32 (1.00)</td>
<td>-.38 (.81)</td>
<td>1.06 (.52)</td>
<td>.28 (.94)</td>
<td>-.72 (.46)</td>
<td>-.16 (.92)</td>
<td>-.76 (.48)</td>
<td>-.11 (0.97)</td>
</tr>
<tr>
<td>Arts &amp; Crafts</td>
<td>.77 (1.19)</td>
<td>-.14 (.90)</td>
<td>-.65 (.20)</td>
<td>-.24 (.62)</td>
<td>-.64 (.25)</td>
<td>-.51 (.39)</td>
<td>1.42 (.78)</td>
<td>-.58 (.34)</td>
<td>-.47 (.45)</td>
<td>-.64 (.18)</td>
<td>-.14 (0.93)</td>
</tr>
<tr>
<td>Volunteer</td>
<td>2.18 (1.78)</td>
<td>.24 (.80)</td>
<td>-.63 (.19)</td>
<td>.17 (.73)</td>
<td>-.48 (.37)</td>
<td>-.14 (.68)</td>
<td>-.04 (.72)</td>
<td>-.32 (.47)</td>
<td>-.04 (.84)</td>
<td>-.53 (.37)</td>
<td>-.07 (0.96)</td>
</tr>
<tr>
<td>Religious</td>
<td>.64 (1.03)</td>
<td>.25 (1.03)</td>
<td>-.87 (.10)</td>
<td>1.24 (.75)</td>
<td>-.48 (.61)</td>
<td>.23 (.97)</td>
<td>-.12 (1.00)</td>
<td>.89 (.83)</td>
<td>-.60 (.48)</td>
<td>-.80 (.39)</td>
<td>-.08 (0.99)</td>
</tr>
<tr>
<td>Paid work</td>
<td>.75 (1.11)</td>
<td>-.17 (.74)</td>
<td>-.61 (.46)</td>
<td>1.60 (.48)</td>
<td>-.34 (.76)</td>
<td>-.50 (.57)</td>
<td>-.20 (.84)</td>
<td>-.51 (.55)</td>
<td>.81 (.87)</td>
<td>-.75 (.37)</td>
<td>-.08 (0.97)</td>
</tr>
</tbody>
</table>
**Activity Participation Patterns by Socioeconomic Status and Gender**

In our sample, SES does not appear to predict adolescents’ activity choices (see Table 3 for means of the average per capita income for each activity profile). There is some variation in average per capita family income by activity profile reflective of previous research findings (e.g., that highly engaged youth have the highest family income) (Posner & Vandell, 1999; Zarrett, 2006). However, our results of a one-way, between-group fixed effects Analysis of Variance indicated that these differences in income by activity profile were not significant, $F(9, 977) = .656, p = .749$.

In contrast, a $2 \times 7$ activity pattern chi square analysis, indicated that activity participation patterns did vary significantly by the gender of the youth [$\chi^2 (6, N=1150) = 32.35, p < .001$]. Consistent with national data that indicate that males still participate in sports at higher rates than do females (The Woman’s Sports Foundation, 2001), we found that males were significantly more likely than expected by chance to participate in the Sports-Only activity pattern while females were significantly underrepresented in the Sports-Only activity pattern. However, the sports-dominant activity patterns that also included participation in other OST activities did not significantly differ by gender. Along with their overrepresentation in the Sport-Only activity pattern, males were also more likely than expected by chance to have an activity profile characterized by high amounts of time spent in paid work. Females were more likely than expected by chance to participate in both an activity pattern dominated by time spent engaging in the performing arts (“PerfArt”), and a participation pattern that mainly involved participation in arts and crafts (“ArtCrft”) (see Table 3).
### Table 3
Percentage of youth who participate in each activity pattern by gender and family income

<table>
<thead>
<tr>
<th>Activity Patterns</th>
<th>Total %</th>
<th>Males %</th>
<th>Females %</th>
<th>Average Per Capita Family Income (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Engaged</td>
<td>5.8</td>
<td>5.3</td>
<td>6.2</td>
<td>$15,126</td>
</tr>
<tr>
<td>Sports+YD</td>
<td>5.3</td>
<td>6.1</td>
<td>4.7</td>
<td>$12,225</td>
</tr>
<tr>
<td>Sports</td>
<td>8.0</td>
<td>11.6*</td>
<td>5.5</td>
<td>$14,757</td>
</tr>
<tr>
<td>Work+Relig</td>
<td>4.7</td>
<td>5.3</td>
<td>4.3</td>
<td>$13,465</td>
</tr>
<tr>
<td>Clubs</td>
<td>4.9</td>
<td>5.5</td>
<td>4.5</td>
<td>$12,936</td>
</tr>
<tr>
<td>Perf Art</td>
<td>11.3</td>
<td>6.1</td>
<td>15.0*</td>
<td>$13,676</td>
</tr>
<tr>
<td>ArtCraft</td>
<td>15.6</td>
<td>10.1</td>
<td>19.4*</td>
<td>$13,776</td>
</tr>
<tr>
<td>Relig</td>
<td>12.6</td>
<td>14.3</td>
<td>11.4</td>
<td>$13,555</td>
</tr>
<tr>
<td>Work</td>
<td>17.4</td>
<td>20.2*</td>
<td>15.4</td>
<td>$13,491</td>
</tr>
<tr>
<td>Low Engaged</td>
<td>14.4</td>
<td>15.8</td>
<td>13.5</td>
<td>$14,839</td>
</tr>
</tbody>
</table>

*Significant overrepresentation in an activity by gender is indicated in bold.

### Are there combinations of sports and other OST Activities that are differentially associated with indicators of functioning in Grade 7?

We considered differences in PYD, Contribution, risk behaviors, and depression by adolescents’ participation profiles across multiple activities, with a focus on how the relation between sports participation and PYD may differ dependent on what types of additional activities youth participate in during their out-of-school time.

Using 2 (gender) X 7 (participation pattern) ANCOVAs, with average family per capita income as a covariate, differences between youth by their participation profiles were found for PYD, $F(8, 934) = 8.09, p < .001$, Contribution, $F(8, 929) = 25.63, p < .001$, and depressed feelings, $F(8, 928) = 3.24, p < .01$. Post-hoc contrasts (Tukey) indicated that the High-Engaged youth scored highest on PYD, significantly higher on PYD than youth in all other activity profiles except for youth in the Sport+YD profile and youth in the Work-Religion profile, who had similarly high levels of PYD. The Sport+YD youth were significantly higher in PYD than the Sport-Only, Work, and Low-Engaged groups and were similar in PYD to youth highly involved in other structured OST activities (“Other-Activities”). Youth in the Work-Relig sport profile were significantly higher on PYD than the Sport-Only and Low-Engaged youth. In contrast, the Sport-Only youth were
significantly lower on indicators of PYD in comparison to youth of all other activity profiles, with the exception of the Work and the Low-Engaged youth, who had similarly low levels of PYD.

The High-Engaged youth and those youth who had a profile of Sports+YD reported similar levels of Contribution, significantly higher than youth in all other groups. In contrast, youth with a Sport-Only activity profile reported significantly lower levels of Contribution in comparison to youth in all other activity profiles, except for those who had a Low-Engaged activity pattern, who reported equally low levels of Contribution.

Although youth in the Sport-Only profile reported lower PYD and Contribution than youth in the other activity profiles, they reported significantly lower depression than both the High-Engaged and Low-Engaged youth. In fact, while Sport+YD youth were not different from any other group in their experiences with depression, post-hoc tests indicated that High-Engaged youth were at greatest risk for experiencing depressed feelings. Youth of all activity profiles reported similarly low incidence of risk behaviors (see Table 4 for means).

### Table 4

*Means and Standard Deviations of Indicators of PYD by Grade 7 Activity Participation Profiles*

<table>
<thead>
<tr>
<th>Clusters</th>
<th>PYD</th>
<th>Contribution</th>
<th>Risk Behavior</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SE</td>
<td>M</td>
<td>SE</td>
</tr>
<tr>
<td>High Engaged</td>
<td>75.55</td>
<td>1.56</td>
<td>60.26</td>
<td>1.63</td>
</tr>
<tr>
<td>Sport+YD</td>
<td>74.44</td>
<td>1.68</td>
<td>57.42</td>
<td>1.76</td>
</tr>
<tr>
<td>Sport</td>
<td>67.88</td>
<td>1.37</td>
<td>43.82</td>
<td>1.44</td>
</tr>
<tr>
<td>Work+Religious</td>
<td>73.11</td>
<td>1.79</td>
<td>53.07</td>
<td>1.84</td>
</tr>
<tr>
<td>School</td>
<td>74.34</td>
<td>1.75</td>
<td>50.97</td>
<td>1.82</td>
</tr>
<tr>
<td>Performing Arts</td>
<td>72.16</td>
<td>1.15</td>
<td>50.90</td>
<td>1.20</td>
</tr>
<tr>
<td>Arts/Crafts</td>
<td>71.86</td>
<td>.99</td>
<td>51.96</td>
<td>1.03</td>
</tr>
<tr>
<td>Religious</td>
<td>70.95</td>
<td>1.06</td>
<td>48.32</td>
<td>1.11</td>
</tr>
<tr>
<td>Work</td>
<td>70.05</td>
<td>.91</td>
<td>49.65</td>
<td>.95</td>
</tr>
<tr>
<td>Low Engaged</td>
<td>65.72</td>
<td>1.04</td>
<td>40.59</td>
<td>1.07</td>
</tr>
</tbody>
</table>

*Note: All reported means and standard errors are net the effects of gender and average per capita family income.*
Discussion

Among the wide array of activities in which youth choose to participate, almost two-thirds of 7th graders nationwide are participating in sports (Larson & Verma, 1999; Theokas et al., 2006). Our pattern-centered analyses indicated that among these sport participants, many combine their sport participation with one or more additional OST activities. Accordingly, our study examined differences in adolescent functioning depending on what youth were doing in addition to their sports participation. In support of previous research (e.g., Zarrett, 2006), our findings suggest that youth benefit from their sports participation differently, depending on what other types of additional activities they participate in during their out-of-school time.

First, similar to research that measured participation using an aggregate score of the number of activities in which youth participated (e.g., Zaff et al., 2003), our findings indicated that youth highly engaged in a variety of activities (“High-Engaged”) along with their sports participation were faring well on multiple indicators of positive functioning. Some researchers have proposed that participation in multiple OST activities is most beneficial for youth because engagement in such a variety of activities is presumed to provide access to a larger and more diverse group of social supports, opportunities to master a variety of competencies, and to cope with challenging tasks (Mahoney, 2000). However, using a pattern-centered approach, we found another sport-dominant activity pattern that was just as beneficial to youth as the High-Engaged pattern. Specifically, those youth who had a Sports+YD activity pattern fared just as well as the High-Engaged youth on PYD, Contribution, and problem behaviors. Moreover, the Sports+YD group had lower depression scores than the High-Engaged youth. Therefore, a key “take away” message for practitioners is that Sports+YD is one of the most effective sport-dominant OST activity configuration for promoting positive development and preventing youth problems.

Accordingly, the present findings not only suggest benefits of combining other activities with participation in sports, but also that the type of sport setting provided youth may be another important factor for youth to benefit from their participation. For example, in contrast to the Sport-Only youth, it may be that the Sport+YD youth were participating primarily in the sport activities provided by their YD program (e.g., YMCA). YD settings are typically focused on providing youth with highly safe and structured environments, positive mentors, and positive overarching goals. For example, 4-H is a “community of young people across America who are learning leadership, citizenship and life skills” (National 4-H Council website, 2006), and the Boys & Girls Clubs focuses on “promoting and enhancing the development of boys and girls by instilling a sense of competence, usefulness, belonging and influence” (Boys & Girls Clubs of America website, 2006). With a majority of youth participating in some type of sports activity, it is important for all sports programs to begin establishing an activity setting that, while continuing to cultivate skill-specific learning and mastery, also stresses some broader goals and values such as cooperative community-building.

In fact, given such diversity in youth activity participation, and the benefits of multiple activity settings, it may serve youth better if practitioners of each program begin to think and work collaboratively across such programs in trying to enhance the development of youth. Of course, this collaboration is much easier to suggest than to accomplish, especially given the competitiveness surrounding the funding mechanisms that support these programs. While it is not within the scope of this paper to discuss the different ways OST activity programs can collaborate, a significant starting point would be for programs to assess how many of their youth are participating in other programs and what sorts of skills or character development the programs aim to encourage. Ideally, this collaboration would help activity program leaders to
encourage further development of important skills cultivated in other activity contexts and to design unique opportunities that nurture additional important skill sets that are complementary to the interests and skill levels of participating youth. Such collaboration would ensure that activity programs addressed the interests of a diversity of youth, and that youth would benefit from whatever activity program opportunities available to them.

Accounting for such variation in participation is a first step toward clarifying how sports participation can be used to promote PYD. Further research that examines:

1. differences in the quality of the sports programs offered;
2. school, family, and youth assets/disadvantages linked to both adolescents’ involvement in sports and other OST activities and their overall developmental trajectories, and;
3. within-person changes in the positive functioning of youth who get involved and stay involved in a sports activity pattern throughout the adolescent years, is needed to gain a better understanding of the relation between sports participation and youth functioning.

Such research, in turn, will help practitioners and policymakers effectively use sports as a tool in promoting PYD.
References


Effects of Coach and Parent Training on Performance Anxiety in Young Athletes: A Systemic Approach

Frank L. Smoll
Department of Psychology
University of Washington
Seattle, WA
smoll@uwashington.edu

Ronald E. Smith
Department of Psychology
University of Washington
Seattle, WA

Sean P. Cumming
Department of Psychology
University of Washington
Seattle, WA
Effects of Coach and Parent Training on Performance Anxiety in Young Athletes: A Systemic Approach

Frank L. Smoll, Ronald E. Smith, and Sean P. Cumming
University of Washington

Abstract: Coaches and parents play a major role in determining the consequences of sport participation in young athletes. This study focuses on the assessment of a systemic, empirically inspired intervention directed at coaches and parents. Parallel workshops derived in part from achievement goal theory were presented to the coaches and parents of 9 to 15 year old boys and girls participating in community-based basketball programs, and their effects were compared with a matched control condition. Multilevel analyses revealed significant Time x Condition interactions on all three subscales of the Sport Anxiety Scale-2 (SAS-2) and on a total anxiety score. Athletes in the intervention condition decreased in cognitive and somatic anxiety scores on the SAS-2, whereas athletes in the control condition exhibited increases in cognitive and somatic anxiety. Results suggest the potential efficacy of brief, economical interventions in enhancing the psychosocial impact of the youth sport environment.

Introduction

From youth sports to the professional level of competition, athletes differ not only in their desire to succeed, but also in their fear of failure. Sport performance trait anxiety is a predisposition to appraise evaluative athletic situations as threatening and to respond with varying degrees of state anxiety. Such reactions may involve high levels of autonomic arousal, worry, and self-oriented cognitions that can disrupt attentional processes and other cognitive functions (Smith & Smoll, 2004; Smith, Smoll, & Wiechman, 1998). Children who are high in performance trait anxiety worry more frequently about making mistakes, not playing well, and losing than do their low-anxiety counterparts. They are also more concerned than low-anxious children about negative evaluations from coaches and parents, and they have stronger expectancies that failure will elicit criticism from these significant others (Brustad, 1988; Gould, Horn, & Spreeman, 1983; Rainey, Conklin, & Rainey, 1987).
Systematic research examining the consequences of performance anxiety on young athletes consistently has shown that excessive anxiety is associated with a variety of undesirable outcomes. High levels of anxiety contribute to children’s avoidance of sport, to athletic burnout, and to sport attrition. Moreover, competitive anxiety can have deleterious effects on performance, enjoyment of participation, and physical well-being. With respect to health-related effects, high trait anxiety associated with significant negative life events has been linked with increased incidence and severity of sport injuries (see Scanlan, Babkes, & Scanlan, 2005, and Smith, Smoll, & Passer, 2002, for reviews).

It is well known that coaches and parents can strongly influence the nature and quality of young athletes’ sport experiences. The goal priorities they set, the attitudes and values they transmit, and the nature of their interactions can markedly influence the effects of sport participation on children. Coaches play an especially influential role in the development and maintenance of performance anxiety, for they provide athletes with extensive evaluative feedback regarding their ability, performance, and potential in the form of response-contingent approval and disapproval. Critical or punitive feedback from coaches can evoke high levels of negative emotion in children who fear failure and disapproval, thereby contributing to a threatening athletic environment (Baker, Cote’, & Hawes, 2000; Passer, 1988; Scanlan, Stein, & Ravizza, 1991). In contrast with children who have negative interactions with their coaches, children who perceive their coaches as being supportive experience higher levels of sport enjoyment (Scanlan & Lewthwaite, 1986; Smoll, Smith, Barnett, & Everett, 1993). Parents can have comparable influences on all of the above outcomes of sport participation (Brustad, 2003; Brustad & Partridge, 2002), for they constitute an important element of the coach-parent-athlete social system known as the “athletic triangle” (Smith, Smoll, & Smith, 1989).

The harmful influence of performance anxiety invites the development of interventions designed to help coaches and parents reduce their potential contributions to young athletes’ anxiety. Controlled outcome studies with youth sport coaches have shown that relatively brief interventions can result in performance anxiety reduction over the course of a sport season. The interventions provide specific behavioral guidelines on how to create a more socially-supportive environment and reduce unnecessary competitive pressures to win. Smith, Smoll, and Barnett (1995) assessed the effects of a psychologically-oriented coaching workshop on performance trait anxiety in youth baseball players. Significant reductions on two global sport performance trait anxiety measures occurred in children who played for the trained coaches, but not in a control condition. Similar anxiety reductions were found in a more recent study using a multidimensional sport performance trait anxiety measure that assesses somatic anxiety, worry, and concentration disruption (Smith, Smoll, & Cumming, 2007).

On all three components of anxiety, young athletes who played for trained coaches exhibited significant reductions of anxiety from preseason to late season compared with youngsters who played for untrained coaches. In the latter study, a key goal was to promote a mastery-involving motivational climate (Ames, 1992; Dweck, 1999) in which success was defined in self-referenced terms of skill mastery, giving maximum effort, and enjoyment of the activity. The researchers also discouraged the establishment of an ego-involving climate in which success was defined in an other-referenced manner as outperforming and defeating others. A mastery-involving climate has been linked to lower anxiety and greater enjoyment in many studies in both educational and sport settings, and an ego-involving climate to higher levels of performance anxiety (Ames, 1992; Papaioannou & Kouli, 1999; Walling, Duda, & Chi, 1993; Yoo, 2003; Vazou, Ntoumanis, & Duda, 2006).
Prior to the present study, only one attempt has been made to implement a systemic motivational climate intervention involving both coaches and parents. Using a single-subject design, Harwood and Swain (2002) investigated the effects on three junior tennis players of a season-long intervention directed at coaches, parents, and the athletes themselves. Mastery-involving principles and behavioral guidelines were communicated to the parents and coaches. In addition, the athletes were taught a mastery-focused motivational approach, together with admonitions against ego-oriented goal striving for the purpose of social recognition. Compared with a matched control participant, the three athletes involved in the intervention reported increased self-efficacy as well as appraisals of lower threat and higher challenge in the competitive setting, suggesting lower anxiety. However, aspects of anxiety beyond threat appraisals, such as worry and physiological reactions were not assessed in this study.

Harwood and Swain’s (2002) research suggests that an intervention that promotes a mastery-involving climate initiated by both coaches and parents could have a significant positive effect on at least the cognitive components of athletes’ performance anxiety. Likewise, getting coaches and parents “on the same page” so that their behaviors are mutually supportive of one another’s efforts to reduce unnecessary pressures on athletes would be expected to enhance the impact of an intervention on athletes. The present article describes a larger-scale controlled outcome study than that carried out by Harwood and Swain. The intervention was systemic in nature, involving complementary psychoeducational programs for coaches and parents designed to help them reduce competitive pressures on athletes by adopting mastery-involving climate principles and increasing the amount of social support they extended to athletes. Effects of the intervention on both cognitive and somatic elements of anxiety were assessed.

Method

Participants
The 151 participants in this study were 84 boys and 67 girls between the ages of 9 and 15 years who played in community-based basketball programs in a city in the Pacific Northwest. The mean age of the athletes was 11.6 years ($SD = 1.73$). The mean age of the 34 coaches (31 males and 3 females) was 42.4 years ($SD = 8.84$), and the mean number of years of basketball coaching experience was 6.6 ($SD = 5.00$).

To obtain the study sample, we utilized U.S. Census Bureau (2000) tract data to identify two youth sport programs that drew participants from households that were similar to one another in family income ($65,000 to $70,000) and educational attainment (64% to 69 % of adults in each area possessed a Bachelor’s degree or higher). The two programs were in separate community leagues and therefore did not compete against one another. The two programs had similar sex and age distributions across the 9 to 15 year age range, and the coaches did not differ on any of the background demographics. Both programs had two hour-long practices and one game per week, thereby equalizing exposure to the coaches.

To minimize the possibility that coaches and parents in the experimental condition might interact with and potentially share treatment information with those in the control group, we utilized a matched quasi-experimental design to assign the programs to experimental and control conditions (Campbell & Stanley, 1966). Given evidence that the coaches and athletes in the matched programs were sufficiently similar to one another to preclude systematic bias, we assigned the program with the most athletes registered at preseason to the intervention condition, on the expectation that not all of the parents would participate in the study. A total
of 100 of the 180 athletes (56%) registered for the basketball program at preseason had at least one member of their family attend the parent workshop. The intervention condition therefore comprised 8 boys and 9 girls teams, and the control condition contained 11 boys and 6 girls teams. Complete preseason and late-season data were collected from 82 youngsters in the intervention condition and 69 participants in the control condition. Multilevel linear modeling showed no significant group differences in the athletes’ cognitive and somatic anxiety at preseason. Teams in the two programs did not differ in mean won-lost percentages during the season in which the study was conducted.

For the experimental condition, only youngsters of parents who attended the intervention were included as participants. During the end-of-season assessment period, 18% of the participants in the intervention condition and 26% of those in the control condition missed three consecutive practices and therefore did not provide outcome data. This attrition/involvement difference is consistent with previous research showing appreciably lower attrition in athletes whose coaches participated in a psychoeducational intervention (Barnett, Smoll, & Smith, 1992). The untested youngsters did not differ significantly in preseason age or anxiety from those who provided complete data.

Coach and Parent Intervention
The coach and parent programs were designed to complement one another by communicating corresponding guidelines for reducing competitive pressures on athletes. Key principles and guidelines involved

(a) positive and supportive behaviors toward the athletes,
(b) promotion of a mastery-involving motivational climate that deemphasized winning and competency-based social comparison in favor of defining success in terms of giving maximum effort, individual improvement, supporting and encouraging teammates, and enjoyment of the activity and team experience.

The two programs were administered during evening sessions prior to the beginning of the season.

Coach program. The coaches in the experimental condition participated in a 75-minute workshop entitled the Mastery Approach to Coaching (MAC) presented by the first author, who has extensive experience in conducting workshops for youth sport coaches and parents. The workshop featured leadership principles that were derived from foundational research on coaching behaviors and their effects on athletes (Curtis, Smith, & Smoll, 1979; Smith & Smoll, 1990; Smith, Smoll, & Curtis, 1978; Smith, Zane, Smoll, & Coppel, 1983; Smoll, Smith, Curtis, & Hunt, 1978) and from more recent research inspired by achievement goal theory (McArdle & Duda, 2002; Roberts, Treasure, & Kavussanu, 1997).

Accordingly, MAC guidelines focused on two major themes. First, strong emphasis was placed on the distinction between positive versus aversive control of behavior (Smoll & Smith, 2006). In a series of coaching do’s and don’ts, coaches were encouraged to increase four specific behaviors—positive reinforcement, mistake-contingent encouragement, corrective instruction given in a positive and encouraging fashion, and sound technical instruction. Coaches were urged to avoid nonreinforcement of positive behaviors and effort; to encourage athletes to learn from mistakes; and to avoid mistake-contingent punishment. They were also shown how to establish team rules early and reinforce compliance with them to avoid discipline problems. A summary of the behavioral guidelines is presented in Appendix A.
The second important theme in MAC was a conception of success as giving maximum effort and becoming the best one can be, rather than an emphasis on winning or outperforming others. Coaches were therefore encouraged to emphasize and reinforce effort as well as outcome; to help youngsters become the best they could be by giving individualized attention to all athletes and by setting personalized goals for improvement; to define success as maximizing one’s athletic potential; and to emphasize the importance of having fun and getting better as opposed to winning at all costs. Like the guidelines that foster positive coach-athlete relationships, these principles are designed to reduce fear of failure, to foster self-esteem enhancement by allowing athletes to take personal pride in effort and improvement, and to create a more enjoyable learning environment that increases intrinsic motivation for the activity. The principles are consistent with those designed by Ames (1992) and Epstein (1988) to create a mastery learning climate in the classroom.

During the experimental MAC workshop, a mastery-involving climate was explicitly described, its creation was strongly recommended, and a list of established salutary effects derived from research was presented. The presentation of MAC principles was augmented by modeling both desirable and undesirable methods of responding to specific situations (e.g., good performance and effort, athlete mistakes). Coaches were also invited to role play desired responses. To reinforce the didactic portions of the workshop, coaches were given a manual entitled Coaches Who Never Lose (Smoll & Smith, 2005a). The 28-page booklet highlights the advantages of a mastery-involving motivational climate and positive forms of behavior influence and provides behavioral guidelines for creating a supportive mastery climate. Coaches were also given self-monitoring forms containing nine items related to the behavioral guidelines. On the form, they were asked how often they engaged in the recommended behaviors in relevant situations. For example, coaches were asked, “When athletes gave good effort (regardless of the outcome), what percentage of the times did you respond with reinforcement?” They were asked to complete the forms immediately after the next 10 practices or games. The coaches reported completing the forms as requested, but many of them could not be retrieved at the end of the season, so they could not be used to assess the coaches’ degree of compliance.

Parent program. The parents in the experimental condition participated in a 60-minute workshop entitled the Mastery Approach to Parenting in Sports (MAPS) presented by the first author. The primary objective of the MAPS workshop was to assist parents in creating a mastery-involving motivational climate that promotes achievement in all areas of life, including sports. Similar to the MAC workshop, the major focus was on encouraging mastery involvement on the behalf of parents with the purpose of reducing performance anxiety in their children. This included an emphasis on reinforcement of effort as well as outcome; personalized goal setting; defining success as achieving one's potential; and emphasizing enjoyment and personal improvement as opposed to winning. An outline of topics covered in the MAPS workshop is presented in Appendix B.

