

## The Impact of a Campus-Based 4-H Summer Conference Program on Youth Thriving

### Abstract

In 2014 the Oregon 4-H program adopted a new program model to describe and evaluate the impact of 4-H on youths. The model is based on promoting thriving in young people, with an emphasis on high program quality. This article discusses the impact on thriving in 378 youth participants of the 4-H Summer Conference (4-HSC) program. The results of the study conducted provide preliminary support for the validity of the program model as well as the impact of the 4-HSC program on participants. Additionally, the study has implications for the use of program models in translating research into practice across Extension programs.

### Mary E. Arnold

Professor and Youth Development Specialist  
School of Social and Behavioral Health Sciences  
Oregon State University  
Corvallis, Oregon  
[mary.arnold@oregonstate.edu](mailto:mary.arnold@oregonstate.edu)

### Jamie M. Davis

Professor of Practice and 4-H Educator  
School of Social and Behavioral Health Sciences  
Oregon State University  
Lakeview, Oregon  
[jamie.davis@oregonstate.edu](mailto:jamie.davis@oregonstate.edu)

### Roberta Lundeberg

4-H Program Coordinator and 4-H Educator  
School of Social and Behavioral Health Sciences  
Oregon State University  
Corvallis, Oregon  
[roberta.lundeberg@oregonstate.edu](mailto:roberta.lundeberg@oregonstate.edu)

## Introduction

Research-based programs are the hallmark of Extension education programming, and a key task of effective program planning is translating current research into useful and relevant practice (Arnold, 2015). In recent years the 4-H program has aligned itself closely with the research base of positive youth development (Lerner & Lerner, 2013), yet few models have been developed to translate this research into practice. In 2014 the Oregon 4-H program adopted a new program model, based on several strands of youth development research, to describe and evaluate the impact of 4-H on youths. This model proposes that 4-H facilitates optimal development in young people by increasing thriving (Benson & Scales, 2011), with an emphasis on high program quality (Eccles & Gootman, 2002; Hensley, Place, Jordan, & Israel, 2007). While theoretically feasible, the model still needs to be extensively tested and refined. One of the first steps in testing the model was to align Oregon's larger and more common signature 4-H programs with the model and develop corresponding evaluation protocols. The annual 4-H Summer Conference (4-HSC)—a 4-day residential campus-based program that is one of these key statewide 4-H programs—was the first program to be evaluated via the new program model. The purpose of the research described here was to test the fit of the 4-HSC program with the model and begin to build evidence for the model's structure and validity. In addition, the impact of 4-HSC on youth thriving is reported.

## Review of the Literature and Associated 4-HSC Program Background

Thriving youths are youths who think, feel, and act in ways that put them on a positive track of development (Benson & Scales, 2011). Over time, this thriving orientation increases the odds of optimal youth development (Search Institute, 2014). Thriving youths are more likely to achieve important developmental outcomes, such as increased academic engagement and achievement (Chase, Warren, & Lerner, 2015), higher social competence and personal standards (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004), and increased connection to others (Lam, 2012), and they are more likely to contribute more to their communities (Lerner, Dowling, & Anderson, 2003). All of these achievements are target outcomes for the 4-HSC program.

Research shows that youths who are on a thriving trajectory have some common characteristics. These characteristics, called "thriving indicators" (Search Institute, 2014), include openness to challenge and discovery, hopefulness for the future, prosocial development, positive emotionality, and high levels of intentional self-regulation. Aligning with these characteristics are the programming and goals of 4-HSC:

- Being open to challenge and discovery, thriving youths possess the desire and courage to explore new things, try new activities, and learn about new things. This "growth mind-set" (Dweck, 2006) is important for healthy development. The 4-HSC program provides rich and varied experiences that allow youths to try new things, learn about things they enjoy doing, and explore potential career areas.
- Thriving youths feel hopeful about their futures. These youths feel that there is a purpose for their lives and that they can make unique contributions to their world. 4-HSC is designed to excite and motivate youths about their futures. Accordingly, one of the main goals of 4-HSC is to expose youths to college and increase their interest in and aspiration and motivation for pursuing a college degree. A more specific goal is to encourage youths to consider Oregon State University (OSU) as a college choice.
- Youths who are thriving also develop in a prosocial manner; they care about others, and as they grow, increase their moral and ethical commitments. Prosocial youths also seek more meaningful connections to others and ways to contribute to society (Lam, 2012; Lerner et al., 2003). 4-HSC provides opportunities for prosocial development, through making friends, learning to work with others, navigating differences, learning to make ethical choices, and participating in community service sessions.
- Positive emotionality is reflected through emotional competence, good social skills, confidence, and positive relationships. These socio-emotional skills are increasingly important for success in work and life (Lippman, Ryberg, Carney, & Moore, 2015; Meyer & Jones, 2015). 4-HSC promotes positive emotional development related to having self-confidence, being able to make new friends, feeling good about oneself through service, developing lasting friendships, and learning from others.
- Thriving youths demonstrate high levels of intentional self-regulation, which involves having the ability to set and achieve goals and persevere when setbacks occur. Youths who are skilled at self-regulation can modify goals and reorient themselves in the face of adversity (Gestsdottir & Lerner, 2008). 4-HSC provides opportunities for youths to develop intentional self-regulation skills, such as goal setting, independence, and decision making.

## Methods

### Participants

Of the youths attending 4-HSC in 2015, 378 (94.5%) completed a written questionnaire about the experience. The instrument was developed for our study and administered the last evening of the conference. Respondents ranged in age from 12 to 19; the mean age was 14.86; 71.3% were girls. Of the respondents, 93.2% were White, 2.6% were American Indian or Alaska Native, 1.2% were Black or African American, 1.2% were Asian American, and 1.8% were Native Hawaiian or other Pacific Islander. Latino ethnicity was reported by 8.9% of respondents. These demographics align fairly well with the overall demographics of Oregon and are typical of participants in the Oregon 4-H program.

### Instrument

Youths responded to a list of items related to the thriving indicators of (a) openness to challenge and discovery, (b) hopefulness for the future through college aspiration and motivation, (c) prosocial development, (d) positive emotionality, and (e) intentional self-regulation. Youths were also asked about the impact of 4-HSC on their college awareness and motivation. Each item was preceded by the wording "While at 4-H Summer Conference did you . . ."; youths were prompted to indicate "yes (1)," "no (2)," or "not sure (3)" for each item.

### Analysis

Items were analyzed in three steps. First, we conducted a descriptive analysis to determine the percentage of youths indicating "yes" to each item. Second, we calculated inter-item reliability scores for each of the five thriving indicators using Cronbach's alpha. Third, we tested for significant differences on the indicator scores based on age, gender, race and ethnicity, socioeconomic status, parental income, and parental expectations for higher education.

## Results

### Openness to Challenge and Discovery

Seven items made up the openness to challenge and discovery subscale ( $\alpha = .594$ ). The top five items and the percentages of youths who answered "yes" to these items are presented below.

- Explore something that interests you (88.6%)
- Discover new things that interest you (77.8%)
- Think about your future plans (72.9%)
- Learn new things from people who are not like you (66.8%)
- Learn about academic programs that interest you (60.1%)

The seven items were combined to create an overall thriving indicator score. The score was then standardized, resulting in a value of 0 to 1, with a mean of .693. The scores were moderately skewed toward the high end, indicating the conference's positive impact on participants' openness to challenge and discovery. Analysis of variance revealed significant differences based on gender, with scores higher for boys ( $M = .73$ ) than for girls ( $M = .68$ ) ( $F = 2.889$ ,  $df = 1$ ,  $p = .009$ ).

## Hopefulness for the Future Through College Aspiration and Motivation

Eight items made up the hopefulness for the future through college aspiration and motivation indicator ( $\alpha = .701$ ). The top five items and the percentages of youths who answered "yes" to these items are presented below.