To supplement the workshop, parents were given a manual entitled Sports and Your Child (Smoll & Smith, 2005b). The 50-page booklet was written to supplement the workshop and thus contains comprehensive treatments of MAPS topics, plus a 17-page section that addresses 25 questions about youth sports, including participation, psychological, and physical issues. The manual was intended to eliminate the need for parents to take notes; to facilitate their understanding of the information; and to give parents a tangible resource to refer to in the future. In addition, parents received a summary/reminder card entitled Behavior at Sport Events (Smoll & Smith, 2004). This front and back, 6-in. by 9-in. card contains specific do’s and don’ts guidelines for parents attending youth sport events. The main topics include recommended
behavior for pre-practice/game preparation; behavior during practices and games; when an
official makes a “bad” call or a parent violates a rule of conduct; post-practice/game follow-up;
after a win; and after a loss. The card was designed to highlight key mastery-oriented principles
(emphasis on doing one’s best and giving maximum effort, the importance of having fun) and
thus serve as a convenient refresher for parents. Parents who attended the experimental MAPS
workshop were encouraged to read the booklet and to refer to the sport behavior card on a
regular basis.

Evaluation Procedures
In addition to their parents’ signed consent, signed assent was obtained from the athletes prior
to the collection of data. To assess the effects of the coach and parent intervention, the Sport
Anxiety Scale-2 (SAS-2; Smith, Smoll, Cumming, & Grossbard, 2006) was used to measure
sport performance trait anxiety. The SAS-2 consists of five-item subscales for Somatic Anxiety,
Worry, and Concentration Disruption. Participants respond to items with the stem, “Before or
while I compete in sports...” (e.g., “my body feels tense;” “I worry that I will not play well;” “it
is hard for me to focus on what I am supposed to do.”). To be suitable for use with children,
the items have a reading level below grade 4 (mean level = grade 2.3). Each item is answered
on a 4-point scale ranging from not at all to very much. Scores on each subscale can range
between 5 and 20, and a total score based on the sum of all items can range from 15 to 60. In
this study’s sample, internal consistency alpha coefficients for the Somatic Anxiety, Worry, and
Concentration Disruption subscales and total anxiety score ranged from .74 to .93 (preseason
and late season administrations).

Trained research assistants administered the SAS-2 during team practices on two separate
occasions. The first session occurred in the week preceding the administration of the MAC and
MAPS workshops in the experimental condition, which was early in the preseason practice
period. The second data collection session occurred approximately 12 weeks later during the
final week of the competitive season as teams were preparing for postseason playoffs.

Results
Hierarchical linear modeling (also referred to as multilevel modeling) was employed to examine
the main and interactive effects of time (preseason and late season) and condition
(experimental and control) upon performance trait anxiety. This method of analysis permitted
us to control for nesting of data within subjects (repeated measures) and teams (Bryk &
Raudenbush, 1992; Singer & Willett, 2003). The statistical tests of the intervention’s effects on
the anxiety scores are found in the cross-level Time x Conditions interactions, which tell us if
different slopes and intercepts for the individual athletes occurred in the regression of anxiety
scores on time as a function of intervention and control conditions.

Preliminary multilevel analyses with time, conditions, and sex as predictor variables indicated
that athletes’ sex did not yield main or interaction effects for any of the three anxiety scales.
Therefore, male and female teams were combined to increase the suitability of the data for
multilevel analyses, whose power depends more on the number of level 2 (team) data points
than on the number of individual athletes within teams (Singer & Willett, 2003).

Raw means and standard deviations for the measures of somatic and cognitive anxiety as a
function of Time and Condition are presented in Table 1. In multilevel analyses, however, the
major interest is in estimated means generated as a result of the hierarchical modeling
procedures, together with the significance tests associated with them. Hereafter, our
presentation of results will focus on the estimated means produced by the hierarchical linear modeling analyses.

**Table 1**
Means and Standard Deviations of Preseason and Late Season SAS-2 Total and Subscale Scores for Intervention and Control Conditions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Preseason</th>
<th>Late Season</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>$M$</td>
</tr>
<tr>
<td><strong>SAS-2 Total Score</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>82</td>
<td>25.44</td>
</tr>
<tr>
<td>Control</td>
<td>69</td>
<td>24.12</td>
</tr>
<tr>
<td><strong>Somatic Anxiety</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>82</td>
<td>8.16</td>
</tr>
<tr>
<td>Control</td>
<td>69</td>
<td>7.48</td>
</tr>
<tr>
<td><strong>Worry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>82</td>
<td>9.77</td>
</tr>
<tr>
<td>Control</td>
<td>69</td>
<td>9.46</td>
</tr>
<tr>
<td><strong>Concentration Disruption</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>82</td>
<td>7.51</td>
</tr>
<tr>
<td>Control</td>
<td>69</td>
<td>7.17</td>
</tr>
</tbody>
</table>

As noted earlier, preliminary analyses revealed that the intervention and control groups did not differ in SAS-2 total score or on any of its subscales at the beginning of the season, substantiating overall preintervention group similarity on the assessed variables. Multilevel analyses were then carried out. As indicated in Table 2, a significant effect was found for Time for Concentration Disruption, indicating a tendency for this component of trait anxiety to increase from preseason to the second administration prior to league playoffs, when competitive pressures were higher.
**Table 2**  
Main and Interactive Effects of Time and Condition upon Change in SAS-2 Scores:  
Parameter Estimates from Multilevel Linear Models

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SAS-2 Total Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>23.98</td>
<td>.86</td>
<td>27.74</td>
<td>.000</td>
</tr>
<tr>
<td>Condition</td>
<td>3.03</td>
<td>1.28</td>
<td>2.37</td>
<td>.019</td>
</tr>
<tr>
<td>Time</td>
<td>1.46</td>
<td>.91</td>
<td>1.61</td>
<td>.111</td>
</tr>
<tr>
<td>Time x Condition</td>
<td>-4.35</td>
<td>1.34</td>
<td>-3.24</td>
<td>.001</td>
</tr>
<tr>
<td><strong>Somatic Anxiety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>7.55</td>
<td>.32</td>
<td>23.85</td>
<td>.000</td>
</tr>
<tr>
<td>Condition</td>
<td>1.06</td>
<td>.47</td>
<td>2.27</td>
<td>.024</td>
</tr>
<tr>
<td>Time</td>
<td>.61</td>
<td>.35</td>
<td>1.73</td>
<td>.086</td>
</tr>
<tr>
<td>Time x Condition</td>
<td>-1.75</td>
<td>.52</td>
<td>-3.35</td>
<td>.001</td>
</tr>
<tr>
<td><strong>Worry</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>7.44</td>
<td>.30</td>
<td>24.79</td>
<td>.000</td>
</tr>
<tr>
<td>Condition</td>
<td>.87</td>
<td>.44</td>
<td>1.96</td>
<td>.051</td>
</tr>
<tr>
<td>Time</td>
<td>.07</td>
<td>.35</td>
<td>.19</td>
<td>.85</td>
</tr>
<tr>
<td>Time x Condition</td>
<td>-1.20</td>
<td>.51</td>
<td>-2.34</td>
<td>.021</td>
</tr>
<tr>
<td><strong>Concentration Disruption</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>8.99</td>
<td>.39</td>
<td>22.93</td>
<td>.000</td>
</tr>
<tr>
<td>Condition</td>
<td>1.09</td>
<td>.58</td>
<td>1.88</td>
<td>.061</td>
</tr>
<tr>
<td>Time</td>
<td>.78</td>
<td>.37</td>
<td>2.12</td>
<td>.036</td>
</tr>
<tr>
<td>Time x Condition</td>
<td>-1.40</td>
<td>.55</td>
<td>-2.56</td>
<td>.011</td>
</tr>
</tbody>
</table>

Intervention effects were formally tested by the Time x Conditions interactions in Table 2. These interactions were significant for SAS-2 total score and for each of its subscales. The interactions involving the expected means generated by the multilevel analysis examining change in total anxiety are illustrated in Figure 1 and show a divergent pattern of change in the intervention and control groups. Athletes in the control condition exhibited higher scores at the end of the season than at the beginning, whereas athletes whose coaches and parents underwent the intervention exhibited decreases in anxiety scores from preseason to late season. Similar patterns of change were observed for each of the SAS-2 subscales.
Figure 1
Preseason and late season estimated means for the intervention (MAC+MAPS) and control conditions on the SAS-2 total score

Separate tests of time differences within each condition were performed using multilevel analyses of the nested athletes-within-teams data. Because significant increases in anxiety in the control condition were not predicted on an a priori basis in the control condition, significance was assessed using two-tailed tests. These analyses of time differences (late-season score minus preseason score) revealed that athletes in the control condition increased significantly in SAS-2 total score ($t = 2.68, p < .01$) and on the Somatic Anxiety ($t = 3.85, p < .001$) and Concentration Disruption ($t = 2.80, p < .01$) scales, but the increase on the Worry scale ($t = 1.40$) was not significant. One-tailed significance tests of the predicted decreases in anxiety within the intervention condition revealed significant effects for SAS-2 total score ($t = -3.24, p < .001$), and for the Somatic ($t = -3.35, p < .001$), Worry ($t = -2.57, p < .02$), and Concentration Disruption ($t = -2.34, p < .03$) scales.

Discussion
This study involved the development, implementation, and evaluation of a systemic coach-parent intervention that translated theoretical principles from achievement goal theory and previous research results on the determinants of performance anxiety into a practical approach to reducing anxiety. Results indicate that the intervention was successful in reducing anxiety in athletes participating in a youth basketball program. In the matched control condition, the participants increased significantly in performance anxiety from preseason to late season,
whereas the youngsters whose coaches and parents had undergone the intervention exhibited decreases in anxiety over the same period. The changes in both groups involved somatic and cognitive components of anxiety, adding to the results reported by Harwood and Swain (2002), who found decreases in threat appraisals prior to competition.

An encouraging feature of the results is that they were achieved with very brief educational workshops that contrasted sharply with the season-long intensive training carried out by Harwood and Swain (2002). We attribute the results of this study, which are consistent in its positive effects with other intervention studies involving coaches (e.g., Smith et al., 1995, 2007; Smith, Smoll, & Curtis, 1979; Smoll et al., 1993) to the highly focused nature of the content presented in the coach and parent workshops, which translated empirically-derived principles into specific and easily-learned guidelines. The number of principles was relatively small and primarily involved a focus on effort and individual development over outcome and instruction on how to provide a highly supportive environment for athletes. These principles were derived from previous research on determinants of anxiety, and their implementation by coaches and parents would appear to underlie the salutary effects on performance anxiety. Our results suggest that brief and economical intervention based on empirically-derived principles can have positive effects on the youth sport setting. Conceivably, such programs could be widely disseminated utilizing technological formats such as DVD, or even over the internet.

This study is best regarded as a preliminary demonstration of efficacy, for it leaves many questions unanswered, hopefully to be explored in future research. Because the intervention was a systemic one, we cannot specify the relative contributions of the coach and parent workshops to the obtained results. Approaching this important question would best be accomplished by a comparative four-group design involving coach training, parent training, this study’s combination of the two, and a control condition. Such a design would allow the uncoupling of coach and parent programs, and an assessment of their individual and interactive effects. Likewise, we do not know which guidelines communicated to coaches and parents had the strongest influences on anxiety reduction. A third limitation of this study was an absence of information on how the coaches and parents actually behaved in relation to the young athletes. An ambitious extension of this study would involve collecting process data in the form of periodic athlete reports and direct observation of coach and parent behaviors over the course of the season. Hopefully, future research will address these issues.

Author Note:
This research was supported in part by Grant #2297 from the William T. Grant Foundation. We express our appreciation to youth sport administrators Dave Augustavo, Mike Balicki, Frank Cammarano, Mike Domingo, and Sean Dumas for their cooperation, to Lesa Hoffman and Judith Singer for their assistance with the statistical analyses, and to the following for their assistance in data collection: Erica Coppel, Polo DeCano, Kira Elste, Christopher Harris, Leslie Lombardo, Kim Matz, Cheree Monroe-Wilson, Olivia Morrow, Tori Nutsch, Dana Ryan, Jason Victor, and Nathalie Walker.

Sean P. Cumming is now at the School for Health, University of Bath, Bath, England BA2 7AY.
References


Appendix A

Summary of Behavioral Guidelines for Youth Sport Coaches

Reacting to Good Plays and Athletes’ Effort
- **Do:** Provide reinforcement. Do so immediately. Let the athletes know that you appreciate and value their efforts. Reinforce effort as much as you do results. Look for positive things, reinforce them, and you will see them increase. Remember, whether athletes show it or not, the positive things you say and do remain with them.
- **Don’t:** Take their efforts for granted.

Reacting to Mistakes
- **Do:** Give encouragement immediately after mistakes. That’s when the youngster needs your support the most. If you are sure the athlete knows how to correct the mistake, then encouragement alone is sufficient. When appropriate, give corrective instruction, but always do so in an encouraging manner. Do this by emphasizing not the bad things that just happened, but the good things that will happen if the athlete follows your instruction (the "why" of it). This will make the athlete positively self-motivated to correct the mistakes rather than negatively motivated to avoid failure and your disapproval.
- **Don’t:** Punish when things are going wrong! Punishment isn't just yelling. It can be tone of voice, action, or any indication of disapproval. Athletes respond much better to a positive approach. Fear of failure is reduced if you work to reduce fear of punishment. Indications of displeasure should be limited to clear cases of lack of effort; but, even here, criticize the lack of effort rather than the athlete as a person.
- **Don’t:** Give corrective instruction in a hostile, demeaning, or harsh manner. That is, avoid punitive instruction. This is more likely to increase frustration and create resentment than to improve performance. Don’t let your good intentions in giving instruction be self-defeating.

Maintaining Order and Discipline
- **Do:** Maintain order by establishing clear expectations. Emphasize that during a game all members of the team are part of the activity, even those on the bench. Use reinforcement to strengthen team participation. In other words, try to prevent misbehaviors by using the positive approach to strengthen their opposites.
- **Don’t:** Get into the position of having to constantly nag or threaten the athletes in order to prevent chaos. Don’t be a drill sergeant. If an athlete refuses to cooperate, deprive him or her of something valued (i.e., participation). Don't use physical measures, such as running laps. If you establish clear behavioral guidelines early and work to build team spirit in achieving them, you can avoid having to repeatedly keep control. Remember, youngsters want clear guidelines and expectations, but they don’t want to be regimented. Try to achieve a healthy balance.

Creating a Positive Learning Atmosphere
- **Do:** Give technical instruction. Establish your role as a caring and competent teacher. Try to structure participation as a learning experience in which you are going to help the athletes become the best they can be. Always give instruction in a positive fashion. Satisfy your athletes’ desire to improve their skills. Give instruction in a clear, concise manner and, if possible, demonstrate how to do skills correctly.
- **Do:** Give encouragement. Encourage effort, don't demand results. Use it selectively so that it is meaningful. Be supportive without acting like a cheerleader.
- **Do:** Concentrate on the activity. Be "in the game" with the athletes. Set a good example for team unity.
- **Don't:** Give instruction or encouragement in a sarcastic or degrading manner. Make a point, then leave it. Don't let "encouragement" become irritating to the athletes.

*Note.* This material was excerpted from a manual entitled *Coaches Who Never Lose* (Smoll & Smith, 2005a).
Appendix B

Outline of Topics Covered in the MAPS Workshop

The Mastery Triangle
- A child-centered orientation that promotes cooperation among parents, coaches, and administrators

Youth Sport Objectives and Values
- Goals of youth sports from the perspectives of parents and young athletes
- Differences between developmental and professional models of sport

Achievement in Sports and in Life
- Defining success in terms of mastery versus ego orientations to achievement
- Effects of a mastery-oriented climate on youngsters’ personal, social, and athletic development
- Keeping sports in perspective relative to social and academic development, spiritual enrichment, and quality of family life

The Real Meaning of Winning
- A mastery-oriented philosophy of winning

Parent Roles and Responsibilities
- Challenges for parents relative to their youngsters' involvement in sports (sharing sons/daughters with coaches, accepting children's disappointments, giving children some time)

Combating Athletic Stress
- The nature and consequences of sport performance anxiety
- Reducing fear of failure and avoiding parent-induced stress

Parent Behavior at Sport Events
- Rules for parents' conduct
- Dealing with parents who do not conform with acceptable standards of behavior

Getting Along with Your Child’s Coach
- Establishing and maintaining open lines of communication

Youth Sport Issues and Challenges
- Question and answer session
Emerging Adulthood: Theory, Assessment and Application

Alan Reifman
Human Development and Family Studies
Texas Tech University
alan.reifman@ttu.edu

Jeffrey Jensen Arnett
Clark University
Worcester, Massachusetts

Malinda J. Colwell
Human Development and Family Studies
Texas Tech University
Emerging Adulthood: Theory, Assessment and Application

Alan Reifman and Malinda J. Colwell
Texas Tech University

Jeffrey Jensen Arnett
Clark University

Abstract: The later attainment of traditional adult roles by today’s youth compared to their counterparts of earlier decades has garnered considerable scholarly and public attention. This article describes a recent concept related to the transition to adulthood, known as emerging adulthood, including a discussion of relevant theory and historical background research. We then introduce a measurement instrument, the Inventory of the Dimensions of Emerging Adulthood (IDEA), which assesses identification with transition-to-adulthood themes. Results of initial scale-development studies were largely supportive of the measure’s reliability and validity. Respondents in their 20s identified with relevant themes to a greater extent than did their younger and older counterparts. Marital status differences on the IDEA emerged, but college and non-college respondents were largely similar. Finally, we provide suggestions for how parent educators can make use of the IDEA instrument in advising parents and their emerging adult children.

Introduction

Many markers of the transition to adulthood, such as median age of first marriage, are being reached at older ages now than in the past (Arnett, 2004a). Furthermore, large numbers of young people (sometimes referred to as “boomerang kids”) are moving back in with their parents while exploring career directions, a phenomenon gaining the attention of parenting educators (Bold, 2001). In this context, the transition to adulthood has attracted great interest, both from academic researchers (Arnett, 2000; Dwyer & Wyn, 2001; Furlong & Cartmel, 1997) and writers for a popular audience (Karlin & Borofsky, 2003; Robbins & Wilner, 2001).
Arnett (2000, 2004a, 2004b) has proposed that the time of life roughly between ages 18-25 be considered a “distinct period” called emerging adulthood (EA). Essentially, this is a time when individuals tend to consider themselves too old to be adolescents, but not yet full-fledged adults. According to Arnett (2000):

“Having left the dependency of childhood and adolescence, and having not yet entered the enduring responsibilities that are normative in adulthood, emerging adults often explore a variety of possible life directions in love, work, and worldviews” (p. 469).

As reviewed by Arnett (2000), emerging adulthood is thought to carry its own constellation of demographic and psychological correlates.

Several other earlier theorists have proposed ideas about the developmental characteristics of a period that follows adolescence but is not fully adult. It is well known that Erikson (1968) proposed that identity is the central developmental issue of adolescence. He also commented on the “prolonged adolescence” typical of industrialized societies, and the psychosocial moratorium granted to young people in such societies, “during which the young adult through free role experimentation may find a niche in some section of his society” (p. 150).

Keniston (1970) proposed the term “youth” for a period between adolescence and young adulthood, but his ideas were based mainly on college student protesters of the late 1960s and are highly reflective of that historical time rather than of any enduring characteristics of the age period. Arnett’s theory takes into account the social and demographic changes that have taken place in the decades since Erikson and Keniston proposed their theories, such as later ages of marriage and parenthood, broadened participation in higher education, and greater tolerance of premarital sexual activity and cohabitation (Arnett, 1998, 2000, 2004a).

The authors cited above who have written contemporaneously with Arnett (Dwyer & Wyn, 2001; Furlong & Cartmel, 1997; Karlin & Borofsky, 2003; Robbins & Wilner, 2001) have identified many of the same themes as he has, such as the freedom, exploration, and unpredictability of the transition to adulthood. Dwyer and Wyn, and Furlong and Cartmel, who have focused on Western nations beyond the U.S. They also go beyond Arnett in certain ways, such as consideration of public policy towards individuals in the transition to adulthood (e.g., in housing and education). Robbins and Wilner have also focused more on the psychological-distress aspect of this transition than have other writers. Nonetheless, these authors have all converged on a set of themes, despite coming from different countries and perspectives (i.e., academic and non-academic).

**Arnett’s Theory**

Arnett’s theory is based on research with young people who have grown up in an environment characterized by these changes, so it may reflect the experiences of young people today in a way that earlier theories do not. However, the five features of emerging adulthood proposed by Arnett (2004a, 2004b) were based on qualitative data from wide-ranging structured interviews. The present paper investigates the empirical validity of Arnett’s five features of emerging adulthood by presenting a scale that was designed to investigate them and to test whether these features are more prominent during emerging adulthood than at other ages, as proposed by Arnett (2004a, 2004b).
**Proposed Dimensions of Emerging Adulthood**

Arnett has continued to flesh out the dimensions of EA beyond his initial (Arnett, 2000) exposition on the topic; more recently, he has proposed that EA is characterized by five distinctive features:

- the age of identity explorations,
- the age of instability,
- the self-focused age,
- the age of feeling in-between,
- the age of possibilities (Arnett, 2004a, 2004b).

According to Arnett, emerging adulthood is the *age of identity explorations* because the psychosocial moratorium Erikson (1968) described is now normative and takes place in emerging adulthood. Emerging adulthood is the *age of feeling in-between* because the majority of emerging adults feel they are no longer adolescents but not yet fully adults (Arnett, 1998, 2001).

It is the *age of possibilities* because it tends to be an optimistic time of life, as a variety of potential mates, job opportunities, social causes, and other commitments are perceived by emerging adults as being available.

As emerging adults explore these possibilities, they concomitantly take on greater independence and responsibility for themselves compared to when they were younger, yet with a sense of considerable personal freedom remaining; these qualities comprise another of the dimensions, namely that of the *self-focused age*.

The independence, responsibility, and freedom of emerging adulthood are not complete, however. Using the example of going away to college, a common experience in emerging adulthood, students’ discretion regarding their time usage, activities, and peer associations would likely be greater than when they lived at home, although many students’ parents may be the ones paying the tuition. Arnett (2000) cited Goldscheider and Davanzo’s (1986) term “semiautonomy” in this context. Arnett (2004a) summarizes the notion of a self-focused age in terms of how individuals “focus on themselves as they develop the knowledge, skills, and self-understanding they will need for adult life” (p. 14).

Whereas the four dimensions listed thus far all appear to refer in a relatively favorable light to experiences of exploring life options and “moving up” to adulthood, it is also likely that emerging adults will experience negative aspects of the transition. The sheer number of available choices and choice-points at which decisions must be made could make individuals feel overwhelmed (Robbins & Wilner, 2001). Further, change is itself unsettling, and some individuals may lack (or feel they lack) the confidence and wherewithal to succeed. This facet of emerging adulthood refers to the *age of instability*.

**Research Topics for a Measure of Emerging Adulthood**

Some researchers have used the terms “emerging adulthood” or “emerging adults” to refer to the (roughly) 18-25 age group *as a whole*, much like one would use terms such as “adolescents” and “adults” to denote specific age groups (Shiner, Masten, & Tellegen, 2002). Yet, researchers may also wish to explore *individual differences* in self-identification with the processes of EA, either between or within broad age groups. The present paper thus
introduces the Inventory of the Dimensions of Emerging Adulthood (IDEA), an instrument
designed to measure such individual differences. In developing the IDEA, we generated items
designed to map onto the aforementioned five dimensions. An additional dimension, known as
other-focus, was also developed; though not part of the primary conceptualization of EA, it
represents a counterpoint to self-focus.

Initial reliability (internal consistency and test-retest) and validity information on the IDEA is
presented. The latter includes comparisons on the EA dimensions by age, educational status,
and role occupancy (e.g., spouse). Individuals in the roughly 18-25 age range are hypothesized
to score higher on EA than individuals of other ages. Those who are attending school and those
who have not yet married – and thus are exploring in the areas of career plans and/or
prospective mates – are also expected to score high.

For further validity information, we examine the relationship of the EA dimensions to various
psychological variables. We hypothesize that these EA dimensions (other than instability) will
correlate positively with life satisfaction, self-mastery (internal control over one’s life), novelty-
seeking, future orientation, and imagination of possible selves. Secondly, we investigate
whether young people’s experience of parental control (e.g., rules) would be associated with a
dampening of the exploration associated with EA or perhaps an enhancement of it as young
people reacted against previous parental constraints. In addition, the EA dimensions could be
used in future research to predict individuals’ other behaviors, such as risky substance use or
frequency of changing college majors (Arnett, 2000).

Implications of Emerging Adulthood for Practice

Bold (2001) discussed factors that could affect parents’ reactions to young-adult children
moving back in with them. Education of parents on the concept of emerging adulthood could
give parents added understanding of their children’s life choices and delays in accomplishment
of traditional adult roles. Some parent educators may find it sufficient to simply present
information on EA, whereas others may wish to go further and make our IDEA questionnaire
available to parents to administer to their young-adult children. Parent educators, parents, and
young-adult children could then discuss their answers.

Method

The methods and results of our studies are described briefly in the following sections. A longer
manuscript providing greater detail in these areas is available upon request from the authors.

Procedures

All studies were based at a state university in Texas, the larger community of which is a small
city located near more rural, agricultural areas. Convenience samples were used. For the
studies in which we sought to compare different age groups, students in an undergraduate
research methodology course administered surveys to acquaintances, friends, and family
members who fell into the relevant age categories. For test-retest reliability, we administered
surveys to students in the same class twice, and for the college/non-college comparison,
students in a class completed surveys themselves and administered them to non-college
acquaintances of theirs. These studies received human subjects approval at the host university.
Samples
Demographics were assessed in all samples, except those used for the very brief test-retest and college/non-college studies. Females comprised 57-66% of the samples in which demographics were assessed, whereas samples were from 72.5-87% white.

Measures
The following measures were each used with one or more of the samples:
- The 31-item Inventory of the Dimensions of Emerging Adulthood (IDEA), an electronic copy of which is available at: http://www.hs.ttu.edu/hd3317/IDEA.htm.
- The brief (five-item) Satisfaction with Life Scale (Pavot & Diener, 1993).
- An instrument measuring self-mastery (i.e., feelings of being in control of events in one's life; Marshall & Lang, 1990; Pearlin & Schooler, 1978).
- A modified version (Reifman & Lacey, 2000) of the 12-item Consideration of Future Consequences Scale (CFC); (Strathman, Gleicher, Boninger, & Edwards, 1994), which measures future orientation.
- The Arnett Inventory of Sensation Seeking (Arnett, 1994), which was used to measure novelty seeking.
- A measure we developed from the literature (Busby, Holman, & Taniguchi, 2001; National Center for Education Statistics, 2001) to measure parental control, in terms of the degree to which parents made decisions for their children, had extensive rules for them, and checked on whether they were completing various tasks and requirements.

Results
Key findings, focusing on statistically significant results, are summarized briefly in three sections below: scale development and psychometrics, demographic/role comparisons, and correlations with other constructs (convergent validity).

Scale Development and Psychometrics
- Exploratory and confirmatory factor analyses largely supported the proposed five-subscale conceptualization of emerging adulthood, plus the other-focused supplementary subscale. In two studies combined, only five item loadings smaller than .45 were obtained. Some of the subscales did exhibit large correlations ($r > .7$) with each other, however.
- Internal consistency (alpha) reliability coefficients for the subscales were generally strong, between .70-.85. Test-retest reliability correlations (over a one-month interval) ranged from .64-.76, with the exception of the “feeling in-between” subscale (.37).

Demographic/Role Comparisons
- In comparing the age groups 18-23, 24-29, 30-39, 40-49, and 50-plus, identity exploration, experimentaiton/possibilities, and negativity/instability (in both samples containing these ages), and self-focus (in one sample) all were highest in the 18-23 age group and declined with older age. Other-focus (in one sample) exhibited the opposite pattern.
- In another of our studies, individuals in the purported emerging adulthood age range (college students and graduates) scored higher than did younger respondents (6th-12th grade) on identity exploration, other-focus, self-focus, and feeling in-between.
• Never-married individuals between 18-29 years old were compared to their age-matched engaged/married counterparts in two samples. Never-marrieds were found to be higher in identity exploration (in one sample), experimentation/possibilities (in both samples), and self-focus (in one sample), but lower in other-focus (in both samples) than the engaged-married group.

• Other comparisons tested EA differences among 18-29 year-olds according to employment, living arrangements, and education. The longer hours one worked, the greater the degree of other-focus and the less the feelings of experimentation. Respondents who totally paid their own expenses had the greatest sense of other-focus, whereas their counterparts who paid none of their own expenses had the least. Individuals living with friends were highest on experimentation and those with a partner/spouse lowest; individuals living with a partner/spouse scored highest on other-focus and those in a dormitory lowest; and individuals living with friends or alone scored highest on self-focus and those living in a dormitory lowest. Identity exploration, experimentation/possibilities, and negativity/instability all increased when respondents felt that their chosen career path required greater education, whereas other-focus went down.

• We also tested for potential gender, race/ethnicity, and social class differences on the EA dimensions. Because we had no a priori predictions regarding gender differences on the IDEA, we limit our reporting to findings that replicated in more than one study. In two samples, females scored significantly higher than did males on self-focus. No significant differences were found between white and Hispanic respondents’ means in any of three samples (other racial/ethnic groups had too few cases). Self-reported working class respondents scored highest on negativity/instability and upper-middle/upper class ones lowest; the groups also differed on self-focus, with working class respondents lowest and middle and upper-middle/upper class groups at about the same, higher level.

• Only one significant difference was obtained between college students and their similar-age non-college counterparts, as the former exceeded the latter on sense of experimentation/possibilities.
Figure 1

Age-Group Differences on Identity-Exploration Subscale, in Original and Replication Studies

Study 1  Study 2

18-23  24-29  30-39  40-49  50+

0  0.5  1  1.5  2  2.5  3  3.5  4
Significant Correlations with Other Constructs

- Individuals scoring highly on negativity/instability were low in life satisfaction ($r = -0.38$). The other-focus subscale was positively related to life satisfaction ($r = 0.16$).
- Individuals reporting high negativity/instability exhibited a low sense of mastery over one’s life ($r = -0.35$).
- Greater self-characterization as being in an identity-exploration time of life was associated with a greater number of hoped-for possible selves ($r = 0.34$), as was the perception of experiencing negativity and instability ($r = 0.35$). Greater identity exploration was associated with a higher percentage of possible selves in the occupational domain ($r = 0.25$), but a lower percentage in the family domain ($r = -0.25$). Greater self-focus was associated with a higher percentage of selves in the leisure domain ($r = 0.25$).
- Future orientation had modest, but consistent, positive correlations with a number of IDEA subscales: identity exploration ($r = 0.20$), experimentation/possibilities ($r = 0.22$), other-focus ($r = 0.29$), and self-focus ($r = 0.23$).
- None of the subscales was significantly correlated with novelty seeking.
• Higher scores on the general parental-authority subscale (i.e., greater parental assertion and less child initiative) were associated with lower identity exploration \((r = -.24)\) and self-focus \((r = -.25)\) in adolescent and college-age children. None of the subscales was correlated with the task-specific parental rules subscale.

**Discussion**

This paper has described the concept of emerging adulthood, provided a measure of it, and suggested how parent educators can make use of it. Initial findings appear to support Arnett’s (2000) conceptualization. Most importantly, 18-29 year-olds tended to have the highest (or lowest) means on various IDEA dimensions compared to other age groups, in accordance with EA theory. Other demographic/role comparisons (e.g., marital/relationship status) also were consistent with the EA framework. The IDEA subscales also appeared to have a reasonable factor structure, generally strong reliability, and some meaningful correlations with existing constructs in the literature.

For practitioners, however, the main value of the IDEA instrument is likely to be in helping parent educators advise parents and their children who are going through the transition to adulthood. Our findings (and those of future researchers) should help normalize families’ experiences of their children’s transition to adulthood and enhance their understanding of the explorations being exhibited by these children. Adult children moving back home thus should not necessarily be viewed by parents as their children rebelling or “slacking.” Prolonged exploration may stem from deeper reasons.

Arnett (2000, 2004b) discusses several possible reasons for the later attainment of traditional adult roles such as marriage and parenthood by today’s youth, compared to their counterparts of previous decades. There are structural reasons, such as greater amounts of education being required for high-technology jobs and the invention of the birth-control pill. However, Arnett (2004b) feels that the most important reason has to do with attitude and outlook:

*There has been a profound change in how young people view the meaning and value of becoming an adult and entering the adult roles of spouse and parent. Young people of the 1950s were eager to enter adulthood and “settle down.” Perhaps because they grew up during the upheavals of the Great Depression and World War II, achieving the stability of marriage, home, and children seemed like a great accomplishment to them...*  

*The young people of today, in contrast, see adulthood and its obligations in quite a different light. In their late teens and early twenties, marriage, home, and children are seen by most of them not as achievements to be pursued but as perils to be avoided. It is not that they do not want marriage, a home, and (one or two) children—eventually. Most of them do want to take on all of these adult obligations, and most of them will have done so by the time they reach age 30. It is just that, in their late teens and early twenties, they ponder these obligations and think, “Yes, but not yet” (p. 6).*

Connections between parenting and emerging adult children’s exploration can be examined from additional angles, as well. Our study of adolescents and early 20s individuals in one of our samples investigated parental control. Although correlational (and especially retrospective) data do not allow causal inference, our results suggest the possibility that parents’ failure to allow autonomy to develop in their children may dampen the latter’s experience of EA-relevant perceptions and sense of future orientation. Also, McCourt (2004) found that college students who scored highly on overall EA exhibited higher alcohol use/misuse and more problematic
body-image issues and watched more television programs with thin characters than their lower EA-scoring counterparts. Thus, there could be health-related consequences of EA-related exploration.

**Conclusion**

In conclusion, emerging adulthood has been an active area of research for the past five years. We hope that it can also be extended to parent education and other community applications. Such applications of research findings from the IDEA instrument could include:

- Material to supplement parenting education pamphlets and informational websites for parents and emerging adults
- Career advising for emerging adults
- Information for health educators in colleges and other settings to help channel emerging adults’ tendencies for exploration and experimentation into healthy, positive directions, as opposed to health-compromising risky behavior.

**References**


**Acknowledgments**

An earlier version of this manuscript was presented at the 111th Annual Convention of the American Psychological Association, August 2003, Toronto, Canada. We would like to thank the student assistants who helped with managing the data files: Karin Doederlein, Penny Gonzalez, Tamsen Harsch, Sarah Hendley and Qingfang Song.
Service-Learning and Leadership Life Skills: An Experimental Study

B. Darlene Locke  
Texas A&M University  
Brownwood, TX  
dlocke@ag.tamu.edu

Barry Boyd  
Texas A&M University  
College Station, TX  
b-boyd@tamu.edu

Steven Fraze  
Texas Tech University  
Lubbock, TX  
Steven.Fraze@TTU.EDU

Jeff W. Howard  
Texas A&M University  
College Station, TX  
j-howard@tamu.edu
**Service-Learning and Leadership Life Skills: An Experimental Study**

B. Darlene Locke, Barry Boyd, Jeff W. Howard  
Texas A&M University  
Steven Fraze  
Texas Tech University

**Abstract:** This study examined the effect of service activities on the development of leadership life skills in youth and (queried) if having a reflection component as part of the activity makes a difference. Additionally, the study examined the impact of selected demographics including age, gender, type of service completed monthly and 4-H membership on the development of leadership life skills. Participants in the study were from two samples. One group represented the El Paso National Youth Service Day, the other represented the District 11 4-H Leadership Lab in Branham, Texas. Participants were randomly assigned to a control (no reflection) or treatment (with reflection) group. Youth participants self rated their leadership life skills using a 33-question post-test only questionnaire. Demographics were reported in nine additional questions.

The major findings of the study are as follows: 1) Overall, the participants reported their perceived leadership life skills to be high in four of the five subscales; 2) The inclusion of a reflection component did not significantly affect perceived leadership life skills; 3) Type of service, whether direct or indirect, had a significant impact on perceived leadership life skills; 4) 4-H membership had a significant impact on the Personal Leadership Development subscale.
**Introduction**

In 1984, only 27% of all high schools reported having students involved in community service and 9% reported service-learning activities. By 1999, those numbers rose to 83% and 46% respectively (National Center for Education Statistics, 1999). The Corporation for National and Community Service in March, 2006 reported that “10.6 million students nationwide, or 38 percent of students between the ages of 12 and 18, have participated in school-based service” (Corporation for National and Community Service, 2006). Reported service activities are being conducted as extensions of the classroom and outside of the classroom through community-based organizations.

The diversity of service activities and participants has resulted in recent studies attempting to identify and separate service-learning and community service. The National Student Service-Learning and Community Service Survey (National Center for Education Statistics, 1999) defined service-learning as curriculum-based community service that integrates classroom instruction with community service activities. Community service refers to those activities that are non-curriculum-based and are recognized by and/or arranged through the school.

Service activities performed by youth not only benefit the recipient, but the participant as well. Students engaged in service projects learn about themselves, have opportunities for career exploration, experience group dynamics and goal setting, practice their communication skills, and feel valued in the community in which they serve. These service activities provide youth with the opportunity to use newly gained skills and knowledge in real-life situations in their own communities (Close Up Foundation, 1995).

The combined efforts of service learning or community service with a structured program such as the 4-H and Youth Development Program of Cooperative Extension has the opportunity to provide youth with service projects that are real, meaningful, and that will have measurable results in the areas of life skills attainment. As 4-H programs are typically offered in an informal setting, rather than a classroom, service activities tend to lean more toward the community service type versus service-learning.

4-H offers youth supervised independence, a sense of belonging with a positive group, a spirit of generosity toward others and a wide variety of opportunities to master life challenges (National 4-H Headquarters, 2006). This is achieved through participation in project learning experiences and service activities. Often adult volunteers guide or assist youth in their endeavors, creating an intergenerational learning experience.

Involvement in service activities can lead to significant changes in personal leadership and community contribution skills as a result of the service-learning experience. Youth participating in reflection activities as part of their service also indicated higher self-perceived scores in Personal Leadership Development and Contributor to Community (Stafford, 2001). The results were not significant. Therefore, Stafford recommended replicating the research with a larger audience.

**Purposes and Objectives**

This study examined the effect of service projects on the development of leadership life skills in youth. It describes whether a reflection component increases the impact of the service experience on the life skills development of youth. Reflection is the critical factor that distinguishes service-learning from community service. The study also examined a possible
relationship between youth’s service experience, their self-perceived leadership life skills, and selected demographic characteristics, including their involvement in the 4-H and Youth Development Program of Cooperative Extension.

The following objectives were developed to accomplish these purposes:

1. Describe whether personal characteristics impact the development of leadership life skills.
2. Describe whether service projects impact the development of leadership life skills.
3. Describe whether having a reflection component as part of the service project (service-learning) makes a greater impact than a service project without reflection (community service) in the development of leadership life skills.
4. Describe whether a relationship exists between the youth’s service experience, their self-perceived leadership life skills and selected demographic characteristics.
5. Describe whether participation in 4-H and youth development activities has an impact on self-perceived leadership life skills.

**Research Design**

The research design used for this study was experimental. A 2 x 2 exposure to service learning (no exposure vs. exposure) by treatment (control vs. reflection) between-subjects design was used to conduct the study in conjunction with the El Paso National Youth Service Day on April 12, 2003 and the District 11 4-H Leadership Lab on June 5, 2003.

The study had seven independent variables and five dependent variables. The independent variables for the study included the service experience that youth participated in during the data collection, gender, age, residence, amount of service completed, type of service previously completed, and participation in 4-H club activities.

The dependent variables for the study were the youth’s scores in the following leadership life skills categories from the questionnaire developed by the researcher, based on the study by Stafford (2001): Contributor to Community, Creative Problem Solver, Effective Team Skills, Personal Leadership Development, and Self-Directed Learner.

**Sample**

Two samples were involved in the research. Sample one involved sixty-nine youth participants of the El Paso National Youth Service Day, April 12, 2003. These youth were involved in a community-wide Easter Celebration for families of Fort Bliss Army personnel. The youth represented twenty different youth organizations from the El Paso community.

The second sample involved youth participants of the Texas Cooperative Extension (TCE) District 11, 4-H Leadership Lab conducted on June 5, 2003. District 11 refers to a grouping of eighteen counties located along the Texas Gulf Coast. Leadership Lab is an experientially based leadership education opportunity for 4-H youth ages 13-19. One hundred and fifty-one youth were randomly assigned to one of three different service activities in the Brenham, Texas community.

Thirty-seven youth were assigned to the Brenham State School where they interacted with residents in activities such as line dancing, group games, playing bingo and other board games. Another 41 youth visited residents at area Nursing Homes to create craft items, sing songs and play interactive games. Seventy-three youth visited the Brenham Boys and Girls Club and were involved in many activities from playing basketball and volleyball with club members, to helping
club members in coloring a wall mural. Other youth assisted in the construction of a storage building while others helped in building and planting a garden.

**Descriptive Statistics and Major Findings**

**Delineated by Objective**

The purpose of this study was to:

- describe the population of the study by personal characteristics;
- describe whether service projects impact the development of leadership life skills;
- describe whether having a reflection component as part of the service project makes a greater impact than a service project without reflection in the development of leadership life skills;
- describe whether a relationship exists between the youth’s service experience, their self-perceived leadership life skills and selected demographic characteristics;
- describe whether participation in 4-H and youth development activities have an impact on self-perceived leadership life skills.

Due to space limitations of this paper, only gender, age, hours of service, and type of service will be reported.

The gender representation of all participants include; 142 (64.5%) of the participants were female while only 78 (35.5%) were male. There were 220 youth total. 30 males and 30 females were involved in the National Youth Service Day. There were 103 females and 48 males involved in the District 11, 4-H Leadership Lab.

The age distribution ranged from 12-13 years (6.4%) to participants’ whose age exceeded 19 (2.7%), 16 participants (7.3%) fell in the 18-19 years of age group. The largest percentage (44.1%) of participants was in the 16-17 year age group and another 39.5% made up the 14-15 years of age group. One hundred eighty-four participants (83.6%) were either 14-15 or 16-17 years of age at the time of the study. The six participants aged 19 and over (2.7%) all came from the El Paso National Youth Service Day.

The amount of service activities completed on a monthly average by participants was also considered. Participants were asked to mark either 0, 1-3, 4-6, 7-9 or 10 or more hours to indicate the number of hours of service completed on a monthly basis. Seventy-nine participants (35.9%) indicated they completed 1-3 hours of service activities each month. A smaller number, 65 (29.5%), indicated their participation was at 4-6 hours per month. Only 15 participants (6.8%) reported no service activity on a monthly basis, while a combined 61 (27.8%) participants reported seven or more hours per month of service activities.

The study also investigated the type of service activity completed by participants on a monthly basis. Participants were asked to describe the level of their service activity as either more than 50% direct (i.e. visiting a nursing home, reading to children), more than 50% indirect (collecting food, toys or other items for distribution, picking up trash), or does not apply. Ninety-one youth (41.4%) indicated they were participating in activities that provided direct interaction with the recipients. A larger percentage, 52.3% (115 participants) were participating in activities that yielded indirect contact with recipients. A small portion, 6.4%, (14 participants) responded they had not participated in service activities, and therefore answered ‘does not apply.’
Findings Related to Objective Two

The second objective was to describe whether service projects impact the development of leadership life skills in youth. Youth participants in this study were part of either the National Youth Service Day conducted in El Paso on April 12, 2003 or the District 11, 4-H Leadership Lab conducted in Brenham on June 5, 2003. Participants were asked to respond to thirty-three statements describing leadership life skills in the following five areas:

- Effective Team Skills;
- Creative Problem Solver;
- Personal Leadership Development;
- Self-Directed Learner;
- Contributor to Community.

Analysis of objective two was achieved by computing descriptive statistics on each of the thirty-three questions and further grouping the five subscales and computing descriptive statistics on the groups. The questionnaire included a Likert-type scale to record participants’ responses to the thirty-three statements. The scale contained six potential responses: 1 = Strongly Disagree; 2 = Disagree; 3 = Slightly Disagree; 4 = Slightly Agree; 5 = Agree; 6 = Strongly Agree.

### Table 1

*Level of National Youth Service Day and District 11 4-H Leadership Lab Participants’ Agreement with Effective Team Skills Statements, 2003, n=220*

<table>
<thead>
<tr>
<th>Effective Team Skills</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I cooperate with others.</td>
<td>f %</td>
<td>f %</td>
<td>f %</td>
<td>f %</td>
<td>f %</td>
<td>f %</td>
</tr>
<tr>
<td>I can get my ideas across to others.</td>
<td>0 0</td>
<td>3 1.4</td>
<td>6 2.7</td>
<td>27 12.2</td>
<td>101 45.7</td>
<td>83 37.6</td>
</tr>
<tr>
<td>I accept other people as they are.</td>
<td>1 0.5</td>
<td>2 0.9</td>
<td>3 1.4</td>
<td>28 12.7</td>
<td>100 45.2</td>
<td>86 38.9</td>
</tr>
<tr>
<td>I can get along with others who are different from me.</td>
<td>1 0.5</td>
<td>0 0</td>
<td>8 3.6</td>
<td>17 7.7</td>
<td>103 46.6</td>
<td>91 41.2</td>
</tr>
<tr>
<td>I encourage others.</td>
<td>0 0</td>
<td>1 0.5</td>
<td>5 2.3</td>
<td>29 13.1</td>
<td>96 43.4</td>
<td>89 40.3</td>
</tr>
<tr>
<td>I can keep written records.</td>
<td>6 2.7</td>
<td>15 6.8</td>
<td>25 11.3</td>
<td>45 20.4</td>
<td>81 36.7</td>
<td>48 21.7</td>
</tr>
<tr>
<td>I can follow directions.</td>
<td>0 0</td>
<td>0 0</td>
<td>5 2.3</td>
<td>33 14.9</td>
<td>93 42.1</td>
<td>89 40.3</td>
</tr>
<tr>
<td>I trust other people.</td>
<td>3 1.4</td>
<td>5 2.3</td>
<td>14 6.3</td>
<td>47 21.3</td>
<td>89 40.3</td>
<td>62 28.1</td>
</tr>
<tr>
<td>I can lead a discussion.</td>
<td>4 1.8</td>
<td>5 2.3</td>
<td>9 4.1</td>
<td>38 17.2</td>
<td>92 41.6</td>
<td>72 32.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16 0.8</td>
<td>34 1.7</td>
<td>83 4.2</td>
<td>307 15.5</td>
<td>855 43.2</td>
<td>685 34.6</td>
</tr>
</tbody>
</table>

Note: Scale 1 = Strongly Disagree; 2 = Disagree; 3 = Slightly Disagree; 4 = Slightly Agree; 5 = Agree; 6 = Strongly Agree; Scale Score for Participants, $M=5.02$, $SD=0.59$, $Min=2.56$, $Max=6.0$
For the Effective Team Skills (Table 1) subscale, seventy-eight percent of all the respondents either “agreed” or “strongly agreed” to seven of the nine statements. However, only 59% responded with “agree” or “strongly agree” to the statement, “I can keep written records.” Similarly, only 69% responded with “agree” or “strongly agree” to the statement, “I trust other people.” These two statements received the lowest overall scores in this subscale. Mean scores for participants were 5.02 (SD = 0.59, Min = 2.56, Max = 6.0) for the nine questions combined.

There were five individual questions and descriptive data for the Creative Problem Solver (Table 2) subscale. Seventy-four percent of all the respondents either “slightly agreed” or “agreed” with all five statements. Only 15% responded “strongly agree” to the combined five statements. The statement “When solving a problem, I generate many possible solutions before making a decision” received 152 (69%), “slightly agree” or “agree” responses, the lowest frequency of the five statements. The statement, “I solve problems in ways they have never been solved before” received 173 (79%) “slightly agree” or “agree” responses, the highest frequency of the five statements. Creative Problem Solver had the lowest overall mean, 4.57, SD=0.66, Min=1.80, Max=6.0.

**Table 2**

| Level of National Youth Service Day and District 11 4-H Leadership Lab Participants’ Agreement with Creative Problem Solver Statements, 2003, n=220 |
|---------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|                                 | Strongly Disagree | Disagree | Slightly Disagree | Slightly Agree | Agree | Strongly Agree |
| Creative Problem Solver         | f %                | f %      | f %                | f %            | f %    | f %          |
| I solve problems in ways they have never been solved before. | 3 1.4 | 8 3.6 | 28 12.7 | 89 40.3 | 84 38 | 8 3.6 |
| When solving a problem, I generate many possible solutions before making a decision. | 2 0.9 | 4 1.8 | 13 5.9 | 49 22.2 | 103 46.6 | 49 22.2 |
| I follow a process to solve a problem. | 6 2.7 | 12 5.4 | 12 5.4 | 75 33.9 | 80 36.2 | 35 15.8 |
| I consider all choices before solving a problem. | 0 0 | 5 2.3 | 6 2.7 | 55 24.9 | 113 51.1 | 41 18.6 |
| I clearly define a problem before generating possible solutions. | 2 0.9 | 6 2.7 | 14 6.3 | 66 29.9 | 99 44.8 | 33 14.9 |
|                                 | f 1.2 | f 35 | f 3.2 | f 73 | f 6.6 | f 334 | f 30.4 | f 479 | f 43.5 | f 166 | f 15.1 |

Note: Scale 1 = Strongly Disagree; 2 = Disagree; 3 = Slightly Disagree; 4 = Slightly Agree; 5 = Agree; 6 = Strongly Agree; Scale Score for Participants, M=4.57, SD=0.66, Min=1.80, Max=6.0

The next subscale was Personal Leadership Development (Table 3). This subscale had the highest overall mean, 5.24 (SD=0.51, Min=2.50, Max=6.0) of the five. Eighty-six percent of all the respondents replied “agree” or “strongly agree” to all six statements. Another 11%
responded with “slightly agree” to all six statements. Ninety-seven percent of all respondents indicated “slightly agree”, “agree” or “strongly agree” to all six statements. Less than 1% responded with “strongly disagree” or “disagree” for all six statements.

Ninety-two percent responded “agree” or “strongly agree” to the statement, “Serving others helps me grow as a leader.” While only 78% responded “agree” or “strongly agree” to the statement, “I am positive about my abilities.”

The most frequent response, 53% was “strongly agree” for the statement, “I learn from others.” Forty-nine percent responded “agree” to the statements, “Helping others increases my awareness of other’s needs,” and “Serving others helps me grow as a leader.”

### Table 3

**Level of National Youth Service Day and District 11 4-H Leadership Lab Participants’ Agreement with Personal Leadership Statements, 2003, n=220**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal Leadership</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helping others increases my awareness of other’s needs.</td>
<td>1</td>
<td>0.5</td>
<td>4</td>
<td>1.8</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>I learn from others.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1.8</td>
</tr>
<tr>
<td>I am positive about my abilities.</td>
<td>1</td>
<td>0.5</td>
<td>2</td>
<td>0.9</td>
<td>6</td>
<td>2.7</td>
</tr>
<tr>
<td>I can be a leader when I serve other’s needs.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>3.2</td>
</tr>
<tr>
<td>Serving others helps me grow as a leader.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>I feel comfortable acting as a leader when helping others.</td>
<td>1</td>
<td>0.5</td>
<td>3</td>
<td>1.4</td>
<td>8</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.2</td>
<td>9</td>
<td>0.7</td>
<td>29</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Note: Scale 1 = Strongly Disagree; 2 = Disagree; 3 = Slightly Disagree; 4 = Slightly Agree; 5 = Agree; 6 = Strongly Agree; Scale Score for Participants, $M=5.24$, $SD=0.51$, $Min=2.50$, $Max=6.0$

There were five individual questions and descriptive data for the Self- Directed Learner (Table 4) subscale. Eighty-two percent of the respondents indicated “agree” or “strongly agree” to all five statements. Ninety-six percent of the respondents indicated “slightly agree,” “agree,” or “strongly agree” to all five statements. Only 1% of the respondents indicated “strongly disagree” or “disagree” with the five statements. The overall mean of 5.16 ($SD=0.55$, $Min=2.80$, $Max=6.0$) indicates a favorable response to the Self-Directed Learner subscale. While overall, 82% of the respondents indicated “agree” or “strongly agree” to all six statements, only 78% had the same response for the statement, “I understand the significance to life of what I learn.” Similarly, only 75% had the same responses for the statement, “I like to discover new knowledge on my own.”
The statement, “I enjoy learning when my experiences pertain to real life” received 47%, the highest number of “strongly agree” responses in this subscale.

Table 4
Level of National Youth Service Day and District 11 4-H Leadership Lab Participants’ Agreement with Self-Directed Learner Statements, 2003, n=220

<table>
<thead>
<tr>
<th>Self-Directed Learner</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I use past experiences when I am learning something new.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0.9</td>
<td>4</td>
<td>1.8</td>
</tr>
<tr>
<td>I like to discover new knowledge on my own.</td>
<td>1</td>
<td>0.5</td>
<td>3</td>
<td>1.4</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>I understand the significance to life of what I learn.</td>
<td>2</td>
<td>0.9</td>
<td>2</td>
<td>0.9</td>
<td>4</td>
<td>1.8</td>
</tr>
<tr>
<td>I learn more when I am involved in the planning process of the learning experience.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.5</td>
<td>5</td>
<td>2.3</td>
</tr>
<tr>
<td>I enjoy learning when my experiences pertain to real life.</td>
<td>1</td>
<td>0.5</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Note: Scale 1 = Strongly Disagree; 2 = Disagree; 3 = Slightly Disagree; 4 = Slightly Agree; 5 = Agree; 6 = Strongly Agree; Scale Score for Participants, M=5.16, SD=0.55, Min=2.80, Max=6.0

The Contributor to Community (Table 5) subscale included eight individual questions and descriptive data. The overall mean, 5.21 (SD=0.59, Min=3.25, Max=6.0) was the second highest of the five subscales, indicating a very favorable response. Eighty-three percent of all respondents indicated “agree” or “strongly agree” to all eight statements. Ninety-six percent of all respondents indicated “slightly agree,” “agree,” or “strongly agree” to all eight statements. Less than 1% responded “strongly disagree” or “disagree” with all eight statements. The statement “Helping others has influenced the way I live my life” received the lowest percentage, 76% of “agree” and “strongly agree” responses. The remaining seven statements showed 82% or more of the respondents with “agree” or “strongly agree” marked.

The statement “I can make a difference in my community” received the highest frequency (105) of “strongly agree” responses. Forty-seven percent of the youth marked this response. Another 46% responded similarly for the statement, “Having a chance to serve makes me a stronger part of my community.” The statement, “Serving others helps me better understand my community” showed a 47% response rate for “agree.”
Table 5
Level of National Youth Service Day and District 11 4-H Leadership Lab Participants’ Agreement with Contributor to Community Statements, 2003, n=220

<table>
<thead>
<tr>
<th>Contributor to Community</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>I feel a responsibility to serve my community.</td>
<td>0 0 1 1 4 2 33 15 98 44 84 38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helping others influences how I live my life.</td>
<td>1 0.5 4 2 8 4 39 18 91 41 77 35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having a chance to serve makes me a stronger part of my community.</td>
<td>0 0 1 1 3 1 27 12 87 39 102 46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community service makes me think about real life in new ways.</td>
<td>0 0 5 2 5 2 28 13 84 38 98 44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serving others helps me better understand my community.</td>
<td>0 0 2 1 4 2 32 15 103 47 79 36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can make a difference in my community.</td>
<td>1 0.5 0 0 3 1 17 7.7 94 43 105 48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will continue to volunteer after high school.</td>
<td>0 0 0 0 7 3 30 14 88 40 95 43</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A leader should be required to serve his/her community.</td>
<td>2 0.9 0 0 11 5 22 10 91 41 94 43</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 0.2 13 0.7 45 2.6 228 13.0 736 41.8 734 41.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Scale 1 = Strongly Disagree; 2 = Disagree; 3 = Slightly Disagree; 4 = Slightly Agree; 5 = Agree; 6 = Strongly Agree; Scale Score for Participants, M=5.21, SD=0.59, Min=3.25, Max=6.0

The five subscale means ranged from a high of 5.24, Personal Leadership Development, to a low of 4.57, Creative Problem Solver. Contributor to Community had an overall mean of 5.21; Self-Directed Learner, 5.16; and Effective Team Skills, 5.02.

Findings Related to Objective Three

The third objective sought to describe whether having a reflection component as part of the service project makes a greater impact than a service project without reflection in the development of leadership life skills. An independent samples t-test comparing the means of each of the five subscales, Effective Team Skills, Creative Problem Solver, Personal Leadership
Development, Self-Directed Learner and Contributor to Community, yielded no significant difference between the reflection (treatment) and no reflection (control) groups. The presence of a reflection component to the service activity did not significantly increase leadership life skills in the participants as shown in Table 6.

**Table 6**
The Impact of Reflection in the Development of Leadership Life Skills by Participants in a Service Activity at National Youth Service Day, El Paso and District 11 Leadership Lab, Brenham, TX, 2003, n=220

<table>
<thead>
<tr>
<th></th>
<th>Control: no reflection</th>
<th>Treatment: with reflection</th>
<th>t-value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Creative Problem Solver</strong></td>
<td>4.63</td>
<td>4.49</td>
<td>1.55</td>
<td>0.123</td>
</tr>
<tr>
<td><strong>Personal Leadership Development</strong></td>
<td>5.28 (0.46)</td>
<td>5.19 (0.58)</td>
<td>1.4</td>
<td>0.162</td>
</tr>
<tr>
<td><strong>Self-Directed Learner</strong></td>
<td>5.2 (0.54)</td>
<td>5.1 (0.57)</td>
<td>1.27</td>
<td>0.206</td>
</tr>
<tr>
<td><strong>Effective Team Skills</strong></td>
<td>5.06 (0.55)</td>
<td>4.98 (0.64)</td>
<td>0.98</td>
<td>0.328</td>
</tr>
<tr>
<td><strong>Contributor to Community</strong></td>
<td>5.24 (0.56)</td>
<td>5.15 (0.63)</td>
<td>1.14</td>
<td>0.255</td>
</tr>
</tbody>
</table>

*p<.05

**Finding Related to Objective Four**

The fourth objective of the study was to describe whether a relationship exists between the youth’s service experience, their self-perceived leadership life skills and selected demographic characteristics. The service experience refers to whether the service activity was more than 50% direct contact or more than 50% indirect contact or no service activity. Direct contact was defined as directly interacting with the people being impacted by the service. Examples include visiting nursing homes, mentoring or tutoring children, or serving meals to the homeless. Indirect service was defined as those activities where the youth had no direct contact with the recipient of the service. Examples include food or clothing drives or cleaning the roadside of trash.

Service experience also refers to the number of hours a youth contributes to service activities on a monthly basis. Youth reported their prior service hours as 0, 1-3, 4-6, 7-9 or 10 or more hours per month.

Self-perceived leadership life skills refer to the five dependent variables: Effective Team Skills, Creative Problem Solver, Personal Leadership Development, Self-Directed Learner and Contributor to Community. Selected demographics include gender, age, and treatment. A (Multiple Analysis of Variance) MANOVA was used to determine the differences between the five dependent variables and selected independent variables. The use of MANOVA reduces the chance of a Type I error when trying to determine if several groups differ on more than one dependent variable (Gall et al., 1996). The results of the MANOVA are shown in Table 7. Only number of prior service hours and service type showed a significant difference. Gender, age and treatment did not show a significant difference on the development of leadership life skills.
Table 7
The Impact of Gender, Age, Treatment, Number of Service Hours and Service Type in the Development of Leadership Life Skills by Participants in a Service Activity at National Youth Service Day, El Paso and District 11 Leadership Lab, Brenham, TX, 2003, n=220

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>Wilks' Lambda</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1</td>
<td>0.966</td>
<td>1.48</td>
<td>0.197</td>
</tr>
<tr>
<td>Age</td>
<td>6</td>
<td>0.987</td>
<td>0.54</td>
<td>0.743</td>
</tr>
<tr>
<td>Treatment</td>
<td>1</td>
<td>0.982</td>
<td>0.75</td>
<td>0.588</td>
</tr>
<tr>
<td>Number of Service Hours</td>
<td>4</td>
<td>0.914</td>
<td>3.95</td>
<td>.002*</td>
</tr>
<tr>
<td>Service Type</td>
<td>1</td>
<td>0.928</td>
<td>3.27</td>
<td>.007*</td>
</tr>
</tbody>
</table>

*p<.05

Findings Related to Objective Five
The fifth objective of the study was to describe whether participation in 4-H and youth development activities has an impact on self-perceived leadership life skills. An independent samples t-test was used to compare the means on the five leadership life skills for 4-H members (n=165) and non-4-H members (n=55). Descriptive statistics showed the means for non-4-H members to be higher for all of the leadership life skills subscales. 4-H membership had a significant impact on only one life skill, Personal Leadership Development (t (1,217) = -2.252 p<.05). This is shown in Table 8. Non-4-H members had significantly higher Personal Leadership Development skills than 4-H youth. The effect size of 0.36 for Personal Leadership Development is small (Cohen, 1988) indicating that while statistically significant, it is not readily visible.

Table 8
The Impact of 4-H Membership in the Development of Leadership Life Skills by Participants in a Service Activity at National Youth Service Day, El Paso and District 11 Leadership Lab, Brenham, TX, 2003, n=220

<table>
<thead>
<tr>
<th>Variable</th>
<th>4-H?</th>
<th>M</th>
<th>SD</th>
<th>t-value</th>
<th>d</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative Problem Solver</td>
<td>yes</td>
<td>4.55</td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>4.62</td>
<td>0.60</td>
<td>-0.742</td>
<td>0.11</td>
<td>0.459</td>
</tr>
<tr>
<td>Personal Leadership Development</td>
<td>yes</td>
<td>5.2</td>
<td>0.51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>5.38</td>
<td>0.50</td>
<td>-2.252</td>
<td>0.36</td>
<td>0.025*</td>
</tr>
<tr>
<td>Self-Directed Learner</td>
<td>yes</td>
<td>5.13</td>
<td>0.57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>5.25</td>
<td>0.49</td>
<td>-1.398</td>
<td>0.23</td>
<td>0.163</td>
</tr>
<tr>
<td>Effective Team Skills</td>
<td>yes</td>
<td>4.99</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>5.12</td>
<td>0.55</td>
<td>-1.397</td>
<td>0.23</td>
<td>0.164</td>
</tr>
<tr>
<td>Contributor to Community</td>
<td>yes</td>
<td>5.18</td>
<td>0.59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>5.28</td>
<td>0.58</td>
<td>-1.114</td>
<td>0.17</td>
<td>0.267</td>
</tr>
</tbody>
</table>

*p<.05
Conclusions, Implication, and Recommendations

Objective two of the study was to describe whether service projects impact the development of leadership life skills in youth. Participants were asked to respond to thirty-three statements describing leadership life skills in the following five areas:

- Effective Team Skills
- Creative Problem Solver
- Personal Leadership Development
- Self-Directed Learner
- Contributor to Community

Analysis of objective two was achieved by computing descriptive statistics on each of the thirty-three questions and further grouping the five subscales and computing descriptive statistics on the groups. Results of the data analysis revealed the following for objective two:

1. Overall, the participants rated their self-perceived leadership life skills above average. The means scores for each subscale were greater than 4.57 on a 6-point scale. Personal Leadership Development had the highest mean of 5.24, followed by Contributor to Community at 5.21, Self-Directed Learner at 5.16, Effective Team Skills at 5.02 and Creative Problem Solver had the lowest mean of 4.57.

2. Ninety-five percent of the participants responded Slightly Agree, Agree or Strongly Agree to all 33 statements. Of that 95%, 79% of the responses were either Agree or Strongly Agree. This indicates the participants had a very positive view of their leadership skills. This data parallels Stafford (2001) where participants in a similar study rated their leadership life skills high. Specifically, 75-88% on the average, reported “agree” or “strongly agree” with the 33 statements addressing leadership life skills.

3. Analysis of the 33 individual questions revealed that the statement, “I learn from others” received the highest number (116) of “strongly agree” responses. Fifty-three percent of the participants felt they learn from others. It may be concluded that peer to peer teaching is an effective means of teaching teens.

4. Participants had a positive attitude toward diversity and acceptance of others, 45.2% and 38.9% responded “agree” or “strongly agree” respectively to the statement, “I accept other people as they are.” Similarly, 46.6% responded “agree” and 41.2% responded “strongly agree” to the statement, “I can get along with others who are different than me.” This supports the research of Kirby (1989), and Billig (2000). Woyach’s (1996) model of a successful leadership education program also includes attention to diversity and sensitivity to other cultures.

5. Forty-eight percent (105) of the participants responded “strongly agree” with the statement, “I can make a difference in my community.” Astin et al. reported similar attitudes. This also parallels the Independent Sector’s findings (2003), where the benefits of youth involvement in service activities included having an impact and making a difference.

6. The subscale Creative Problem Solver revealed that participants were not positive in their attitudes of this characteristic. Eleven percent of the respondents rated their self-perceived leadership skill in this area below average. Of the remaining 89%, only 15% strongly agreed with the five statements in this subscale. This finding parallels Stafford’s 2001 research, where Creative Problem Solver skills were rated moderately low by study participants using a similar instrument. It may be concluded that teens have either not had the opportunity to practice creative problem solving or have not been taught how to do so.
The third objective sought to describe whether having a reflection component as part of the service project makes a greater impact than a service project without reflection in the development of leadership life skills. The analysis was conducted by computing an independent samples t-test comparing the means of each of the five subscales: Effective Team Skills, Creative Problem Solver, Personal Leadership Development, Self-Directed Learner and Contributor to Community.

No significant difference between the reflection (treatment) and no reflection (control) group was found. The presence of a reflection component in the service activity did not significantly increase perceived leadership life skills in the participants. This finding does not support Stafford’s 2001 findings, where reflection immediately following the activity significantly affected the means for Contributor to Community. Nor does this finding support the Standards Committee of the Alliance for Service-Learning (Close Up Foundation, 1995) which states that preparation and reflection are critical to a successful service-learning program.

The fourth objective was to describe whether a relationship exists between the youth’s service experience, their self-perceived leadership life skills and selected demographic characteristics. The service experience refers to whether the service activity was more than 50% direct contact or more than 50% indirect contact or no service activity. Service experience also refers to the number of hours a youth contributes to service activities on a monthly basis. Youth reported their prior service hours as 0, 1-3, 4-6, 7-9 or 10 or more hours per month.

Self-perceived leadership life skills refer to the five dependent variables: Effective Team Skills, Creative Problem Solver, Personal Leadership Development, Self-Directed Learner and Contributor to Community. Selected demographics include gender, age, and treatment.

A multiple analysis of variance (MANOVA) was used to determine the differences between the five dependent variables and selected independent variables. The use of MANOVA reduces the chance of a Type I error when trying to determine if several groups differ on more than one dependent variable (Gall, Borg & Gall, 1996). The results of data analysis for objective four are as follows:

1. A significant difference was seen in service type and service hours; gender, age and treatment did not show a significant difference on the development of leadership life skills; this was determined with the MANOVA. Schine (1990) makes a case that reflection is not the only factor important to the success of a service-learning program. The type of service, whether there was direct or indirect contact in the activity plays a critical role, as this research also found.

2. Gender and age did show significance in the area of helping others in the National 4-H Impact Assessment Project, (2001. Females reported higher mean scores than males. Younger youth reported higher mean scores than older youth.

The fifth objective of the study was to describe whether participation in 4-H and youth development activities has an impact on self-perceived leadership life skills. An independent samples t-test was used to compare the means on the five leadership life skills between 4-H members (75%) and non-4-H members (25%). Results of the data analysis are as follows:

1. The mean for each of five leadership skills was higher for non-4-H members than 4-H members. This finding is not supported by other research in the area of 4-H leadership life skills development (Boyd, Herring & Briers, 1992, Howard, 2001, Rodriguez, Hirschl, Mead, & Goggin, 1999, Astroth, 2002, & Ledoux, 1997).
2. Personal Leadership Development was statistically significantly different between the two groups.

**Implications**

Participants in the study generally perceived their leadership life skills to be above average. 4-H participants historically are exposed to many leadership training opportunities and may have under-rated their leadership skills; while, non-4-H participants may have over-rated their leadership skills.

The presence or absence of a reflection component in the service activity did not have a significant effect on the perceived leadership life skills of participants. The measurement of a one-time service activity may not be enough to change the participant’s level of leadership life skills. The participants’ assessments of their current perceived leadership life skills were already at a high level due to the nature of the activity. The reflection component alone may not impact leadership life skills, other factors may need to be considered as suggested by Schine (1990). Linking the service activity specifically to a leadership curriculum and connecting the two during reflection activity may serve to identify an impact.

The type of service and the hours of service completed on a monthly basis, did however, have a significant impact on perceived leadership life skills. There is an implication that participants involved in activities that require direct contact with service recipients will perceive their leadership life skills to be higher. Similarly, those youth who participate in 7-9 or more hours of service on a monthly basis will have higher perceptions of their leadership life skills.

**Recommendations for Action**

1. Utilize curricula that allows teens teaching teens, as this research showed the most frequent positive response. Fifty-three percent “strongly agreed” for the statement, “I learn from others.” Forty-nine percent responded “agree” to the statements, “Helping others increases my awareness of other’s needs,” and “Serving others helps me grow as a leader.”

2. Include service activities in 4-H and youth programming, with the goal of youth participating seven or more hours on a monthly basis. This research indicated that as the hours of youth service increases, on a monthly average, the perceived leadership life skills rating also increased.

3. Encourage service activities that provide direct involvement with the recipients versus indirect involvement. “Bake and take” is nice, but one to one service yields greater benefits for the provider and the recipient. Direct service activities showed significantly different impact over Indirect service activities in this research.

4. Link 4-H project areas to the service activity; research supports the idea that the significance of the activity is increased when there is relative value seen by the service provider.

5. Utilize an evaluation instrument or methodology that includes more than self-reporting.
References


Helping Schools: Youth Development as a Form of Supplemental Education

Jan B. Carroll
4-H Youth Development
Colorado State University
Jan.Carroll@colostate.edu

Jeff Goodwin
4-H Youth Development
Colorado State University
Jeff.Goodwin@colostate.edu

Melissa Oliver
4-H Youth Development
Colorado State University
Melissa.Oliver@colostate.edu
Helping Schools: Youth Development as a Form of Supplemental Education

Jan B. Carroll, Jeff Goodwin and Melissa Oliver
Colorado State University

Abstract: This study measured the impact of 4-H Youth Development on Colorado’s youth. Active youth were compared to those who did not participate in out-of-school activities. Data were collected from 5th, 7th, and 9th grade students. Results of the study confirm active students, including 4-H Youth Development members, were less likely to engage in at-risk behaviors. 4-H Youth Development can function as a form of supplemental education, contributing to academic, civic, and social success of young people.

Introduction

Youth development, including 4-H, is one form of supplemental education – efforts by schools, parents, organizations and communities to enhance learning for K-12 students. According to Bridgall and Gordon (2002), “the idea of supplementary education is based on the assumption that high academic achievement is closely associated with exposure to family and community-based activities and that occur outside of school in support of academic learning” (p. 1). They define supplemental education as “the formal and informal learning and developmental enrichment opportunities provided for students outside of school and beyond the regular school day or year” (p. 2).

Schools alone are unable to assure students opportunities to learn and practice all of the hard and soft skills required by today’s workforce today. The basic skills required by U.S. businesses include traditional characteristics such as a positive attitude and a willingness to work hard, and also hard skills -- mathematics, problem solving and reading, and soft skills -- the ability to work in groups and present effectively both orally and in writing (Murnane & Levy, 1996). These are not always taught during the regular school day, practiced in the classroom environment, measured on standardized tests, and/or reported to stakeholders as measures of school success.
Youth development programs, including 4-H, are: well positioned to add value to the work of schools and families by building on young people’s current knowledge and strengths. In addition, they can provide young people with the support, protection, guidance, and opportunities that will allow them all to take their places as the next generation of America’s workers, family members, and citizens (Quinn, 1999, p. 113).

Other forms of supplemental education include after-school care and the many “education-related opportunities that ... parents make available to their children – for example travel, dance lessons, scouting, tutoring, summer camp, and so forth” (Gordon, Bridglall and Meroe, 2005, p. 40).

According to Ingles, et. al (2002), participation in extracurricular activities in eighth grade was one characteristic of students (others included exhibiting high math achievement, studying algebra, and attending private school) who were more likely to graduate from high school with a diploma and less likely to complete high school with a GED or to drop out. They also had higher postsecondary enrollment rates and bachelor’s/higher degree attainment. These findings are important, since the income premium for having a bachelor’s degree over having no postsecondary education was about 33 percent in 2002.

Furthermore, educational attainment is associated with all seven attributes of democratic citizenship – that is, more active and effective citizenship, as shown by the 1990 Citizen Participation Study (Nie, Junn, & Stehlik-Barry, 1996).

Although 4-H Youth Development has celebrated 100 years in Colorado and has extensive reach and potential for promoting positive youth development, little systematic analysis of effectiveness has been conducted in the state, nor indeed among any youth development organizations (Quinn, 1999).

The purpose of this study was to measure the impact that the 4-H Youth Development experience has had on Colorado’s young people. As state and county budgets become tighter and tighter, the 4-H Youth Development program must demonstrate its effectiveness with sound data to enhance the rich anecdotal information more easily available. Research-based information is critical to future 4-H Youth Development programs.

Also examined were students who were active in out-of-school-time activities other than 4-H and their involvement in at-risk behaviors. This paper focuses on these data and relates the findings to the value of 4-H Youth Development as a form of supplemental education.

**Methods and Procedures**

This Colorado 4-H Impact Study was undertaken to determine the impact 4-H Youth Development may have had on students in Colorado public schools. Colorado State University’s Human Research Committee (HRC) gave approval to survey Colorado 5th, 7th and 9th grade students.

There were 1906 useable surveys returned. The data were entered, coded and analyzed as a capstone project by the spring 2005 BK 410 Marketing Research class in the College of Business
at Colorado State University. Some data were reviewed by the university’s Department of Statistics for data entry accuracy and additional data analysis.

**Population**

The population for the Colorado 4-H Impact Study consisted of a stratified random sample of 15 counties in Colorado. A stratified random sample was used to insure an equal distribution of counties among the three Extension regions in the state (North, South, and West). In each county, four schools were randomly selected. The list of schools was retrieved from the Colorado Educational Directory 2004 - 2005 (Colorado Department of Education, 2005). Using the complete list of schools that had 5th, 7th and/or 9th grades, a computer random generator was used to determine the selected schools. These grades were selected because they represent the audience served by 4-H Youth Development (Goodwin et al. 2005).

Before the administration of the survey, some selected counties and some schools within selected counties determined they would not be able participate. Alternate counties and schools had been selected and did participate.

**Development of Instruments**

The survey instrument used to assess the ways young people spent their time out of school and how that use of time may affect their academic, emotional, social and cognitive development was modeled on a study conducted in 2000 by the Montana Extension Service (in collaboration with researchers at Montana State University), and replicated in Idaho in 2002 – 2003. The Search Institute approved the use of some of their survey questions for the Montana survey; subsequently, Idaho and Colorado requested and were granted permission to carry those questions forward for their replication studies.

The original instrument consisted of principally high quality (valid and reliable) questions taken from other national or state surveys (Astroth & Haynes, 2002). It included questions of basic demographic and family-oriented content as well as questions categorized into seven subscales:

- Positive self-identity
- Social competency
- Relationships with adults
- Self confidence
- Empowerment
- Kindheartedness
- Skills

To save students’ time during administration of the survey, Colorado’s edition included only 65 questions. Redundant items were eliminated in consultation with the BK410 Marketing Research students whose early group assignment included shortening the survey.

The survey was divided into seven sections (see Table 1). The question formats included fill-in-the-blank, yes/no, essay, circle those that apply (Likert-type scale), and multiple-choice. A Spanish version of the survey was available for those students who had difficulty reading or comprehending English. No Spanish-language surveys were returned.
Table 1
Design of the survey

<table>
<thead>
<tr>
<th>Section</th>
<th>Questions</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 – 2</td>
<td>Gather extracurricular activity and negative behavior information about the subjects of the study</td>
</tr>
<tr>
<td>2</td>
<td>3 – 9</td>
<td>Determine the way the students perceived themselves regarding their personal identity</td>
</tr>
<tr>
<td>3</td>
<td>10 – 15</td>
<td>Have the participants assess their levels of social competency</td>
</tr>
<tr>
<td>4</td>
<td>16 - 27</td>
<td>Same as above</td>
</tr>
<tr>
<td>5</td>
<td>28 – 38</td>
<td>Measure specifically how the individuals felt concerning their self confidence, character and personal empowerment</td>
</tr>
<tr>
<td>6</td>
<td>39 – 53</td>
<td>Determine whether the students cared about others, life skills they have learned and demographics, including age, grade, gender, location of family living unit, grades in school, and family composition</td>
</tr>
<tr>
<td>7</td>
<td>54 – 65</td>
<td>Ascertain whether participants had been, or currently were, a 4-H Youth Development member.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Those who had no experience completed the survey at this point.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Students who had experience with 4-H Youth Development were asked to complete the rest of section seven, which was designed to measure the impact of 4-H Youth Development on those students who had participated.</td>
</tr>
</tbody>
</table>

Collection of Data

The survey instruments were delivered to or picked up by the local Cooperative Extension agent in each participating county. Packets of instructions on how to administer the survey were sent to all county Extension agents in the selected counties. They made initial contacts with the school superintendents and/or principals. Letters of cooperation were secured from each participating school in every selected county.

Surveys were implemented within the randomly selected schools in those counties after HRC approval was granted. Parental “opt out” letters of informed consent were sent previous to the actual administration of the survey. Administration of the questionnaires was conducted in the spring of 2005. A follow-up was not necessary as all students completed the surveys during the class period.

Surveys were not coded in advance. However, when each class finished within the participating grade, the surveys were wrapped with an accompanying tracking sheet filled in with pertinent information by the county Extension agent or other facilitator. Surveys were sent to the State 4-H Office where they were checked in and distributed to those BK410 class members whose assignment was data entry. SPSS was the program used for data entry and analysis. Response rates are reported in Table 2.
Table 2
Response to the survey instrument

<table>
<thead>
<tr>
<th>Respondent Groups</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counties</td>
<td>15</td>
</tr>
<tr>
<td>Students</td>
<td>2003</td>
</tr>
</tbody>
</table>

Coding and Analysis of Data
The BK410 Marketing Research class at Colorado State University coded and entered the data into SPSS and each of five small groups from the two sections prepared a report and presentation for the State 4-H Office. Four of the groups reported frequencies only. For the SPSS program to analyze the dependent variables, the fifth group converted the rankings of the Likert-type scales to numerical classes and treated them as interval level variables:

1 = Strongly Agree
2 = Agree
3 = Neutral
4 = Disagree
5 = Strongly Disagree

Missing data were coded as 9 = “missing” for electronic entry after they were received. These were deleted from statistical analysis. Ninety-seven questionnaires were unusable due to incorrect completion, wrong grade surveyed for information, and/or empty spaces. Analyses were conducted with 1,906 usable returned surveys.

The fifth small group from BK410 conducted and reported statistical analysis of the data. Logistic regression using the chi-square ($\chi^2$) test was performed for analysis. The statistics laboratory in the Colorado State University Department of Statistics reviewed the data entry for accuracy, and provided additional data analysis.

Frequencies and percentages
Frequencies and percentages were complied on the questions regarding extracurricular participation, negative behaviors, positive identity, social competency, contact with adults, self confidence, empowerment, caring about others, skills learned, age, grade, gender, household size, location of family living unit, family types, and impact of 4-H Youth Development on members.

Findings and Discussion

Participants
Respondents were asked to indicate a number of background characteristics to contribute to the statistical analysis. Of the 1906 respondents who participated in the survey,

- 49.9 percent were male, and 49.2 percent were female.
- 393 reported they had been involved in the 4-H Youth Development program for at least one year.

Of those 406 respondents who had ever been in 4-H Youth Development, 294 of them had been a member for two years or more.
The age range reported was between 10 and 15 with outliers at ages 9, 16, and 17. Students were asked to specify which grade they were in at the time of the survey: 5th, 7th, or 9th. Of the participants,
- 41.7 percent identified themselves as being in the 5th grade;
- 37.6 percent reported to be in the 7th grade; and
- 20.7 percent said they were in the 9th grade.

Concerning location of residence, of the 1,906 total respondents,
- sixty-one respondents did not indicate where they were living;
- 12.9 percent lived on a farm;
- 24.8 percent lived in the country, but not on a farm; and
- 62.2 percent lived in town.

Of the 402 4-H Youth Development respondents to this question,
- 31.1 percent lived on a farm;
- 27.4 percent lived in the country but not on a farm; and
- 41.5 percent lived in town.

**Active and Non-Active Students**
Analysis of the data revealed that Colorado youth in the sample who were involved in out-of-school activities were less likely to be involved in a variety of at-risk behaviors when compared to youth who were not involved in any out-of-school activities (Table 3). This was congruent with data from the Montana study, where “youth who are involved in out-of-school activities were found to be less likely to be involved in a whole range of at-risk behaviors when compared to youth who are not involved in any out-of-school activities” (Astroth and Haynes, 2002, pp. 3-4).

To determine the involvement in the identified at-risk behaviors, respondents answered yes or no to this wording on the survey instrument, “During the past year did you.....

- Cheat on a test?
- Drink any alcohol without parental permission?
- Shoplift?
- Use any drugs like marijuana, methamphetamines, or cocaine; or sniff glue or other fumes to get high?
- Smoke cigarettes?”

Table 3 shows that there was a highly significant statistical difference between active and non-active respondents in all identified at-risk behaviors except “cheated on a test.” The incidence of cheating on tests increased with grade level. When all grades (5th, 7th, and 9th) were examined (Table 3) the incidence of cheating on a test was reported at 23.7 percent for active students and 25.7 percent for non-active students. There was no statistical difference between the groups of students. When the 9th grade respondents were examined separately, however (Table 4), incidences were reported at the higher levels of 43.9 percent for active students and 37.5 percent for non-active students. There was still no statistical difference between the groups.
Table 3
Percent of Students (all grades) Involved in At-Risk Behaviors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Active Students</th>
<th>Non-Active Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
<td># (of total)</td>
</tr>
<tr>
<td>Cheated on a test</td>
<td>23.7</td>
<td>385 (1624)</td>
</tr>
<tr>
<td>Drank alcohol</td>
<td>15.1**</td>
<td>244 (1619)</td>
</tr>
<tr>
<td>Shoplifted</td>
<td>5.5**</td>
<td>89 (1613)</td>
</tr>
<tr>
<td>Used drugs</td>
<td>6.6**</td>
<td>107 (1614)</td>
</tr>
<tr>
<td>Damaged property</td>
<td>11.9**</td>
<td>193 (1618)</td>
</tr>
<tr>
<td>Smoked</td>
<td>7.8**</td>
<td>126 (1613)</td>
</tr>
</tbody>
</table>

* = significant difference P< 0.05  ** = highly significant difference  (#) = number of observations

Respondents in the 9th grade who did not participate in any out-of-school activities reported that they were more likely to shoplift, use drugs, damage property, and smoke cigarettes. In fact, the non-active students were more than twice as likely to shoplift and more than twice as likely to use drugs (Table 4). Montana data showed non-active 9th graders to be twice as likely to shoplift, and nearly three times as likely to use drugs (Astroth and Haynes, 2002).

Table 4
Percentage of Active and Non-Active 9th Grade Students Engaged in At-risk Behaviors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Active Students</th>
<th>Non-Active Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
<td># (of total)</td>
</tr>
<tr>
<td>Cheated on a test</td>
<td>43.9</td>
<td>143 (326)</td>
</tr>
<tr>
<td>Drank alcohol</td>
<td>39.3</td>
<td>128 (326)</td>
</tr>
<tr>
<td>Shoplifted</td>
<td>8.3*</td>
<td>27 (326)</td>
</tr>
<tr>
<td>Used drugs</td>
<td>12.9**</td>
<td>42 (325)</td>
</tr>
<tr>
<td>Damaged property</td>
<td>17.2*</td>
<td>56 (326)</td>
</tr>
<tr>
<td>Smoked</td>
<td>17.8**</td>
<td>58 (326)</td>
</tr>
</tbody>
</table>

* = significant difference; ** = highly significant difference; (#) = number of observations

Considering this difference between the active and non-active students, researchers asked if there were any difference between the 9th grade 4-H Youth Development members and the other active 9th grade students in their responses to the at-risk behavior questions. The results are shown on Table 5. Ninth grade 4-H Youth Development members were again significantly less likely to use drugs than were the active students who had never belonged to 4-H Youth Development (Table 5), but data did not indicate they were less likely to participate in other at-risk behaviors.
Table 5
9th Grade 4-H Youth Development Students and Non-4-H Youth Development Active 9th Grade Students Engaged in At-risk Behaviors

<table>
<thead>
<tr>
<th>Variable</th>
<th>4-H Youth Development 9th Grade Students</th>
<th>Non-4-H Youth Development But Active 9th Grade Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
<td>#</td>
</tr>
<tr>
<td>Cheated on a test</td>
<td>44.9</td>
<td>(35 of 78)</td>
</tr>
<tr>
<td>Drank alcohol</td>
<td>39.7</td>
<td>(31 of 78)</td>
</tr>
<tr>
<td>Shoelifted</td>
<td>9.0</td>
<td>(7 of 78)</td>
</tr>
<tr>
<td>Used drugs</td>
<td>6.4*</td>
<td>(5 of 78)</td>
</tr>
<tr>
<td>Damaged property</td>
<td>16.7</td>
<td>(13 of 78)</td>
</tr>
<tr>
<td>Smoked</td>
<td>12.8</td>
<td>(10 of 78)</td>
</tr>
</tbody>
</table>

* = significant difference; (#) = number of observations

Reported academic performance of active and non-active students is summarized below (Table 6). Students who were active in out-of-school activities were more likely to report getting better grades than those students who were not active in such programs. Almost 65 percent of the active students reported they had received either mostly A's or about half A's and half B's. In contrast, only about 40 percent of those students who were non-active reported they had received mostly A's or about half A's and half B's. Bridglall and Gordon (2002) agree that those high achieving students who have experienced supplementary education efforts “identify with high achievement values” and “have good study skills and other learner behaviors” (p. 2).

Table 6
Academic Performance of Active and Non-Active Students (all grades)

<table>
<thead>
<tr>
<th>Grades</th>
<th>Active Students**</th>
<th>Non-Active Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
<td>#</td>
</tr>
<tr>
<td>Mostly A's</td>
<td>31.1</td>
<td>(504 of 1623)</td>
</tr>
<tr>
<td>A's and B's</td>
<td>33.7</td>
<td>(547 of 1623)</td>
</tr>
<tr>
<td>Mostly B's</td>
<td>6.0</td>
<td>(97 of 1623)</td>
</tr>
<tr>
<td>B's and C's</td>
<td>16.2</td>
<td>(263 of 1623)</td>
</tr>
<tr>
<td>Mostly C's</td>
<td>2.8</td>
<td>(46 of 1623)</td>
</tr>
<tr>
<td>C's and D's</td>
<td>6.8</td>
<td>(111 of 1623)</td>
</tr>
<tr>
<td>Mostly D's</td>
<td>1.6</td>
<td>(26 of 1623)</td>
</tr>
<tr>
<td>Less than D's</td>
<td>1.8</td>
<td>(29 of 1623)</td>
</tr>
</tbody>
</table>

* = significant difference; ** = highly significant difference; (#) = number of observations

Discussion and Recommendations

Researchers expected to find 4-H Youth Development participants indicating they were less involved in at-risk behaviors and more involved in asset-building behaviors. While the latter was reflected in the data reported elsewhere, the difference in at-risk behaviors was actually between active and non-active youth, where 4-H may or may not have been one of the activities.
Youth development programs staff increasingly recognize “the need to work in meaningful partnerships with other community institutions especially schools” (Quinn, p. 112). Inserting 4-H Youth Development curriculum and activities into programs and sites already serving youth (such as Boys and Girls Clubs, YMCA and YWCA, Girls, Inc., the National Urban League, school-based after school programs, faith-based youth groups, etc.) is one way to partner. Afterschool programs are, in fact, among the most widespread forms of supplementary education (Bridglall and Gordon, 2002). 4-H Cooperative Curriculum System (4-HCCS) materials (http://www.n4hccs.org/) are jury reviewed and available for use in all counties, states, and territories. Colorado’s Seasonal 4-H Clubs model (http://www.4h.colostate.edu/schoolenrichment/schoolenrichment.shtml) is another design that can come off the shelf and into the supplemental education environment with minimal preparation. While intended for out-of-school use, these materials are aligned with Model Content Standards for Learning and with Bridglall’s and Gordon’s (2002) targeted supplemental education strategy to “nurture academic achievement as instrumental to personal and political agency” (p. 3).

Framing 4-H Youth Development programs as a form of supplemental education provides the opportunity to position a traditional program within a modern effort to provide youth with the skills they need for today’s workforce and society.

**References**


The Promise of Autonomy Supportive Contexts to Promote Youth Participatory Competence

Margaret Cargo
Psychosocial Research Division
Douglas Hospital Research Centre-McGill University
margaret.cargo@douglas.mcgill.ca

Tatiana Nedacheva
Psychosocial Research Division
Douglas Hospital Research Centre-McGill University

Nguyet Nguyen
Health and Social Services Agency
Laval, Quebec
nguyet_nguyen@ssss.gouv.qc.ca

Michel De La Durantaye
Department of leisure science and social communication
University of Quebec at Trois-Rivieres
Michel.DeLa.Durantaye@uqtr.ca
The Promise of Autonomy Supportive Contexts to Promote Youth Participatory Competence

Margaret Cargo and Tatiana Nedecheva
Douglas Hospital Research Centre-McGill University

Nguyet Nguyen
Health and Social Services Agency of Laval, Quebec

Michel De La Durantaye
University of Quebec at Trois-Rivieres

Abstract: A municipal youth citizenship initiative was implemented with the aim of providing adolescents with autonomy supportive contexts to plan and implement activities that were meaningful to youth and contributed to the collective good. The study purpose was to assess whether autonomy support, operationalized as instrumental practitioner support, influenced youth perceptions of participatory group competence beyond individual level factors. Youth participated in groups of 8 to 20 peers with practitioners facilitating youth participation in collective decision-making, planning and activity implementation. Cross-sectional surveys were completed by 79 of 113 eligible youth participants actively involved in the citizenship initiative implemented during the 2003-04 school year. Practitioner support was significantly related to participatory group competence, beyond perceived self-efficacy and age. Study findings suggest that there may be some merit to the implementation of youth citizenship initiatives that create autonomy supportive contexts and allow youth the opportunity to develop their participatory competence. Experiences such as this may allow young people to flourish as individuals and citizens and thus realize their full potential.
Introduction

Positive youth development stresses the importance of transactions between adolescents and their proximal social environments to produce constructive developmental change (Lerner, Dowling, & Anderson, 2003; Lerner & Castellino, 2002). In contexts characterized as autonomy supportive, practitioners encourage youth to make choices and participate in decision-making to satisfy basic psychological needs of autonomy, competence, and relatedness (Deci, & Ryan 2000; 1995). In contexts that undermine autonomy, practitioners make decisions on behalf of youth and unintentionally thwart satisfaction of these basic psychological needs (Deci, & Ryan 2000; 1995). As a concept within Deci and Ryan’s (1985) self-determination theory, autonomy support is associated with positive changes in academic achievement and self-esteem (McLaughlin, Irby, & Langman, 1994), sense of sharing and respect for others (Gambone & Arbreton, 1997; McLaughlin, 2000; Merry, 2000), emotional well-being (Ryan, La Guardia, Solky,-Butzel, Chirkov, & Kim, 2005), as well as social competence and job seeking (Soenens & Vansteenkiste, 2005).

The concept of autonomy support is also congruent with empowerment-based adolescent citizenship (Hart & Atkins, 2002) and health promotion initiatives (World Health Organization, 1986). Related research suggests that there may be some merit to practitioners providing autonomy support to youth groups in school and community settings to promote competent group-based decision-making (Cargo, Grams, Ottoson, Ward, & Green, 2003; Wallerstein & Sanchez-Merki, 1994). Rather than teaching or implementing pre-designed activities for youth, practitioners can facilitate or enable collective decision-making and promote positive developmental outcomes while teens contribute to the collective good (Camino & Zeldin, 2002).

This study hypothesized that an autonomy supportive context, operationalized as instrumental practitioner support, would be positively related to youth perceptions of participatory group competence, when individual level measures were taken into account.

Methods

Intervention Context

A youth citizenship initiative was launched by an urban municipality with a population of 350,000 to enable youth empowerment through their participation in planning and implementing activities of interest to them. This initiative was adopted by five schools and two youth-based community organizations that served an estimated 6,000 youth. Youth participated in groups ranging from 8 to 20 participants to plan and implement activities. They met outside of school time to plan a variety of activities ranging from school culture week and a skateboard park to preparation and delivery of food baskets to community members. Group leaders were practitioners with backgrounds in counseling, guidance, social work, and youth work. Their mandate was to work with youth groups to provide ongoing autonomy support and thus facilitate collective planning, decision-making, and activity implementation.

Procedure

Cross-sectional surveys were completed by 79 of 113 youth participants actively involved in the youth citizenship initiative implemented during the school year. Surveys were administered at a regularly scheduled youth project meeting in May 2004. Self-report surveys were completed in the researcher’s presence. The response rate was 70% of those involved in activity planning and decision-making. Ethical approval was obtained from the University of Quebec at Trois-Rivieres.
**Measures**
Measures were derived from the literature when available, or developed for this study from published qualitative research based on a Healthy Communities initiative (Cargo et al., 2003). New measures were reviewed by a panel of three experts in youth empowerment and pre-tested on a convenience sample of 15 youth and six practitioners for comprehension and readability. Changes in wording and question format were made based on their feedback.

**Dependent Measure:**
We developed a 7-item measure of perceived participatory group competence (scored on a four-point Likert scale) to assess youth perceptions of their group’s capacity to collaborate on making decisions, planning, and implementing activities (See Table 1). One scale item (#6) was reverse coded. Higher scores indicated greater perceived participatory competence ($\alpha = 0.73$).

**Table 1**
Items for the participatory competence measure

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Group members shared their ideas and opinions freely with each other.</td>
</tr>
<tr>
<td>2.</td>
<td>The group considered my ideas when it came to deciding on the tasks that needed to be done.</td>
</tr>
<tr>
<td>3.</td>
<td>Our group weighed the pros and cons of different ideas before making decisions.</td>
</tr>
<tr>
<td>4.</td>
<td>The group worked together to implement its activities.</td>
</tr>
<tr>
<td>5.</td>
<td>When it came to planning activities, we made decisions as a group.</td>
</tr>
<tr>
<td>6.</td>
<td>Group members did not listen to the opinions of others when it came to making decisions.</td>
</tr>
<tr>
<td>7.</td>
<td>The group considered my ideas when it came to making decisions to advance the project.</td>
</tr>
</tbody>
</table>

**Independent Measures:**
Demographic and contextual measures. Information on youth age (years), gender, and academic achievement (4-point ordinal measure) was collected. Whether youth participated in the school or community setting was coded as a binary variable. To assess practitioner level differences in support, the group in which youth participated was coded as a nominal variable.

Individual measures included perceived self-efficacy ($\alpha=0.79-0.83$), perceived co-operation and communication and perceived problem-solving scales ($\alpha=0.70-0.77$) from the California Healthy Kids Survey (Constantine & Benard, 2001). Each 3-item scale was assessed using a 4-point Likert scale. Self-reported participation measures included duration of activity participation (months), and the number of activities in which youth were involved over the last school year.

Perceived autonomy support was measured using a newly developed 7-item scale; each item was rated on a 4-point Likert scale. The scale was informed by the concept of autonomy support in Deci & Ryan’s (2000) self-determination theory and qualitative research featuring the role of practitioners in enabling collective youth decision-making (Cargo et al., 2003). Youth responded to the following items on whether practitioners:

- gave advice, suggestions and information,
- helped the group with brainstorming and discussion,
- showed youth how to work in a group,
• provided group feedback, and
• showed youth new skills in support of collaborative planning, decision-making and activity implementation (α=0.86).

Given the skewed distribution, this measure was dichotomized based on the median split to reflect “high” and “low” autonomy support.

**Results**

Participants’ age (n=79) ranged from 12 to 17 years, with a mean age of 14.1 years (SD=1.55). More girls (58 percent) completed surveys than boys. Level of academic achievement was high with 24 percent of participants reporting a grade of 91 or higher on an ordinal-level measure. Descriptive information for psychosocial, participation and autonomy support measures is in Table 2.

**Table 2**

Means and standard deviations for psychosocial, participation and perceived autonomy support measures.

<table>
<thead>
<tr>
<th>Measures</th>
<th>N</th>
<th>No. items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychosocial/ developmental (mean + SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived self-efficacy</td>
<td>3.43 (.41)</td>
<td>79</td>
<td>3</td>
</tr>
<tr>
<td>Perceived cooperation and communication</td>
<td>3.49 (.53)</td>
<td>79</td>
<td>3</td>
</tr>
<tr>
<td>Perceived problem-solving</td>
<td>3.01 (.64)</td>
<td>79</td>
<td>3</td>
</tr>
<tr>
<td>Perceived participatory group competence</td>
<td>3.43 (.42)</td>
<td>78</td>
<td>7</td>
</tr>
<tr>
<td>Participation (mean + SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration of participation (% more than 6 months)</td>
<td>35%</td>
<td>79</td>
<td>1</td>
</tr>
<tr>
<td>Number of activities (% more than 2 activities)</td>
<td>43%</td>
<td>79</td>
<td>1</td>
</tr>
<tr>
<td>Context (% involved in school setting)</td>
<td>70%</td>
<td>79</td>
<td>1</td>
</tr>
<tr>
<td>Perceived Autonomy Support (mean + SD)</td>
<td>1.48 (.50)</td>
<td>75</td>
<td>8</td>
</tr>
</tbody>
</table>

Most youth participated through the school setting (70 percent). In the last school year, 43 percent of youth participated in more than two activities; one-third of the sample participated in activities for over 6 months. Perceptions of participatory group competence did not differ by gender (t=0.98, df=74, p>.05), academic achievement (F=0.82, df=3, 68, p>.05), context of participation (t=0.42, df=74, p>.05) nor by duration of involvement (F=1.1, df=2, 72, p>.05) or number of activities (F=0.02, df=1, 74, p>.05), but increased with age (F=5.5, df=1, 76, p=.02). The GLM univariate procedure was used to test for an independent effect of practitioner on participatory group competence. Group, entered as a fixed effect, was not statistically significant (F=.73, df=6, 69, p>.05).

Adjusted for age and gender, independent main effects of perceived self-efficacy (t=4.3, df=1, 76, p<.0001) and autonomy support (t=4.4, df=1, 76, p<.0001) on participatory group competence were statistically significant, while measures of perceived co-operation and communication (t=1.1, df=1, 76, p>.05) and perceived problem-solving (t=1.9, df=1, 76, p>.05) were not significant. Given the small sample size, only statistically significant main effects were retained for further analysis. Although not statistically significant, models were adjusted for gender.
Hierarchical multiple regression was used to assess the contributions of individual level measures and autonomy support on participatory group competence; variables were entered in three blocks (See Table 3).

**Table 3**

Hierarchical regression predicting participatory group competence

<table>
<thead>
<tr>
<th>Step</th>
<th>Variables Added</th>
<th>Beta&lt;sub&gt;step1&lt;/sub&gt;</th>
<th>Beta&lt;sub&gt;step2&lt;/sub&gt;</th>
<th>Beta&lt;sub&gt;step3&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age, Gender</td>
<td>.27* (.13)</td>
<td>.25* (-.05)</td>
<td>.18* (-.04)</td>
</tr>
<tr>
<td></td>
<td>Model Summary:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( F=5.61,76, p&lt;.05)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( R^2 \text{ (adjusted)} = .06 )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Perceived self-efficacy</td>
<td></td>
<td>.43**</td>
<td>.39**</td>
</tr>
<tr>
<td></td>
<td>Model Summary:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( F=13.2,75, p&lt;.0001 )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( R^2 \text{ (adjusted)} = .23 )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Autonomy support</td>
<td></td>
<td></td>
<td>.37**</td>
</tr>
<tr>
<td></td>
<td>Overall model:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( F=15.4,73, p&lt;.0001 )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( R^2 \text{ (adjusted)} = .36 )</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* \( p < .05 \) ** \( p < .0001 \)

The effects of age and perceived self-efficacy, entered in the first and second blocks, respectively, were statistically significant. Perceived autonomy support, added to the model in the third step, was statistically significant and accounted for 13 percent of the variance.

Results should be interpreted in light of study limitations, notably small sample size, the newly developed measure of perceived participatory competence and the cross-sectional research design which precludes inferences of causality.

**Discussion**

To date, research has shown an association between youth participation in organized activities and the acquisition of initiative, identity exploration and reflection, and developing teamwork skills (Hansen, Larson, & Dworkin, 2003). The role of the practitioner in promoting these developmental competencies has not been examined. Their role, however, is of growing importance given health and social policy directives aimed at engaging adolescents as active participants in group-based initiatives to improve the quality of school and community life (Australian Youth Foundation, 1997; Blyth & Roehlkepartain, 1995; Hartmann, Watson, & Kantorek, 2001; Watson, 2002; World Health Organization, 1993).
This study found perceived autonomy support provided by practitioners to have a direct effect on youth perceptions of participatory group competence, beyond age and perceived self-efficacy. Our findings suggest that opportunities made available to youth through newly implemented empowerment-based youth citizenship initiatives require concomitant autonomy support from practitioners in the form of offering advice, assisting youth with brainstorming and offering feedback to let youth know they are on the right track. As the recipients of practitioner-designed programs, many participating youth were not aware of some key logistical issues that needed to be addressed as part of activity planning and implementation. Funding issues, for example, required youth to write letters or attend meetings to secure event sponsors and material support. Youth also had to approach the appropriate authority figures (e.g., school principal) to gain permission to host an activity in a particular venue (e.g., school gym).

Participating youth, especially those who were younger, had not been in a position to make these types of decisions before. We found that youth required the ongoing assistance of an experienced and interested practitioner to serve as a guide and point them in the right direction. Through the provision of autonomy support youth were enabled to make informed group-based decisions at a point of their development in which they likely lacked the necessary experience and skill.

Without practitioner support, empowerment interventions that provide youth with meaningful opportunities for participation in collective decision-making run the risk of reinforcing the disempowerment it aims to alleviate (Wallerstein, 1992). However important practitioner support may be, it should not eclipse the influence of perceived self-efficacy and age, both of which were positively related to participatory group competence. Thus, complementary interventions are required to develop youth’s confidence in their ability to confront general challenges.

By facilitating the group process, practitioners can help youth define the object of, or the parameters around, their pro-social participation, which in this study ranged from organizing a school culture week to establishing a skateboard park or preparing food baskets for the underserved. Once young people identify the general target of their pro-social efforts, they may feel more confident to participate in group-based activities consistent with self-endorsed values, needs, and intentions (Ryan, Kuhl, & Deci, 1997) and contribute to the collective good (Lerner et al., 2003). Discussions with practitioners over the course of this study point to at least two motivations for youth participation: 1) to have fun; and 2) to gain volunteer experience.

Consistent with the theoretical ideas put forward by Csikszentmihalyi and Rathunde (1993), for youth to have fun, the activities should be meaningful and relevant, and the context for participating should be enjoyable. The goals of some youth participants, however, were oriented more toward a future professional occupation. These youth were involved to gain experience and develop skills for a future job. It would appear that an openness and responsiveness of practitioners to the pro-social interests of youth is key to engaging and maximizing the participation of youth in citizenship initiatives.

In providing autonomy support to develop participatory competence, practitioners play a significant role in shaping the lives of young people by fostering person-environment interactions that allow them to flourish as individuals and citizens.
References


Merry, S. (2000). *Beyond home and school: The role of primary supports in youth development.* Chicago, Ill: Chapin Hall Center for Children at the University of Chicago.


**Acknowledgements**

We would like to thank all the youth and practitioners were gave their time to support this study. This study would not have been possible without administrative support from the Municipality of Laval and the effort of the research assistant.
NikeGO: a Corporate-Sponsored Program to Increase Physical Activity and Foster Youth Development

Sarah Levin Martin
PEANUT© Evaluation Team
Centers for Disease Control and Prevention
Division of Nutrition and Physical Activity,
Atlanta GA USA
sjl2@cdc.gov

Maurice Martin
PEANUT© Evaluation Team

Molly White
Nike Incorporated, U.S. Community Affairs
NikeGO: a Corporate-Sponsored Program to Increase Physical Activity and Foster Youth Development

Sarah Levin Martin and Maurice Martin
PEANUT© Evaluation Team

Molly White
Nike Incorporated, U.S. Community Affairs

Abstract: NikeGO was initiated in 2002 by the Nike US Community Affairs Division to address a growing need: to provide youth a safe environment in which to be physically active. Nike collaborated with several organizations across the country and offered an array of programs to foster developmentally appropriate physical activity among youth through their influencers (e.g., teachers, coaches). These programs reached youth in underserved areas ranging from urban inner cities to rural Native lands through various channels and settings including schools, Boys and Girls Clubs, YMCA’s, youth sports organizations, and others. Objective and subjective measures were used to determine the reach of the program, the dose of physical activity, the “fun” level of the activities, changes in youths’ self-esteem and self-concept, and the likelihood of continued participation. Many older youth gained leadership skills in the process. Overall, the programs have been successful in reaching “hard to reach” youth and engaging them in the positive, developmentally sensitive, health behaviors.
Introduction

NikeGO was established in 2002 by the US Community Affairs Division of Nike, Inc., communicating the simple mission: “Get kids moving and give them the means to do it.” In its first two pilot years, NikeGO committed more than $20 million in cash and products to fund programs aimed at encouraging children ages 9-15 years to be more physically active. NikeGO focused on the children’s influencers (i.e., parents, teachers and coaches) who delivered the pilot programs, which were designed to give them the information and tools needed to enhance kids’ chances of adopting long-term, physically active lifestyles.

Nike actively engaged in advocacy work at the state and national level, helping to build partnerships and information sharing that will lead to policy-level action to combat childhood obesity. Going forward, Nike will continue with its youth development programming, advocacy, and communication efforts to meet the health challenges faced by today’s youth.

Regular physical activity offers an array of health enhancing effects (USDHHS, 1996) and provides a positive alternative to less healthy behaviors. Unfortunately, many factors in society are unwittingly reducing the opportunities youth have for regular physical activity. For example, some schools have reduced physical education offerings and recess in exchange for increased emphasis on academic test scores. Parents struggle to find time and safe space for physical activities; consequently many youth remain indoors and spend increasing amounts of time in front of a screen (TV, video games, computers).

Through youth development programming, NikeGO brings physical activity opportunities back to the nation’s youth in underserved areas. The program is designed to offer thousands of children aged 9 - 15 years the motivation and means to discover the joy of movement and the fun of physical activity. Further, Nike is committed to program evaluation which helps the company not only measure the success of their programs, but also to make adjustment to continuously improve their youth development programming.

NikeGO Programs

The NikeGO youth development programs continue to evolve based upon societal needs and the results of professional program evaluations. Programs focus on four key initiatives:

1. after-school and summer programs,
2. NikeGO Places,
3. PE2GO and in-school programs, and
4. advocacy, and the related sponsorship of Shaping America’s Youth (SAY; www.shapingamericasyouth.com).

Each initiative will be described below.

After-School and Summer Programs

NikeGO grants in 2003-04 and 2004-2005 were awarded to non-profit organizations and governmental partners, including: Boys & Girls Clubs of America, Indian Health Service, Portland Parks and Recreation (in Oregon), Positive Coaching Alliance, Beyond the Bell among others. NikeGO also funded the evaluation of its programs to provide recommendations to Nike, its partners, and grantees for program improvement and to measure successes.
Sports, Play, and Active Recreation for Kids (SPARK) has become an important partner with Nike in helping to design developmentally sensitive curricula and training for people who deliver active recreation programs to formerly at-risk youth.

Boys and Girls Clubs

Approximately 30 Boys & Girls Clubs in major U.S. cities were funded each year since 2002 to conduct NikeGO programs that were created with the input of their members. The clubs’ intent was to enhance their youth development program by engaging inactive youth in the NikeGO program, and to attract new youth to the program because of the new Nike involvement. To kickoff the program, Nike sponsored “SPARK Active Recreation” (out-of-school program) training for the clubs’ staff. The SPARK philosophy aligns well with that of NikeGO; to include all youth, keep them active, and make the activity fun so the youth learn to enjoy movement. In addition to the staff training, each club was provided with funds to use at the club to support the youth development program (e.g. for adjunctive staff) and Nike equipment selected by each club according to its individual needs.

On the TRAIL

Staff at six Boys & Girls Clubs from five Native American reservations, in partnership with Indian Health Services, were trained in “SPARK Active Recreation” as part of a larger diabetes prevention program called “On the T.R.A.I.L. (Together Raising Awareness for Indian Life) to Diabetes Prevention.” These clubs used NikeGO grant monies to buy equipment and incentives for their youth development program.

Portland Parks and Recreation

Portland Parks and Recreation youth development program received funding to create after-school opportunities for youth in Portland, Oregon in five school sites. Three elementary school sites used SPARK activities along with sports mixer sessions (i.e., varied activity offerings) while two middle schools and a high school conducted continuing instructional activities such as break-dancing, drill team, tae kwon do, soccer, and basketball. Portland Parks and Recreation also ran a summer youth development program since 2003 sponsored by NikeGO that featured fun physical activities to enhance existing less active activities.

Positive Coaching Alliance

The Positive Coaching Alliance (PCA) was funded by NikeGO to create a youth development workshops for African American and Hispanic communities within the Los Angeles area. PCA’s mission is to “transform youth sports so sports can transform youth.” The organization’s goals are to

- replace the “win-at-all-cost” attitude with the “double-goal” of not only winning but, more importantly, using sports to teach life lessons,
- teach youth sports organization leaders how to create a culture where “honoring the game” is the norm, and
- spark and fuel a “social epidemic” of “positive coaching” across the country. PCA is using NikeGO funds to recruit and train bi-lingual, culturally appropriate trainers to reach out to Latino and African American coaches and parents in Los Angeles and New York City.
**Beyond the Bell**

Beyond the Bell runs a NikeGO sponsored program called A World Fit for Kids (AWFFK). This after-school youth development program provides otherwise missing physical activity opportunities for youth in five middle schools in Los Angeles. The goal of AWFFK is to help students improve their own physical, mental, and emotional fitness through sports, fitness and peer leadership training.

**NikeGO Places**

Through this grant program, Nike installs, upgrades, and refurbishes play and sports courts and facilities throughout the U.S. using NikeGrind, a material created from recycled athletic footwear. As part of Nike’s 30th anniversary in 2002, the company awarded Portland, Oregon, a $2.5 million grant to refurbish 90 basketball courts in 35 metro-area parks. NikeGO will continue NikeGO Places as an integral component of its efforts to provide kids with safe, high-quality places to be active.

**PE2GO**

PE2GO brings physical activity classes to fourth and fifth graders in public school who have had physical education classes reduced or eliminated due to scheduling issues or budget constraints. Nike views this initiative as a short-term solution to a much greater, long-term objective: to get physical education teachers back into those schools and insure that physical activity rounds out the education programming for students who otherwise might not have that the opportunity.

Nike partnered with SPARK to create developmentally appropriate curricula (Playbook-SPARK®) and facilitation training support for classroom teachers in schools with reduced or no physical education. Nike also created and delivered custom equipment kits so that each student in a 36-child classroom had the equipment needed to be physically active for the full 30 minute class, without waiting for a turn.

**Shaping America’s Youth (SAY)**

SAY is a national, cross-sector initiative devoted to youth development through the promotion of physical activity and healthy lifestyles among children. Nike, along with Gerber, Campbell Soup, Johnson & Johnson and McNeil Nutritional, sponsors SAY (www.shapingamericasyouth.com, 2004). In cooperation with private, public, and non-profit partners from across the country, SAY has created a registry and summary document describing funding, advocacy, and program efforts aimed at reversing the current childhood health crisis of sedentary lifestyles and poor eating habits for more than 2,000 programs in the non-profit, governmental and private sectors. The information gathered will enable and promote interactions, partnerships, and coordinated efforts among all concerned parties to improve the health of America’s children.

**Evaluation Methodology and Selected Findings**

An independent program evaluate team evaluates each of the NikeGO youth development programs. The evaluation team provides a summary of its program-specific findings to Nike, its partners, and to the grant recipients for the purpose program improvement. The team uses a methodology termed, PEANUT© [Program Evaluation Across the Nation Using Technology©
to assess program processes of operation and effectiveness against two stated objectives:

1) to increase the time youth spend during the course of the program being physically active, and
2) to attract more kids to youth development programs by offering Nike sponsored physical activity programming.

The variety of program venues and array of activities offered by Nike contributions to youth programming required the use of a battery of evaluation strategies and techniques. For example, the evaluation of after-school programs includes paired-child interviews, direct observation of planned activities, and web-surveys of program administrators. The evaluation of the Native American reservation program includes a site visit, which included key informant interviews and observation. The PEZGO program evaluation includes focus groups and paper-and-pencil surveys of teachers and web-based surveys of administrators. The PEANUT© process for the evaluation of the Nike contribution to the Boys & Girls Club youth development programs is described in more detail elsewhere (Martin, 2004).

Findings from the first year of youth development programs that took place after school in 2002 - 2003 are archived on the internet (Harvard Out-Of School Database website, 2004). In the second and third year (2003-2005), the majority of Boys & Girls Clubs youth development programs scored 4 or 5 on a 5-point scale, yielding examples of successfully run programs (i.e., increasing the time youth spend being physically active, and attracting more kids to youth development programs). The observations combined with the interviews with activity leaders revealed that “hard to reach” youth were reached through the unique activities offered.

The paired-child interviews revealed that many youth changed their self-concept since the program and now see themselves as an athlete, and view themselves as more active than prior to the program. In addition, some of the older youth in the Clubs (aged 15-18 years) have been trained to lead physical activity sessions for the younger children. Based on a case study approach, the evaluation found that this had a positive impact on teens as evidenced by marked boosts their self-esteem and self-confidence.

Conclusion

NikeGO provides a physical activity component to youth development programs and opportunities to thousands of youth in primarily underserved settings including urban inner cities and rural Native lands. The NikeGO initiatives are in line with evidence-based strategies to promote physical activity (Task Force on Community Preventive Services, 2002). Specifically, the programs in partnership with SPARK provide enhanced physical education (i.e., physical education that engages youth in moderate to vigorous physical activity and promotes lifelong physical activity); and the initiatives increase access to places to be active (e.g, in after-school settings and through the NikeGO Place, which refurbishes settings where physical activity can take place).

NikeGO programs work to increase the physical activity level of youth across a variety of settings through a variety of means. Many aspects of the program foster youth development, such as exposure to positive and fun behavior, team building skills, leadership experiences for the older youth, staff training for program infrastructure, and supportive relationships for the youth involved with adult leaders and peers.
Each year, youth development organizations can apply for funding though the NikeGO website (www.nikego.com).

Corporate America is one of many players needed to help provide positive, health promoting behaviors as an alternative to less healthy behaviors often present in underserved areas. American companies have specific resources (communications, branding, capacity to drive demand and influence thinking, ability to create appropriate products and services, and financial resources) that can be used to help create and maintain youth development programs. Many corporations have begun the work through product creation and changes in communications efforts. When all business, government, and community sectors join together to leverage resources and talents, we may be able to create healthier lifestyles for American youth.

References


A Person-Centered, Asset-Based Community Development Framework for Youth with Special Health Care Needs/Disabilities in Transition to Adulthood

Heather H. Boyd
Virginia Tech
Blacksburg, VA
hboyd@vt.edu

Beth Swedeen
Madison, Wisconsin
swedeen@waisman.wisc.edu
A Person-Centered, Asset-Based Community Development Framework for Youth with Special Health Care Needs/Disabilities in Transition to Adulthood

Heather H. Boyd
Ag and Extension Education, Virginia Tech

Beth Swedeen
University of Wisconsin-Extension, Cooperative Extension

Abstract: In the United States, 12.8 percent of children under 18 have special health care needs. Ninety percent of youth in America with special health care needs and/or disabilities can now be expected to reach adulthood. Youth with special health care needs and/or disabilities are less likely to experience successful transition to adulthood in comparison to youth without special health care needs. This article presents a person-centered, asset-based community development approach that assisted youth in achieving transition and inclusion-oriented outcomes. Examples are drawn from a Healthy & Ready to Work demonstration project in Wisconsin. At the center of our approach to transition were community connectors -- adults who knew the personal interests and assets of youth and who found opportunities in the community that matched individual youth interests. Implications for youth development professionals as successful community connectors are described.

Who are youth with special health care needs and/or disabilities?

In the United States, 12.8 percent of children under 18 – or 9.4 million -- have special health care needs (U.S. DHHS, 2004). Children with special health care needs are defined by the U.S. Maternal and Child Health Bureau as “those who have or are at increased risk for a chronic physical, developmental, behavioral or emotional condition and who also require health and related services of a type or amount beyond that required by children generally” (McPherson et al, 1998).
For youth development professionals who may not work regularly with youth with special health care needs and/or disabilities, this article and the work of this project focuses on the individual and unique needs and interests of each youth. In the field of disabilities, this is referred to as a person-centered approach. In this article we describe youth who have given us permission to share information about them. This includes one young woman, who has a metabolic disorder that affects her joints, also uses a wheelchair. She has good interpersonal skills and would like to be a doctor someday. Another youth has Down syndrome; he would like a career in child care and often cares for his nieces and nephews. For additional descriptions of youth, see http://www.waisman.wisc.edu/cedd/WRC/Txt/transitionstories.html (Swedeen, 2003).

What transition outcomes have youth with special health care needs and/or disabilities experienced?

Perceptions of successful transition are often defined culturally, thus describing transition passages across cultures and expectations can be fraught with difficulty (Hogan & Astone, 1986). Regardless, many youth development practitioners in the United States consider transition to adulthood to be characterized by a combination of some of the following accomplishments, or completion of stages:

- completion of formalized schooling,
- entry and/or advancement in the paid labor force,
- establishment of mature, adult relationships (which may involve partnership, marriage and sometimes parenthood) (Hogan & Astone, 1986).

Ninety percent of youth in America with special health care needs and/or disabilities can now be expected to reach adulthood (White & Gallay, 2005). All markers of transition can apply to the lives of youth with special health care needs and/or disabilities, depending on the young person’s goals, assets and access to opportunities. Other markers of success for youth with special health care needs and/or disabilities may be: involvement in civic life through volunteer work, participation in community organizations and activities and independent living.

The reality for many youth with special health care needs and/or disabilities, their families and their communities is that they are less likely to experience successful transition to adulthood than youth without special health care needs and/or disabilities. Youth with special health care needs and/or disabilities are less likely to graduate from high school, find employment or pursue secondary education (Blum, R., White, P. & Gallay, L., 2005).

What frameworks for transition to adulthood exist for these youth?

Education and health care systems offer frameworks for youth transition to adulthood for youth with special health care needs and/or disabilities. However, these frameworks seldom extend beyond the parameters of specific agencies. For example, educational frameworks focus almost exclusively on academic goals that can be accomplished in school settings with teaching staff. In reality, multiple systems, both formal and informal, are necessary for youth to participate in community life and explore future goals.

Within special education systems, transition to adult life has many meanings and considerations for youth with special needs and these can range from developmental processes to legislative mandates (Hanley-Maxwell, 1999). For example, as a result of the Individuals with Disabilities
Education Act (IDEA), transition issues are to be considered in each youth’s Individualized Education Plan (IEP).

Many youth development professionals may be familiar with IEPs because youth with special needs and their families and/or school-based team create these plans to help the youth reach specific goals during the school year. Creating an IEP can involve a collaborative team planning processes with youth and can include both paid professionals, family members and unpaid but interested friends and acquaintances. Youth development professionals are naturals to be invited to these planning sessions, especially when they have a personal and/or professional connection to youth with special needs.

Once a youth is 16 (age 14 in Wisconsin), federal law mandates that transition planning be a part of each youth’s IEP in the form of a statement of transition service needs. At 16, a youth’s IEP is to include a statement of needed transition services, including interagency responsibilities or needed linkages. Frameworks for transition in education extend beyond those mentioned briefly here.

In health care, a recent review of literature about transition to adulthood for adolescents with special health care needs (Betz, 2004) reviewed 43 journal articles from pediatric, nursing, social work, public health, education, disabilities, occupational therapy, and speech/language literature from 1982 through August 2003. Of the 43 articles, two used theoretical frameworks (Bent et al., 2002; Russell, Reinbold & Maltby, 1996). Both frameworks are team-based models that are situated within health care systems.

Education and health care systems recognize the importance of youth interests, family involvement and community connection for the potential success of youth in transition to adulthood. For example, the Medical Home initiative of the American Academy of Pediatrics, American Academy of Family Physicians, and the federal Bureau of Maternal and Child Health recognize the value of gaining access to community supports outside of health care systems. These agencies encourage a child’s primary health care professional to help the youth and family gain access to and coordinate health care, educational services, and other public and private community services that are important to the overall health of the youth and family.

Using team-based education planning and medical home models as part of a community-based transition approach may extend links from formalized systems to communities. Below we describe a transition framework for youth who desire full inclusion into community living as they experience adulthood. The framework is based both on person-centered planning and asset-based community development.

**How does a person-centered, asset-based community development approach differ from other frameworks?**

Using a person-centered planning and asset mapping as a community development strategy has the ability to connect youth with formal systems and mandated services, but success is not dependent on service systems alone. This approach can tap into the interests of the youth as well as youth’s support network, regardless of formal roles in service systems or structures. It can use, but can also transcend service agreements.
Person-centered planning is a broad term that encompasses different techniques of futures planning that focuses on individual people and their skills, abilities and goals. Depending on the format used, an IEP meeting can be an example of part of a person-centered planning process.

An asset-based community development approach has been used in a wide variety of situations including public safety, public health and education. For youth with health issues, asset-based community development has been used to promote connection between pediatricians and local associations (McKnight & Pandack, 1996). Specific to people with disabilities, asset-based community development was used to help strengthen a community in Chicago by integrating adults with developmental disabilities into a neighborhood (O’Connell, 1990).

There are five basic steps to this approach regarding working with people with disabilities (Kretzmann & McKnight, 1993):

1) map community assets to discover potential partners for people with disabilities,
2) build productive relationships between people with disabilities and the community,
3) mobilize for your purpose and information sharing,
4) convene the community to develop a vision and a plan for the individual and the community,
5) leverage outside resources to support your local purpose.

When applied to youth with special health care needs in transition, person-centered, asset-based community development is based on two central tenets:

- Young people with special health care needs thrive when their gifts and passions are recognized, supported and used in communities.
- Communities thrive when all of their resources and assets are connected and utilized.

**How can a person-centered, asset-based community development approach work to link personal interests and assets with community opportunities?**

Blending person-centered planning with asset-based community development helped the Wisconsin Healthy & Ready to Work demonstration project connect youth with community opportunities. The combination of the information learned during person-centered planning sessions as well as the involvement of people who were invested in building relationships between youth and community partners were both critical to developing experiences that contributed to youth outcomes.

Interpersonally talented and local-network-rich individuals called “community connectors” were recruited to work with individual youth in transition and their family members, friends and other members of their communities. Community connectors facilitated many parts of a youth’s transition process, including:

1) asking the youth what they wanted for themselves,
2) probing the youth and those in their circle of support about the youth’s assets and
3) making connections in and to the broader community for outlets for youth assets and ways to help the youth achieve their goals and dreams.

The project required the work of these community connectors to deepen the focus on youth connection to six spheres that construct “community” according to the approach:

- individuals,
- associations and groups,
Community connectors were passionate about working with youth and finding ways to help youth fulfill their dreams and showed tenacity in helping youth to facilitate their own transition processes.

Here is an example of how one youth’s passions and assets were linked to community opportunities through a multi-year transition process. Andy has given permission for us to share his story (see http://www.waisman.wisc.edu/cedd/WRC/Txt/transitionstories.html).

Andy received the diagnosis of autism as a teenager after having struggled through diagnoses of emotional and behavioral disorders in middle school. A collaborative team gathered to be part of a person-centered planning process, which was facilitated by his informal community connector, the director of the regional children with special health care needs center. The community connector kept this question in mind as she thought of potential key players: "Who else could be part of Andy’s life?" and encouraged Andy and his family to invite these people to his meeting.

During the meeting, the group listened to Andy’s dreams, took stock with him regarding his assets and helped him to think about what small piece of his dream he wanted to work on first. While the planning meeting was a one-time event, the assembled team was able to understand Andy’s goals and how he might be able to achieve them. Over time and throughout events in Andy’s life, including personal discussions and trial-and-error attempts at community connection, Andy and his team learned ways that Andy could successfully connect his interests and assets to community opportunities.

For example, Andy is someone who likes quiet spaces and little noise where he lives and works. Minimizing noise is important to Andy’s happiness and ability to function well. He had experienced employment at a sheltered workshop but the long hours and stress created more anxiety for him. He saw an ad for work in a nursing home and applied for a part-time job with the home. He now works there one to three days a week, no more than four hours at a time. His community connector and his case worker helped him develop a budget so that he could pay all of his bills, work part-time and still receive some support from Social Security.

Andy also volunteers part-time at the nursing home, and used his own money to have his two dogs trained to be therapy dogs for the enjoyment of the residents of the nursing home. At the nursing home, he enjoys conversations with others at a pace that suits him. This schedule allows him to have time for other interests like taking his grandfather to church and babysitting his nephew.

During transition, Andy benefits by having a collaborative team that cares about his interests and abilities. He connects with others in the wider community through the nursing home and its residents. Nursing home residents benefit by experiencing the company of someone who chooses to spend time in conversation with them. The benefits of finding a good fit for a youth person with special needs extends past the individual person and his or her family into the wider community.
What transition and inclusion outcomes did youth involved in Wisconsin’s Healthy & Ready to Work project experience?

Examples of transition outcomes for youth associated with the work of two community connectors and their teams appear below. We provide detailed information on implementation strategies to accomplish transition and inclusion-oriented outcomes.

Case one: Rural Wisconsin
In one Wisconsin community, seven youth and their families chose to participate in transition planning processes using the person-centered, asset-based community development approach. Their community connector was a parent of a transition-aged child with a disability. She also had professional experience with education and health care systems. Six of the seven families had known the community connector before the project. Each youth was between the ages of 15 and 25 and all had cognitive disabilities. Some had other diagnoses as well, which were conditions that required medication.

After acquainting youth and their families with steps in the person-centered planning process, this community connector hosted and facilitated collaborative planning team sessions where each youth and 4-10 team members attended. Team members included parents, siblings, teachers, family friends and providers of other services. Over the next six months, the connector mapped different community opportunities to youth goals, made introductions between youth and community contacts and followed up to see how things went. After six months, the teams gathered to share successes and to formulate future steps. The teams decided that they wanted to continue to meet at least twice a year to maintain energy and commitment and to learn from each other, even if the community connector could not participate in the group meetings.

Examples of positive transition and inclusion-oriented outcomes for these youth and their collaborative teams included:

- employment at a grocery store for one youth,
- volunteering at the humane society for another youth,
- serving as an usher in his faith community for a third youth,
- creating and using a personal exercise plan for strengthening by and for a fourth youth,
- meal planning, preparation and sharing for another youth and one of his team members,
- opening their first checking and savings accounts for several youth, along with learning budgeting and money management.

We don’t know if any of these outcomes would have occurred without the person-centered, asset-based approach, but we do know that lives of these youth have expanded and broadened because of the work that they, their teams and their community connector committed to. "Person-centered planning brought me out of my cave and opened my mind to new possibilities for my son," one parent told us. Another parent said, "We parents have to overcome the perceived risks of letting our children be part of the community. We are so worried about failure or rejection, but there are no benefits without risks." One youth asked, "When are we going to have our next meeting?"

Case two: Urban Wisconsin
In another Wisconsin community, the community connector worked with six youth, all between the ages of 14 and 21. The community connector was in the education profession, bilingual and knew personally many Spanish-speaking members of the neighborhood. Each of the youth
had mental health issues and/or other major health concerns. Some of the youth were undocumented immigrants and not eligible for county, state or federal services. All participating youth were connected to the project because the community connector was their public school teacher. Participation was initiated through the community connector rather than by the youth or family.

The community connector used a person-centered planning tool with each youth a few weeks before the school-based and family teams met with the youth to create their IEPs. Interests, skills and opportunities were then incorporated into the plan for the coming year. The community connector/teacher and other school staff then connected youth with opportunities as discussed in the planning process.

Transition- and inclusion-related outcomes for youth in this community included:

- becoming a hospital volunteer for one youth and volunteering at a nationally-affiliated community organization for other youth;
- applying for and using a library card for all youth;
- learning how to open a bank account for other youth; and
- learning how to negotiate prices at local shops where that is the custom.

In this community, youth built stronger relationships with adults at school, with local library staff and with store clerks. Their planning processes included a wider range of people. For example, one youth’s father was not involved in the IEP and the youth asked a school security guard, with whom he was friends, to attend and participate. The school security guard was pleased to be involved and understood that he was an adult male that the youth considered important to him. “You can never close the door to relationships...with the family, with the youth or with the community. It takes a lot of time,” said the community connector.

**What are implications for youth development professionals working as community connectors for youth with special health care needs and/or disabilities?**

One of the key elements of this project was the importance of a well-placed, dedicated community connector. Having ties to a local community can have great advantages for those involved in youth development outreach. Effective community connectors in this project live in the same city, community or neighborhood as the youth and care deeply about community life and young people. Youth development professionals in the extension system understand the importance of encouraging ties to family and community (belonging) to help make positive things happen for youth (Kress, 2005).

Being a community connector is not a full-time, paid position. Community connectors were funded with small mini-grants that typically reimbursed them for a few hours a week of their time and for their travel. For example, one community connector was paid $1500 for her involvement in the project and had a full-time career separate from the project. Another community connector saw this work as a natural extension of her professional and personal work with youth. She was not paid a stipend, nor did she request one.

Regardless of whether community connectors were paid a stipend for their part-time work with youth in transition, the characteristics of successful community connectors that helped youth achieve transition and inclusion-oriented outcomes with the person-centered, asset-based community development approach are described below. Successful community connectors:
• demonstrate a welcoming attitude;
• think creatively about who is willing to refine and change ideas and strategies over time and know many people and places in the community;
• follow through on commitments to youth, family and community contacts;
• understand how to decrease formal supports as new connections emerge, know how to step back when youth and community members are working together successfully;
• relate to people from all walks of life, with all types of values, even if they are not his or her own;
• have the ability to be comfortable in people’s homes, workplaces, community centers, churches, schools, wherever they want to meet;
• show comfort with asking questions;
• take a genuine interest in people’s lives;
• display patience with the process of self- and community discovery;
• have willingness to take risks and ask favors;
• exhibit the creative ability to see connections between people’s interests and activities already occurring in the community;
• hold an abiding interest in helping people and communities flourish;
• demonstrate stamina and perseverance; and
• enjoy bringing people together and acting as “host”.

**Recommendations**

Youth development professionals have enormous potential for serving as community connectors for youth with special health care needs and/or disabilities in youth transition to adulthood as many understand asset-based approaches as well as the importance of youth passion in connecting youth with community resources, opportunities and partners. For those interested in assisting youth with special health care needs and/or disabilities in transition to adulthood, learning about a youth’s interests and assets is a good place to begin. Helping youth achieve transition- and inclusion-oriented outcomes can broaden the experiences of the youth and all involved in the on-going process of transition.

**References**


Acknowledgement:
The Waisman Center received its Healthy & Ready to Work funding directly from the United States Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau, Division for Children with Special Health Care Needs (Grant #H01MC00044).

We would like to acknowledge and thank the following people for their work with this demonstration project: Dan Bier, Project Director Wisconsin Healthy & Ready to Work Project; Sharon Fleischfresser, Medical Director for the Title V Children with Special Health Care Needs Program in the Bureau of Community Health Promotion at the Wisconsin Division of Public Health; Patti Hackett, Co-director and Project Lead for the Healthy & Ready to Work National Center and Monique Fountain, Maternal and Child Health Bureau Project Officer. We would like to thank the following people for the ways in which their suggestions improved earlier versions of this manuscript: Greg Hutchins, Matt Calvert, Nancy Franz, Mary Michaud, John Klatt, Mary Ellen Bell, Mary Thiry, Ellen Taylor-Powell and Kathy Blomquist.
Appendix
Resource: Planning for the Future

These are notes from a future planning session for:

___________________________________________________

Planning Participants Included:

School:

Date:

This planning tool was developed for the Healthy and Ready To Work (HRTW) grant of the Waisman Center. Material was borrowed from Pathfinders Personal Futures Planning by Beth Mount and Connie Lyle O’Brien, and material developed at the Marsha Forest Centre in Toronto by Marsha Forest, Jack Pearpoint and John O’Brien.
1. Dreaming, or "The North Star"

Use this space to create a vision for the future. What kind of life does the person want, and what kind of life do those around the person want for him/her? Try to articulate an ideal vision for home, work, relationships, activities, and services such as direct support, health care, etc. Use this time to reveal what is most important to this person, his/her family and those closest to them. Timelines and limitations are not important during this part of the discussion.

2. Who Is This Person?

Make a list of 5-10 statements that best describe this person from a capacity view. What are his/her attributes and abilities that become gifts when they are shared with others?
3. Staying Strong: 
Things To Do and Things To Avoid

| Things that “work”. Things that create interest, engagement and motivation. Things the person needs to have in his/her life to stay strong. | Things that “don’t work”. Things that create boredom, upset and frustration. Things that will sap the person’s strength. |
4. Connections

A. People:

Make a diagram, with the person in the center, of the people in the person’s life, including people who may be interested in planning together over time. Note the nature of the connection to the person, e.g. family, friends, paid support, long term or short term, etc.

B. Places:

Make a diagram of the places in the community where the person spends his/her time. This will include home, school and other connections the person may have. Note the places the person most enjoys and those where the person has the least success. Note which places the person may want to increase his/her participation and involvement.
5. Goals: The First Year After High School

Think back to the categories you explored in the first, or dream, step. Project yourselves to one year after leaving High School and list where in each of those categories the person should be. There may be more activity in some areas than others. At what state will the person be regarding work, home, relationships, activities, personal supports, adult health care, etc. Be specific. Also, make sure not only that each goal is reasonable and achievable, but that the totality of the goals are possible to achieve and not overwhelming.
6. Building Community Connections

Think about the goals for after High School, the dreams for the future, the person’s actual and potential gifts, and to whom and where he/she is connected. And fill in the chart below to give the group some ideas about where the person could create and/or strengthen existing community connections.

| 1. Interests: Summarize the interests, gifts and qualities we hope to further develop. |
| 2. Places: List community opportunities, settings, and associations where people with similar interest, qualities and values come together. |
| 3. Roles: List a variety of roles the person could assume, learn and contribute in such a place and with such people. |
| 4. Supports: Identify what the person will need to be successful in the setting. For example: How will he/she get there? Who will support them? Will it be paid or unpaid support? What adaptations will need to be made by the person and/or the setting? |
1. Building Community Connections (con.)

<table>
<thead>
<tr>
<th>1. Interests (con.)</th>
<th>2. Places (con.)</th>
<th>3. Roles (con.)</th>
<th>4. Supports (con.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. The Next Few Months

Pick a date two to four months from now. Then make a list of where the person needs to be on their way to the goals you developed for the first year after High School. Some abilities and connections may be fully developed, others you may not have even started working on, and most will be somewhat in the middle. In developing these interim goals, you once again want to make sure they’re possible to achieve in the timeframe, and not overwhelming in their totality.

8. Getting Started

Now’s the time to develop a first step for the goals you’ve listed above. Remember, “A journey of a thousand miles begins with a single step.” In developing these first steps, answer these questions:

- What specifically, is the action to be completed?
- Which people will do it?
- Who will coach and check in with those people at the completion date?
- When will the group next meet to check in on progress and develop the next steps?
Cyber Town at the Woodrow Wilson Center

Lisa M. Dennis
University of Maryland
Somerset County Cooperative Extension
Princess Anne, MD 21853
ldennis@umd.edu
Cyber Town at the Woodrow Wilson Center

Lisa M. Dennis
University of Maryland

Abstract: Cyber Town is a technology based after-school program that concentrates on reading and technology literacy. The program provides at-risk minority youth a safe environment where they learn skills that will make them competitive in the digital age. Qualitative and quantitative data are collected on all after-school program participants enabling program staff with the ability to individualize technology aided instruction. Youth are instructed at appropriate instructional levels these levels are determined through reading level assessment software programs, teacher recommendations, and reading scores. The program provides a model others can utilize in operating similar computer based programs. It illustrates that when working with youth, educators may discover deeper problems than originally anticipated and adaptations must be made to meet the needs of those young people.

Overview

Cyber Town at the Woodrow Wilson Community Center is an after-school program that was established to provide youth with technology skills and bridge the digital divide for rural youth. When the project began in 2002, it targeted youth who lived at the Crisfield, Maryland Housing Authority who had limited access to technology. At that time the local school system did not have Internet connection and the local public library had only two Internet-connected computers available for public use. The project was introduced as a prevention program because concerned community members such as teachers, parents, youth, and business leaders did not want young people in their community to fall behind in our computer driven society.

When Cyber Town initially opened, the primary focus was technology education. This focal point was based on a community assessment completed by Maryland Cooperative Extension for the PowerUp grant. According to the National Telecommunications and Information Administration (2000) report, “Urban households with incomes of $75,000.00 or higher are more than 20 times likely to have Internet access than rural households at the lowest income levels.” A survey
conducted by Maryland Cooperative Extension on youth who lived at the Crisfield Housing Authority indicated that > 1.3%, (n=47, SD=1) had access to the Internet.

Studies such as those conducted by Schaubler (2002) showed many young people across the nation were becoming experts utilizing technology emphasizing the need for greater access to technology education. In Somerset County in 2002, many youth had never touched a computer. This was an alarming fact and had to be addressed in order to allow Somerset County youth to be competitive in the new age of technology.

**Needs Assessment**

An initial needs assessment was performed in coordination with PowerUp to assess the community’s need for technology. This assessment was completed through community asset mapping, focus group meetings, meetings with local leaders, and surveys of community businesses, members, and leaders. The assessment revealed that the number of youth who had a safe after-school environment and exposure to technology was marginal. There were extremely low numbers of safe, structured after-school programs available to youth in Crisfield. Computer training was desperately needed by youth in this community. Youth focus groups revealed that young people wanted to learn simple word processing skills and how to use the Internet. The results of the assessment led the PowerUp organization to grant 20 computers and several educational software programs to our site. Furthermore, the recommendation was made that the Somerset County Educational Intervention Team be established.

**Program Design**

To organize the after-school effort, the Somerset County Educational Intervention Team was established. This team included business owners, teachers, youth, parents, community agency representatives, and Maryland Cooperative Extension (MCE) faculty and staff. The team developed plans to expose youth to technology and teach them computer skills. They believed this was the answer to “fixing” the technology gap in Crisfield. The delivery method selected was to establish an after-school program. This decision was based on the fact that limited after-school programming was available to community residents. The team also wanted to ensure that the youth participated in a structured program that had a focused, concentrated curriculum and would allow frequent daily contact with a designated group of youth.

Once the after-school program was established, educators and program assistants began to record qualitative data on the youth participating in the program. The qualitative reports indicated that youth were not learning to use the computers as quickly as expected. The members of the Somerset County Educational Intervention Team met and reviewed the findings and discovered that many youth who attended the program had poor reading skills (Johnson, 2002). According to Tompkins and Hoskisson (1991), a student’s ability to read directly impacts his or her overall educational performance. Students with limited literacy skills face difficulty in all subject areas. Based on this research, the Somerset County Educational Intervention Team then placed an intense emphasis on building the youth’s reading ability.
The team reviewed the research on reading to develop a concrete educational plan utilizing computers for instruction. Research supported the use of computers to teach reading and using computers would help bridge the technology gap that rural youth were facing. Castellani and Jeff (2001) state, “The critical reading processes that computer technology can support include:

- comprehension (annotating, linking ideas, etc.)
- idea generation (brainstorming)
- analysis (articulating and classifying positions reacting to others' comments)
- reflection (using an electronic journal to develop metacognitive awareness--reflecting on topics, tasks, learning strategies, etc.)
- composition (writing papers)
- communication (electronic mail).”

Computers are successful tools in teaching reading because they provide for a high level of interactivity, which means that there is two-way communication between the user and the computer (Meyer & Rose, 2000). Interactivity can be extended beyond one student using one computer to many students using many computers, such as with electronic journals which can be a method or a forum used to discuss student readings and share intellectual thoughts. A high level of interactivity and sharing thoughts with other students encourages students to become more actively involved with what they are reading and builds comprehension skills (Leu, 2000).

By combining research-based reading instruction with technology education, the design of Cyber Town crystallized. Cyber Town at the Wilson Center is currently the educational hub of a primarily African-American community, providing a safe and productive learning center for the families living in Woodrow Wilson Housing Authority. Its purpose is to help youth: Increase their computer literacy skills, strengthen their ability to complete homework, build reading comprehension, and learn to use e-mail, the Internet, and the World Wide Web. Cyber Town at the Wilson Center after school program is directed towards:

- Youth who live in the Crisfield Housing Authority
- Members of the Cyber Town 4-H Club, youth who attend the Woodrow Wilson Community Center after-school program
- Fifty four youth (approx.), ages 8-12
- Race – 85% African American, 10% White, 5% Hispanic

The computer lab is open daily as an after-school program site for children to gain instruction in reading, help with homework, and assistance with research. The children attend the lab from 3:30 pm to 6:30 pm. The hours of operation reflect the needs of the user. Recreational options such as interactive computer games, e-pals, and basketball are provided. The participants’ first responsibility is to complete their homework. When the youth arrive, their homework agenda is presented to the computer lab program assistant who first provides the youth with homework assistance and then checks their work for accuracy. Once youth have completed their homework, they are provided with individualized computer-aided instruction to build their reading comprehension skills.

The computer software programs allow students to read stories and answers questions about what they have learned. Computer-generated prompts analyze the children’s reading level and give them challenging reading scenarios. The educator and program assistants work with the students to provide additional support in reading and writing. Instruction is closely monitored for each child. Participants are encouraged and taught how to use word processing to write
stories and keep electronic journals. The educator and program assistant have taught the children to utilize e-mail and often write the youth messages of encouragement to help build self-esteem. The lab also provides a lending library for the children, invites community leaders to read stories to the children, and promotes family reading events.

Evaluation

The Cyber Town evaluation design incorporates several methodologies to assess program process and capacity. Student outcomes are evaluated using: 1) teacher assessment; 2) report cards; 3) attendance records; 4) GPA; 5) software assessment. The after-school program is evaluated utilizing the following methods: 1) focus groups; 2) participant surveys; 3) comment cards. The evaluation includes interviews with key stakeholders, the after-school program coordinator, referral teachers, as well as information from focus groups. Cyber Town was evaluated using a formative evaluation using a pre-post test methodology. Students filled out a pre-program evaluation at the beginning of the year and then completed a post-program evaluation at the end of the program. The program impacts were evaluated through a pre and post program entry test.

The students who participated in the Cyber Town program reported a sense of accomplishment and strong confidence in their ability to be successful in school. The students commented that they felt they could read better, had stronger communication skills, and actually liked attending school more they were not afraid of the unknown as they had felt in the past. They believed that these feeling were a direct result of their participation in the after-school program.

The success of the after-school site’s ability to increase reading comprehension was measured using a pre- and post-entry test. As each individual entered the lab they were given an age appropriate reading test. After one year of treatment the group was then given an age appropriate post reading test. Descriptive statistics reveal that the pre-test scores had a mean of 52% (SD=22) demonstrating that the test scores had a wide variance but overall were low. The highest score that could be achieved was 100%. Overall the youth did not perform well on the pre-test. After participating in the Cyber Town after-school program, the youth were tested and the mean score was 73% (SD=8). This demonstrated that the youth scored much higher on the test. Their scores were a good deal closer to the mean illustrating that more students scored nearer to the average. The percentages also showed that overall scores increased by 21%.

Participants in the Cyber Town program were reported to have fewer school office referrals than youth who did not attend. This data was recorded and reported by the principal of the local elementary school. In addition to better behavior, teachers reported that youth who attended the Cyber Town after-school program turned in complete and accurate homework. The final report cards of youth who participated in the program showed a continual increase in student GPA’s over the nine month grading period.
### Cyber Town Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>52.14</td>
<td>Mean</td>
<td>72.67</td>
</tr>
<tr>
<td>Standard Error</td>
<td>3.17</td>
<td>Standard Error</td>
<td>1.98</td>
</tr>
<tr>
<td>Median</td>
<td>56</td>
<td>Median</td>
<td>76</td>
</tr>
<tr>
<td>Mode</td>
<td>56</td>
<td>Mode</td>
<td>77</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>22.19</td>
<td>Standard Deviation</td>
<td>6.88</td>
</tr>
<tr>
<td>Range</td>
<td>78</td>
<td>Range</td>
<td>56</td>
</tr>
<tr>
<td>Minimum</td>
<td>9</td>
<td>Minimum</td>
<td>43</td>
</tr>
<tr>
<td>Maximum</td>
<td>87</td>
<td>Maximum</td>
<td>99</td>
</tr>
<tr>
<td>Sum</td>
<td>2555</td>
<td>Sum</td>
<td>3561</td>
</tr>
</tbody>
</table>

### Sustainability

The program is community focused and develops leadership skills in participants by teaching skills to implement change. Darling and Randel (1999) determined a healthy community has three dimensions:

- residents hold a common vision
- leaders identify and resolve issues
- organizations adapt to an ever-changing environment.

The long term sustainability of this program is promising because leadership is being developed in the local community members and they are being taught how to seek funding and report success to stakeholders. The Somerset County Educational Team is committed to providing support and sustaining the program.

### Conclusion – Replication

Across the nation, safe educational after-school programming is needed by families to support working parents. The Cyber Town project has been successful and seeks to continually improve. It has provided a wealth of knowledge on community strengthening, technology literacy, and building reading comprehension. This program is important for other professionals because it is a practical demonstration of the national goals of the 4-H youth development program which include: developing volunteers, strengthening and expanding the 4-H club program, and outreach to underserved and under-represented youth. After-school programming is greatly needed by working families across the nation. This program provides a model others can utilize in operating similar computer based programs. It illustrates that when working with youth, educators may discover deeper problems then originally anticipated and adaptations must be made to meet the needs of those young people.
References


Assessing Program Outcomes: Rationale and Benefits of Posttest-then-Retrospective-Pretest Designs

James P. Marshall
Cooperative Extension Service
University of Arkansas Division of Agriculture
jpmarshall@uaex.edu

Brian J. Higginbotham
Utah State University

Victor W. Harris
Utah State University

Thomas R. Lee
Utah State University
Assessing Program Outcomes: Rationale and Benefits of Posttest-then-Retrospective-Pretest Designs

James P. Marshall
University of Arkansas Division of Agriculture

Brian J. Higginbotham, Victor W. Harris and Thomas R. Lee
Utah State University

Abstract: The importance of program evaluation for decision making, accountability, and sustainability is examined in this article. Pros and cons of traditional pretest-posttest and posttest-then-retrospective-pretest methodologies are discussed. A case study of Utah's 4-H mentoring program using a posttest-then-retrospective-pretest design is presented. Furthermore, it is argued that the posttest-then-retrospective-pretest design is a valid, efficient, and cost-effective way to assess program outcomes and impacts.

Need for Program Evaluation

Evaluation is “the systematic collection and analysis of program-related data that can be used to understand how a program delivers services and/or what the consequences of the services are for participants” (Weiss & Jacobs, 1988, p. 49). Although there are a variety of reasons to conduct program evaluation, three of the primary reasons outlined by Little, Dupree, and Deich (2002) involve the ability to:

(a) make management decisions,
(b) demonstrate accountability,
(c) build a case for sustainability.

Prevention programs are becoming more common in many cities across the United States, and at the same time funding agencies are requiring program evaluations to document the effectiveness of funded programs. However, many agencies and organizations that provide prevention programs, such as youth mentoring, are not equipped for or familiar with formal evaluation processes. Many agencies are excellent at providing services but they may not be as
skilled at evaluating the outcomes of the services they provide. The posttest-then-retrospective-pretest research design will enable many smaller organizations, or those organizations with limited experience with outcome evaluation, to efficiently and cost-effectively measure their program outcomes and impacts.

One of the problems associated with many youth mentoring programs is their inability to document required outcomes. If financial support for prevention programs for at-risk youth is to continue, programs must develop evaluation strategies that objectively document program outcomes and impacts (Baldwin, 2000).

**Research and Evaluation Strategies**

**Measuring Change Using the Traditional Pretest-Posttest Method**

One of the most respected methods to measure change in individuals is the experimental pretest-posttest design using a control or comparison group (Campbell & Stanley, 1966; Kaplan, 2004). Two reasons for the deference to the pretest-posttest method are its presumed tight scientific control over threats to internal validity and the fact that it can be used to make comparisons between the same people, or groups of people, at different points in time.

However, like all research designs, the pretest-posttest design has some limitations. Limitations may include the difficulty, or impossibility, of locating and maintaining an adequate comparison group. As is the case with many community-based programs, some organizations simply lack the time and resources necessary to conduct pretest-posttest evaluations (Brooks & Gersh, 1998). Further, for pretest-posttest comparisons to be meaningful, participants must be present when the program begins and ends, yet attrition and sporadic attendance are common among community education programs (Pratt, McGuigan, & Katzev, 2000). Another important limitation is that even when complete pretest-posttest information is obtained, actual changes in attitudes, behaviors, or skills may not be evidenced if participants overestimate their attitudes, behaviors, or skills on the pretest (Howard, 1980).

Overestimation on a pretest is likely if participants do not have a clear understanding of the attitudes, behaviors, or skills a program is targeting (Pratt, McGuigan, & Katzev, 2000). Often, it is the participant’s lack of knowledge or performance in certain areas that warrant a program intervention in the first place. Participating in the program may show participants they actually knew much less than they originally thought when they completed the pretest. When this is the case, pretest-posttest comparisons are misleading because participants have a different frame of reference after participating in the program than they did before (Howard, et al, 1979). Howard and Daily (1979) were the first to refer to this change in an individual's frame of reference due to program participation as “response shift bias.” Simply put, response shift bias can be defined as “a program-produced change in the participants’ understanding of the construct being measured” (Pratt, McGuigan, & Katzev, 2000, p. 342).

The following is an example of the misleading effects of response shift bias. A program is developed to teach youth to improve their listening skills. On the pretest they are asked if they actively listen to others when others are speaking. The measurement scale ranges from 1 (never) to 5 (always). One youth perceives herself as someone who usually listens to others and she scores herself at a 4 (“not always but usually”). For the next four months she learns about listening skills and how to actively listen. At the end of the program she realizes that although she has begun using many of the skills she has learned and is a much better listener
than before, she is still not a master listener. She now takes the posttest and scores herself at a 4 (“not always but usually”). Her pretest score was 4 and her post test score is 4. In a pretest-posttest design it would appear that her listening skills did not change and that the program was ineffective, when in reality the program probably was effective. What changed was her point of reference. If this youth could re-take the pretest, perhaps she would rate herself differently; however, in a traditional pretest-posttest design this is not an option.

**Measuring Change Using the Posttest-then-Retrospective-Pretest Method**

The posttest-then-retrospective-pretest research design was created in the late 1970s as a way to control response shift bias in the traditional pre-post design (Howard, Schmeck, & Bray 1979). The post-then-pre design is a way to assess learners’ self-reported changes in knowledge, skills, confidence, attitudes, or behaviors (Klatt & Taylor-Powell, 2005a) and it avoids the pretest sensitivity and response shift bias associated with pretest overestimation or underestimation (Howard, 1980; Pratt, McGuigan, & Katzev, 2000; Rockwell & Kohn, 1989).

In the posttest-then-retrospective-pretest design, both before and after information is collected at the same time. The procedures for administering the posttest-then-retrospective-pretest are as follows. At the conclusion of the intervention or program, participants are asked to rate their current levels of knowledge, skills, attitudes, or behaviors. They are then asked to reflect back and rate their levels of knowledge, skills, attitudes, or behaviors prior to participating in the program. By taking the posttest and the pretest at the same time it is more likely that both ratings will be made from the same frame of reference, thus eliminating the effects of response shift bias.

**A Case-study: Utah’s 4-H Mentoring Program**

Utah’s 4-H Youth and Families with Promise mentoring program has had great success in using the posttest-then-retrospective-pretest method to measure the program’s impact on youth and their parents. At the end of each program (academic) year, every youth who has been enrolled in the program for at least six months and one of his or her parents/guardians are invited to complete a posttest-then-retrospective-pre survey. The self-report survey asks both the youth and his or her parent/guardian to assess their perceptions of how well the youth is functioning in the areas of academic achievement, social competency, family bonds, and delinquent behaviors. Paired-samples t-tests are used to compare retrospective pretest scores with the corresponding posttest scores for both youth and parents. Table 1 shows results from the 2004-2005 program year.
Table 1
Paired-samples t-test results of youth and parents perceptions of academic achievement, social competency, family bonds, and delinquent behavior.

<table>
<thead>
<tr>
<th>Variables of interest</th>
<th>Posttest mean score (SD)</th>
<th>Pretest mean score (SD)</th>
<th>Mean change (SD)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Achievement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth report</td>
<td>24.26 (4.16)</td>
<td>21.67 (5.20)</td>
<td>2.59 (3.72)</td>
<td>9.36</td>
<td>.001*</td>
</tr>
<tr>
<td>N=181</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent report</td>
<td>23.17 (5.00)</td>
<td>20.59 (5.38)</td>
<td>2.58 (3.30)</td>
<td>9.86</td>
<td>.001*</td>
</tr>
<tr>
<td>N=160</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social Competency</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth report</td>
<td>32.23 (5.60)</td>
<td>29.30 (6.31)</td>
<td>2.93 (4.42)</td>
<td>9.00</td>
<td>.001*</td>
</tr>
<tr>
<td>N=184</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent report</td>
<td>30.31 (5.65)</td>
<td>27.19 (5.84)</td>
<td>3.12 (4.21)</td>
<td>9.35</td>
<td>.001*</td>
</tr>
<tr>
<td>N=159</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family Bonds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth report</td>
<td>44.88 (7.72)</td>
<td>42.08 (9.15)</td>
<td>2.80 (4.46)</td>
<td>8.20</td>
<td>.001*</td>
</tr>
<tr>
<td>N=172</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent report</td>
<td>45.32 (6.88)</td>
<td>42.50 (7.32)</td>
<td>2.83 (5.23)</td>
<td>6.77</td>
<td>.001*</td>
</tr>
<tr>
<td>N=157</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Delinquent Behavior</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth report</td>
<td>42.33 (3.87)</td>
<td>43.13 (2.73)</td>
<td>.80 (2.15)</td>
<td>-4.98</td>
<td>.001*</td>
</tr>
<tr>
<td>N=178</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent report</td>
<td>42.27 (3.38)</td>
<td>43.09 (2.55)</td>
<td>.82 (1.76)</td>
<td>-5.78</td>
<td>.001*</td>
</tr>
<tr>
<td>N=155</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Both youth and parents reported statistically significant (p < .001, two-tailed) improvements in youth levels of academic achievement, social competency, family bonds, and delinquent behaviors.

**Benefits of the Posttest-then-Retrospective-Pretest Method**

Although the posttest-then-retrospective-pre design is not free from limitations (e.g., accuracy of participant recall and socially desirable responses), it is a valid, efficient, and cost-effective way to assess program outcomes and impacts (Klatt & Taylor-Powell 2005a; 2005b). The post-then-pre design is a simple, convenient, and expeditious method of assessing self-reported behavioral and attitudinal changes in youth and family programming. It is convenient because it is only administered a single time. Only collecting outcome data at the end of a program conserves time and resources and it requires less complicated data management than traditional pretest-posttest designs. The post-then-pre design is also extremely flexible because survey questions can be designed to reflect actual program content, as it may evolve during the course of a program. Finally, research has shown that a post-then-pre design reduces or eliminates response shift bias (Howard, 1980). Although a youth mentoring program example was provided here, the methodology can be adapted and easily applied to other youth and family programs.
References


4-H & FFA Livestock Projects: Life Skills Gained and Knowledge Learned

Lyle N. Holmgren
Utah State University
Brigham City, Utah
lyleh@ext.usu.edu

Chad R. Reid
Utah State University
Cedar City, Utah
chadr@ext.usu.edu
4-H & FFA Livestock Projects: Life Skills Gained and Knowledge Learned

Lyle N. Holmgren and Chad R. Reid
Utah State University

Abstract: Junior Livestock shows are one of the most popular 4-H and FFA projects in Utah. Thousands of youth participate in these shows from every county in Utah. County extension agents and FFA advisors spend much time with livestock committees, leaders, parents, and youth engaged in livestock shows. Can public funds spent on salaries be justified for county 4-H extension agents and FFA advisors who work with junior livestock shows? To help answer this question, 413 youth involved in livestock shows in Utah were surveyed in 2001. Youth were asked to share skills learned from their livestock projects. Value statements along with specific content skills were measured in the survey. The results indicate that from their 4-H and FFA projects, youth learned to accept responsibility, follow instructions, gain self-confidence, follow instructions, “do the right thing” as well as a variety of other values and content skills.

Introduction

Junior Livestock shows provide a unique educational experience for youth development. Ward (1996) provided evidence that 4-H and FFA animal science programs benefit youth by helping them develop valuable life skills. In Utah, youth who participate in 4-H begin livestock projects as early as 3rd grade and can continue until the summer after they graduate from high school. Boleman, Cummings and Biers (2004) noted that parents of 4-H and FFA youth indicated that the longer children actively engage in the project, the more likely they are to develop life skills that will hopefully make them more productive as adults. They also confirmed that positive life skills in youth are enhanced as a result of participation in 4-H and FFA livestock projects. Many of these youth begin learning positive life skills, including responsibility, at an early age. Some research suggests that as 4-H and FFA programming intervenes in a youth's life, irresponsible behavior can be avoided (Boyd, Herring, and Biers, 1992).
Purpose and Objectives

County 4-H extension agents, 4-H workers and FFA advisors spend considerable time working with livestock committees, leaders, parents, and youth. Can public and private funds spent on youth with livestock projects be justified?

Studies related to the impact of 4-H livestock projects on the development of life skills are well documented. In one study conducted by Boleman, Cummings, & Briers (2004), parents were asked to address the life skill development of their children participating in 4-H livestock projects. In another study, Ward (1996) explored evidence that 4-H alumni attribute the development of important life skills to their participation in animal science projects.

This research focuses on the following objectives:

1. What values and life skills are youth developing as a result of their 4-H or FFA livestock project?
2. What 4-H and FFA projects other than livestock and horse projects are youth enrolled in?
3. What are 4-H and FFA youth learning as a result of their livestock projects?

Its purpose is to access the value of these projects for youth development as well as help extension educators and FFA advisors identify opportunities to develop quality programs for youth with livestock projects.

Methodology

A survey was developed that asked youth to share what they learned as a result of their livestock projects. Value statements along with specific content skills were measured in the survey. The survey was used to collect data from two groups of youth involved in two separate livestock shows in 2001. One group surveyed 131 4-H and FFA youth attending the Southwest Junior Livestock Show (SWJL) in Cedar City, Utah, a Utah Department of Agriculture and Food (UDAF) sponsored livestock show and the other sampled 282 4-H and FFA youth who participated in the Box Elder County Junior Livestock Show (BEJL) in Tremonton, Utah, a county sponsored show.

Youth who participate in 4-H and FFA livestock projects come from a wide range of residential backgrounds. Almost two-thirds of youth (63%) declared they reside in non-production farm residences. Many live in small towns or in rural non-farm areas. Of 131 youth that responded at the SWJL show, 57.5% were male and 42.5% were female. Youth from 17 Utah counties participated in the SWJL show. At the BEJL show 282 youth responded and of that total, 47.4% were male and 52.6% were female. In the combined livestock shows, 66.3% of the respondents had been involved in 4-H less than 4 years.
Table 1
Residence During 4-H Project

<table>
<thead>
<tr>
<th>Residence During 4-H Project</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town under 50,000 population</td>
<td>16</td>
<td>66</td>
</tr>
<tr>
<td>Rural non-farm</td>
<td>17</td>
<td>70</td>
</tr>
<tr>
<td>Hobby Farm (under 5 acres)</td>
<td>30</td>
<td>124</td>
</tr>
<tr>
<td>Production Farm (over 5 acres)</td>
<td>37</td>
<td>153</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>413</td>
</tr>
</tbody>
</table>

Findings

The survey asked youth to identify impacts from participating in livestock projects. Value statements along with specific content skills were measured. As a result of their 4-H and FFA livestock project, some values and skills were learned or reinforced significantly by participation. On the other hand, there are some values and skills that youth did not learn as well. For example, in Table 4, more than 97% of youth who participated in these two junior livestock shows report that they are very confident showing an animal at a junior livestock show. On the other hand only 35% of these youth have explored careers in agriculture.

Values and Life Skills Gained

Twenty-one life skills were analyzed individually to reveal mean values and standard deviations (Table 2). These life skills were based on research conducted by Lee, Beard and Straquadine (2003) and the 4-H Youth Survey of the National 4-H Impact Assessment Project conducted by Peterson, et al (2000). Youth were asked what they learned as a result of their livestock project. The rank order for the top five mean scores was: "to accept responsibility for doing a job" (4.48, SD = 0.63), followed by "to value the contributions of others" (4.48, SD=0.68), "to be friends with people who are different than me" (4.45, SD = 0.66), "to follow instructions as they are given to me" (4.41, SD = 0.63), and " to understand what was required to have a successful livestock or horse project" (4.39, SD = 0.70).
Table 2
Life Skills Gained
(listed in descending order by mean)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>to accept responsibility for doing a job</td>
<td>415</td>
<td>4.48</td>
<td>0.63</td>
</tr>
<tr>
<td>to value the contributions of others</td>
<td>414</td>
<td>4.48</td>
<td>0.68</td>
</tr>
<tr>
<td>to be friends with people who are different than me</td>
<td>393</td>
<td>4.45</td>
<td>0.66</td>
</tr>
<tr>
<td>to follow instructions as they are given to me</td>
<td>415</td>
<td>4.41</td>
<td>0.63</td>
</tr>
<tr>
<td>to understand what was required to have a successful livestock or horse project</td>
<td>414</td>
<td>4.39</td>
<td>0.70</td>
</tr>
<tr>
<td>how to make decisions</td>
<td>414</td>
<td>4.35</td>
<td>0.72</td>
</tr>
<tr>
<td>how to help others</td>
<td>413</td>
<td>4.34</td>
<td>0.66</td>
</tr>
<tr>
<td>to use time and money efficiently</td>
<td>415</td>
<td>4.33</td>
<td>0.77</td>
</tr>
<tr>
<td>how to gain confidence in myself</td>
<td>415</td>
<td>4.33</td>
<td>0.71</td>
</tr>
<tr>
<td>to not use illegal drugs or alcohol</td>
<td>414</td>
<td>4.33</td>
<td>1.04</td>
</tr>
<tr>
<td>to set goals</td>
<td>413</td>
<td>4.32</td>
<td>0.71</td>
</tr>
<tr>
<td>the value and importance of ethics “doing the right thing”</td>
<td>412</td>
<td>4.32</td>
<td>0.77</td>
</tr>
<tr>
<td>that I have some control over events in my life</td>
<td>413</td>
<td>4.26</td>
<td>0.75</td>
</tr>
<tr>
<td>to feel comfortable saying “no” to things that I do not want to do.</td>
<td>412</td>
<td>4.21</td>
<td>0.88</td>
</tr>
<tr>
<td>to help others reach their goals</td>
<td>413</td>
<td>4.20</td>
<td>0.78</td>
</tr>
<tr>
<td>to accept opinions different from mine</td>
<td>413</td>
<td>4.17</td>
<td>0.67</td>
</tr>
<tr>
<td>how to keep records</td>
<td>411</td>
<td>4.16</td>
<td>0.83</td>
</tr>
<tr>
<td>to live a healthy lifestyle</td>
<td>414</td>
<td>4.14</td>
<td>0.89</td>
</tr>
<tr>
<td>to solve problems that occur in my life</td>
<td>412</td>
<td>4.14</td>
<td>0.83</td>
</tr>
<tr>
<td>to want to tell my friends to enroll in a livestock/horse project.</td>
<td>415</td>
<td>4.05</td>
<td>0.93</td>
</tr>
<tr>
<td>to meet and work with people of other cultures</td>
<td>413</td>
<td>3.94</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Scale: 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree

The high ranking of “to accept responsibility for doing a job” is consistent with Boleman, Cummings and Briers (2004) research for life skill development of youth participating in 4-H beef projects from a parent’s perception. These findings are also consistent with Ward’s (1996) research of life skill development of youth who participate in animal science projects. It is interesting that both youth and parents perceive accepting responsibility as the number one life skill gained from a livestock project.

In general, 4-H and FFA members agree or strongly agree that as a result of their 4-H and FFA livestock project they learned responsibility, leadership, communication, positive interactions with other youth and adults, and personal development skills. Although the average response
for not using illegal drugs or alcohol was high (4.33 on a 5 point scale), the standard deviation suggests more variability in the answers to that question and indicates some respondents might be more likely to use illegal drugs or alcohol.

4-H and FFA Participation in Activities and Projects

Youth who participate in 4-H clubs have a wide range of projects they can choose from. Many positive life skills are formulated by participation in structured 4-H clubs and through hands on learning. For example, Astroth (1996) found that 4-H clubs can be effective at helping youth develop critical life skills such as decision-making, responsibility, interpersonal skills, how to get along with others and an ethic of service. Astroth & Haynes (2002) later found that 4-H effectively develops life skills. His research showed 4-H members are more likely than non 4-H members to be able to make their own decisions, do things on their own, set goals, try new things, and take responsibility for their actions. This research supports the findings of Astroth and others. 4-H and FFA livestock projects effectively help youth develop critical life skills such as accepting responsibility, getting along with others, setting goals, decision making and interpersonal skills. In addition, youth in this survey report following instructions, money management, saying “no” to things they do not want to do, and gaining confidence as attributes derived from their 4-H or FFA livestock projects.

Table 3
Activities 4-H and FFA Youth Have Participated In
(rankied in ascending order)

<table>
<thead>
<tr>
<th>N</th>
<th>Yes</th>
<th>No</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officer training</td>
<td>397</td>
<td>5.5%</td>
<td>94.5%</td>
</tr>
<tr>
<td>Science and technology</td>
<td>396</td>
<td>8.1%</td>
<td>92.0%</td>
</tr>
<tr>
<td>Communications</td>
<td>397</td>
<td>10.1%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Committee member</td>
<td>397</td>
<td>12.3%</td>
<td>87.7%</td>
</tr>
<tr>
<td>Demonstrations</td>
<td>397</td>
<td>17.1%</td>
<td>82.9%</td>
</tr>
<tr>
<td>State contests</td>
<td>397</td>
<td>23.2%</td>
<td>76.8%</td>
</tr>
<tr>
<td>Held club office</td>
<td>397</td>
<td>22.7%</td>
<td>77.3%</td>
</tr>
<tr>
<td>Leadership</td>
<td>397</td>
<td>25.4%</td>
<td>74.6%</td>
</tr>
<tr>
<td>Community service</td>
<td>397</td>
<td>36.0%</td>
<td>64.0%</td>
</tr>
<tr>
<td>Portfolio/record book</td>
<td>397</td>
<td>44.8%</td>
<td>55.2%</td>
</tr>
</tbody>
</table>

Penn State (2004) researchers have found that most youth are involved in the implementation aspect of 4-H projects but have minimal input in the planning and evaluation components of the process. Seevers and Dormody (2000) reported that adults who work with 4-H programs may not be providing youth the opportunity to be involved in the total leadership process including planning, implementing and evaluating.

The rank in ascending order of the bottom five activity areas 4-H and FFA youth participate in from Table 3 are: “officer training” (5.5% Yes), “science and technology” (8.1% Yes),
“communications” (10.1% Yes), “committee member” (12.3% Yes), “demonstrations” (17.1% Yes).

This survey’s relatively low rankings for questions related to receiving officer training, science and technology, communications, being a committee member and conducting a demonstration show that 4-H and FFA programs should be developed and modified so that more leadership, science and technology and communication opportunities are available to 4-H and FFA youth with livestock projects.

**Knowledge Youth Learned From Their Projects**

Ward (1996) found that specific events in 4-H animal science programs appear to have a positive influence on the development of important life skills. Most notable are such activities as livestock shows and livestock judging activities. The top five skills youth learned from their 4-H project ranked in order are “show an animal” (97.01% Yes), “care for an animal” (96.77% Yes), “feed an animal” (95.77% Yes), “groom an animal” (95.77% Yes) and “keep an animal healthy” (91.79% Yes). Areas where youth did not feel they learned as much from their 4-H or FFA project are “giving oral reasons” (33.33% Yes), “learning about careers in agriculture” (35.15% Yes).

**Table 4**

Knowledge Learned From Their Projects  
(rankled in descending order)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Yes</th>
<th>No</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show an animal</td>
<td>402</td>
<td>97.01%</td>
<td>2.99%</td>
<td>1.03</td>
</tr>
<tr>
<td>Care for an animal</td>
<td>402</td>
<td>96.77%</td>
<td>3.23%</td>
<td>1.03</td>
</tr>
<tr>
<td>Feed an animal</td>
<td>402</td>
<td>95.77%</td>
<td>4.23%</td>
<td>1.04</td>
</tr>
<tr>
<td>Groom an animal</td>
<td>402</td>
<td>95.77%</td>
<td>4.23%</td>
<td>1.04</td>
</tr>
<tr>
<td>Keep an animal healthy</td>
<td>402</td>
<td>91.79%</td>
<td>8.21%</td>
<td>1.08</td>
</tr>
<tr>
<td>Select an animal</td>
<td>400</td>
<td>86.00%</td>
<td>14.00%</td>
<td>1.14</td>
</tr>
<tr>
<td>Determine the cost to raise an animal</td>
<td>402</td>
<td>84.58%</td>
<td>15.42%</td>
<td>1.15</td>
</tr>
<tr>
<td>Practice safety around animals</td>
<td>402</td>
<td>76.12%</td>
<td>23.88%</td>
<td>1.24</td>
</tr>
<tr>
<td>Understand animal reproduction</td>
<td>402</td>
<td>48.51%</td>
<td>51.49%</td>
<td>1.51</td>
</tr>
<tr>
<td>Learn about careers</td>
<td>404</td>
<td>35.15%</td>
<td>64.85%</td>
<td>1.65</td>
</tr>
<tr>
<td>Give oral reasons</td>
<td>402</td>
<td>33.33%</td>
<td>66.67%</td>
<td>1.67</td>
</tr>
</tbody>
</table>
Conclusions

4-H and FFA livestock projects provide an excellent opportunity for youth to develop valuable positive life skills that will benefit them as they become adults. Accepting responsibility for doing a job is paramount for these youth and is well documented in similar research. Caring for an animal project requires responsibility and fortitude. The study noted that youth seem to be comfortable with grooming, feeding, showing and caring for their animal project but are not as comfortable or knowledgeable with the principles of animal reproduction, understanding products produced from livestock or career opportunities in agriculture.

Although it is widely documented that 4-H and FFA can effectively develop life skills in its members, the results of this survey show that many youth who have livestock projects either do not have the opportunity to participate in other 4-H activities outside the realm of livestock or horse projects or simply choose not to participate. Many youth do not have the opportunity to sit on committees. Most have not held a club office or received training on how to be an officer in their club. These youth could benefit from exploring 4-H projects such as leadership, science and technology and communication. Locally, youth need opportunities to participate as committee members and as leaders in their 4-H club. For example, older FFA youth could gain leadership experience leading a club of young 4-H’ers.

Our findings indicated that emphasis should be placed on leadership and communication development by encouraging youth to be members of county 4-H and FFA livestock and horse committees, junior club leaders, etc. State-wide and county extension programming might be reevaluated for educational events like demonstrations, leadership training and state contests to attract youth with livestock projects.

This study demonstrates the value of surveys in determining what youth development skills are strengthened by participating in youth livestock projects. Youth development professionals could conduct similar surveys to determine the value of other projects they are promoting.

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.
College 101:
Strategies for First Year Success –
A Program for High School Seniors

Brian Raison
Ohio State University Extension
Dayton, Ohio
raison.1@osu.edu
College 101:  
Strategies for First Year Success –  
A Program for High School Seniors  

Brian Raison  
Ohio State University Extension  

Abstract: Making the transition from high school to college can be one of the biggest challenges in life. The first year dropout rate stands at 26% nationally. Adolescent decision-making literature suggests that youths can achieve greater success and reduce negative consequences during their first year of college if they 1) increase knowledge of new social scene and academic protocols, and 2) work through a conjectural decision-making process prior to actual encounters.

This program presents key points high school seniors “must know” in advance of their arrival on campus. It is research-based with first-hand advice from real college students including on-the-street video interviews. Topics cover: Choosing Classes, Test Strategies, Social Scene Changes, Budgeting, Roommates, Safety, Talking with Professors, Time Management, and more. The program is designed for any student planning to attend any 2 or 4-year college. Youth professionals can teach this loosely-scripted 1 or 2-hour PowerPoint-based seminar “out of the box.” The $159 curriculum package is free to the first 250 responders.
Background

Each year, approximately 1.8 million U.S. first-quarter college freshmen encounter the greatest decision-making period of their young lives. Many of their choices will initiate life-long consequences with financial, emotional and physical (health-related) implications. The highest risks include a dramatic loss of earning capacity due to failing or dropping out—26% freshman non-return rate nationally (ACT, 2004), acquiring a sexually transmitted infection—25% of college age youths (CDC, 2004), alcohol poisoning, acquaintance rape, and others.

Conversely, behavioral data on youths show improved decision-making and fewer negative consequences associated with prior encounters or foreknowledge of given life scenarios (Trad, 1993; Wyatt, 1989). Thus, our hypothesis: *Youths will achieve greater success and reduce negative consequences during their first year college if they*

1) *increase knowledge of social scene changes and new academic protocols, and*
2) *work through a conjectural decision-making process prior to life encounters.*

Increased College Prep Efforts

In recent years, colleges and universities have added “First Year Encounter” seminars aimed at easing social and academic adjustments while lessening dropout potential. Most, however, offer these during the first quarter—too late to provide processing time for risk decision-making. Freshman orientation is offered prior to campus arrival, but tends to focus on class scheduling, placement, library use, and some warnings about crime prevention and underage drinking. In addition, it is predisposed toward a specific institution.

High school guidance counselors work to prepare students for college entry exams, scholarships and financial aid applications. But, they have little time for discussions on social scene changes, campus life, or collegiate academic rigor. The popular press offers several “college survival” titles as antecedents; but reviews are anecdotal and mixed, at best.

The new *College 101* curriculum offering stands apart on two key points. First, it is research-based. Second, it is proffered several months prior to the physical move—the transition-to-college event. Again, adolescent decision-making theories note the predictive abilities of intervention to influence actual decisions that can forecast outcomes (Mann, Harmoni, & Power, 1991; Ross, 1981). This previewing technique forms the basic premise of the program.

The Program’s Research Basis

We surveyed over 600 current college students (Ohio State University IRB Protocol #2006E0643) asking them to provide advice to college-bound high school seniors. Over 280 provided input (Raison, 2006). Key themes were identified and formed the basis of a 2006 pilot college preparatory curriculum. To date, an estimated 3,500 students in 14 states have participated in the seminar. Of 708 collected evaluations, 88.6% of students said they learned new information and/or that they would recommend the program to a friend.

In late 2006, the University of Wisconsin Research Foundation’s Transitions to College Focus Group Study found that many college students wish they had known in high school how much more demanding college would be. They also said that college stress would have been reduced if they had taken more courses to prepare them for college. (Janke, et al, 2006).
The report recommended "developing workshops for parents and their college-bound students to discuss the social transformations that are coming." They also recommended using current college students "to share their experiences and advice with high school seniors as way to increase their knowledge about academic, social, and financial issues related to the transition to college." The College 101 program directly addresses these recommendations.

The program was built on the framework of Logic Model (University of Wisconsin Extension, 2002). It provided consideration for the context, environment, and input-output factors that described the full chain of events—from inputs to outcomes—and provided accountability at the end of the process. This strengthened the program overall and provided an excellent structure to convey the current collegian advice.

Program Overview

The College 101 curriculum offers guidance on key issues derived from current collegians that lend stories with peer-to-peer credibility. It approaches high school seniors on their terms utilizing direct quotes from contemporaries to add social scene and classroom stories with “future shock” value. For the 2007 update, we taped “on the street” video interviews with just over 60 college students from three different universities. Now, sixteen edited segments intersperse “live advice” throughout the program.

During the seminar, specific differences between high school and college academic protocols are highlighted. Data on college completion rates are presented as well to show evidence of the difficulty of this endeavor and to invoke a challenge to succeed. Participants receive tips on specific topics such as time management, studying/testing techniques, roommate issues, drug, alcohol, and STD statistics, credit/money management, and more. Questions are posed at given intervals to stimulate discussion and to increase audience participation and engagement.

Program Impact

Most participants will depart for college within one or two months of completing the program. Move-in day provides the first opportunity to determine program effectiveness. As parents unload cars, unpack boxes and finally depart for home, the complete and total freedom of being away at college will be suddenly realized. If not that very evening, then certainly within the week, first-quarter freshmen will encounter between one and all of the scenarios presented in the program. Their decision-making process will be taxed to the fullest extent. Hopefully, information from the seminar will resonate and help guide their choices.

Making a successful transition is the main goal. The definition of success, particularly within this construct, is expanded to encompass the avoidance of certain behaviors with potentially negative, life-impacting consequences, especially during this first quarter adjustment period. We are now gathering participants’ future college email addresses to conduct follow-up surveys during their first quarter of college to determine if and how the program components were recalled, and/or if their decisions were influenced in a positive way. This information will help guide derivative editions of the program.

Teaching the Program

All materials needed to facilitate this program are on one CD. It can be conducted by: University outreach specialists, 4-H & Extension Educators, Youth Development Professionals, School
Counselors, Teachers, Community and Faith-Based Organization Professionals. The CD is formatted to teach the program as a:

1. **Stand-alone seminar**: The CD includes both 1-hour and 2-hour versions. Audience Size: 10 to 100 (or 200+ but with less interaction).

2. **Classroom series**: The CD includes a classroom version with 4-6 lessons of 1-hour each, and additional handouts and discussion points. Audience Size: 5 to 50 optimal.

3. **Self-study**: This included a new “electronic narrator” as a click-through-guide for student/parent or student/teacher study. Program length is self-determined.

Current collegians may provide highlights and beneficial insight in any teaching application. Educators may wish to preview the program with them; then develop a plan of inclusion with time and topic restrictions. The program CD includes Microsoft’s free PowerPoint Viewer. System requirements include Windows 98, XP or newer and most Macintosh operating systems.

**Implementing the Program (250 Free)**

The retail price of the curriculum is $159 for end-users schools, libraries, or non-profits. An expanded use site-license is available for broad-ranging or state-wide applications. **The first 250 Extension Educators (or Journal of Youth Development readers) who respond will receive the program FREE.** A $5/unit shipping and handling fee will be collected. Simply email the author.

Recipients of the free copies will be asked to either teach the seminar or share information about the program with their local high schools. Some schools, guidance counselors and local libraries may want to have their own copies for student self-study and review. They may also want to teach the expanded 4-lesson classroom series (included on the CD) as a special senior session or in a government class. School purchase information is available online at [http://college101seminars.com](http://college101seminars.com).

For schools with limited or no curriculum budget, the program will be made available to them free of charge. An application is required and a limit may apply.

**Cost Recovery**

Some schools have opted to charge a fee for the class, (e.g. $2-$5 per senior). This modest expense can help promote buy-in from the participating seniors and can provide a supplement to a curriculum budget year after year.

**Expanded Program Use – Admissions Tool**

To date, three universities have expressed interest in customizing the program with their logos, branding, and college-specific information. The program would be sent as a self-study to help prepare admitted students. It would offer a wider array of topics and depth than is afforded during the brief on-campus freshman orientation. It would also provide critical processing time for students prior to their fall campus arrival. A low cost site license for First-Year Experience and Admission Office use is available.
Conclusions

Feedback on the research, program content and participant reaction has been overwhelmingly positive. Based on written responses of participants and high interest by school counselors, the program appears to have great potential for impacting the lives of college-bound students. The current college student survey returned more than 1,000 comments citing the need for an intervention program such as this. These excerpts are typical responses:

"I wish I was more confident as a freshman."
"I wasn’t prepared to be in control."
"A lot of people aren’t ready for college."

The College 101 program combines common threads of readily accessible information into one seminar that is proffered at a critical point in adolescent development. It contributes essential knowledge that will help reduce negative consequences and dropout rates of first-year college freshmen.

Curriculum Highlights

The curriculum has undergone numerous blind peer reviews among colleagues in universities across the country. It has received several honors and invitations noted below.

Awards:

Invited Presentations:
- Building Human & Social Capital: The Knowledge Economy Conference – Ohio State University. Columbus, Ohio – May 2, 2006. (White paper.)

Reviews / Comments:
"The transition from high school to college can be the most difficult transition in life. But it doesn’t have to be. College 101 gives students exactly what they need: a realistic picture of what’s ahead, combined with practical tools to navigate the challenges.”— Derek Melleby, College Transition Specialist, Center for Parent/Youth Understanding (http://www.cpyu.org)

"The difficulty of making the transition from high school senior to college freshman is well documented. Along with the first year dropout rate, students face enormous social and academic pressures. Built on a sound research base, the College 101 program provides excellent advice gathered directly from the front line: current college students. The video segments bring great credibility in a peer-to-peer learning model that really connects with
college-bound students.” — Theresa Ferrari, Ph.D., Associate Professor and Extension Specialist, The Ohio State University.

"It is yet another great tool for school counselors to use as they help students successfully plan for their futures.” — Kelley S. Schubert, MS, LPSC, President, Ohio School Counselor Association

References


**Suggested Reading**


Summary of Results from the 2003 National Survey on First-Year Seminars. (2004). Retrieved September 26, 2004 from the University of South Carolina, National Resource Center for the First Year Experience and Students in Transition web site: http://www.sc.edu/fye/research/surveyfindings/surveys/survey03.html


Guidelines for Submitting Manuscripts

Authors are asked to follow the guidelines below to ensure their submissions will be accepted for review:

A. Manuscripts for Feature Articles should be approximately 2,000-5,000 words. These articles are informational, explanatory, or critical analysis and interpretation of major trends or comprehensive reviews. Articles have clear implications for youth development practice and programming and are grounded in original research or are based on cutting-edge research. Feature articles selected for publication generally will answer the following questions:

- Is the information based on current research and/or an explicit theory of change?
- In the case of original research articles did the author explicitly state methodology, analysis, results and specific implications for practice?
- What are the implications for youth development research, practice, and/or programs?

B. Manuscripts for Program Articles should be approximately 1,500 words, although longer articles are accepted when appropriate. A program article is an article describing a unique, successful, or promising youth development program. Program articles chosen for publication will generally answer the following questions:

- What are the purposes, activities, and audience for the program?
- What made the program a success (or why does it promise to be a successful program)? What are the impacts?
- After reading the article, how can youth development professionals emulate it or seek funding and other resources to implement it?

C. Articles for Research and Evaluation Strategies should be approximately 1,000 words, although longer articles are accepted when appropriate. They describe innovative methodologies and strategies in the collection and analysis of quantitative or qualitative research and evaluation data.

D. Resource Reviews articles should be approximately 300 words in length. Contributions to the Resource Reviews provide a critical analysis of books, videos, curricula, and other tools that may be helpful to youth development professionals. The value and limitations of the resources should be noted. Readers should gain a clear idea of how this resource may be used by a youth development practitioner. The materials under review must be thoroughly identified, including author, publisher, date of publication, and information on how to obtain a copy of the materials.
Below are guidelines for submitting any type of article:
- Manuscripts should be in block style (no indent or tabs). Information in columns must be put in a table format.
- American Psychological Association (APA) is the required style.
- The Journal of Youth Development ~ Bridging Research and Practice is published on the World Wide Web. This means that special attention should be paid to formatting for on-screen reading. Include shorter paragraphs (e.g., 100 words), bulleted and numbered lists, and subheadings.
- Authors should include a cover page that lists the title of the article, author’s name, official title and affiliation, office contact information (address, phone, and FAX numbers, electronic-mail addresses), and the date of submission.
- Authors should submit a separate Bio page highlighting professional title, affiliation, educational background and expertise.
- Authors should submit with the manuscript a brief abstract (not to exceed 150 words) and suggested key words for use in indexing. Please indicate the type of manuscript submitted, such as feature article, program article, etc.
- Submitted manuscripts should contain only non-previous published material and should not be under consideration by other publications, unless the editor grants special permission.
- It is the author’s responsibility to obtain any necessary written permission for use of copyrighted material contained within the article.
- Authors are responsible for the accuracy of all citations, references, and bibliographies.
- Authors are responsible for specifying approval by an institutional ethics committee for research involving human subjects, if applicable.

How to Send Manuscripts:

- Authors should submit their manuscripts electronically as an attachment to an e-mail. Word, WordPerfect, or hypertext markup language (HTML) is accepted.

- Manuscripts should be sent to the editor:
  Patricia Dawson
  Patricia.dawson@oregonstate.edu
  PO Box 100
  2411 NW Carden – Umatilla Hall Room 100
  Pendleton, Oregon 97801
  541-278-5404