- Think more seriously about attending college (82.5%)
- See yourself attending college away from home (82.3%)
- Become more interested in going to college (82.0%)
- Become more aware of how OSU and 4-H are connected (81.0%)
- Become familiar with OSU campus (79.0%)

The eight items were combined to create an overall thriving indicator score. The score was then standardized, resulting in a value of 0 to 1, with a mean of .792. The scores were skewed toward the high end, indicating the conference's positive impact on participants' college awareness and motivation. Further analysis revealed no significant differences based on demographic variables.

An additional question asked participants whether attending 4-HSC affected their likelihood of attending college at OSU. Participants selected a response option on a 1–5 scale, with 1 indicating "much more likely to attend." More than half of the respondents indicated that 4-HSC positively affected their likelihood of attending OSU:

- 39.7% indicated that they were "much more likely to attend," and
- 20.6% indicated that they were "somewhat more likely to attend."

Because college decisions become more salient with age, the "likelihood of attending OSU" item was analyzed by age. An analysis of variance revealed a significantly higher likelihood of attending OSU for middle school youths ( $M = 1.89$ ) than for high school youths ( $M = 2.35$ ) ( $F = 12.34$ ,  $df = 1$ ,  $p = .001$ ). This finding was opposite of what was expected and is addressed in the discussion section.

## Prosocial Development

Eighteen items made up the prosocial development subscale ( $\alpha = .855$ ). The top five items and the percentages of youths who answered "yes" to these items are presented below.

- Get to know other youth from around the state (89.9%)
- Meet new people who are not like you (82.7%)
- Enjoy that Summer Conference is not a competitive event (78.2%)
- Learn new skills that you can use to lead others (76.8%)
- Practice being an effective member of a team (76.0%)

The 18 items were combined to create an overall subscale score. The score was then standardized, resulting in a value of 0 to 1, with a mean of .712. The scores were moderately skewed toward the high end, indicating the conference's positive impact on prosocial development. Analysis of variance revealed a significant difference between middle school youths ( $M = .685$ ) and high school youths ( $M = .760$ ) ( $F = 7.68$ ,  $df = 1$ ,  $p = .006$ ).

## Positive Emotionality

Two items made up the positive emotionality subscale ( $\alpha = .362$ ). The items and the percentages of youths who answered "yes" to these items are presented below.

- Have the opportunity to develop self-confidence (78.2%)
- Feel better about yourself because of the community service (63.7%)

The two items related to positive emotionality were combined to create an overall positive emotionality score. The score was then standardized, resulting in a value of 0 to 1, with a mean of .708. The scores were moderately skewed toward the high end, indicating the conference's positive impact on participants' positive emotionality. Analysis of variance revealed a significant difference between middle school youths ( $M = .668$ ) and high school youths ( $M = .788$ ) ( $F = 9.59$ ,  $df = 1$ ,  $p = .002$ ).

## Intentional Self-Regulation

Five items made up the intentional self-regulation subscale ( $\alpha = .634$ ). The five items and the percentages of youths who answered "yes" to these items are presented below.

- Try harder to achieve the goals you have for yourself (83.3%)
- Set any new goals for yourself (80.3%)
- Commit to doing well in school (76.2%)
- Have the opportunity to be independent (70.4%)
- Have the opportunity to make decisions for yourself (67.6%)

The five items were combined to create an overall subscale score. They score was then standardized, resulting

in a value of 0 to 1, with a mean of .757. The scores were skewed toward the high end, indicating the conference's positive impact on participants' development of self-regulation. Further analysis revealed no significant differences based on demographic variables.

## **Discussion, Implications, and Conclusions**

The results of our study provide a useful first look at a signature 4-H program as it aligns with a new 4-H program model. In particular, the results support the theoretical premise that 4-H programs promote youth thriving.

### **Thriving Indicators**

The results support the program's efficacy in enhancing the following characteristics related to youth thriving: openness to challenge and discovery (.693), hopefulness for the future through college aspiration and motivation (.792), prosocial development (.712), positive emotionality (.708), and intentional self-regulation (.757). These findings provide evidence that 4-HSC is positively affecting youths in all intended areas, and in the area of college aspiration and motivation in particular. These findings set the stage for evaluation of other signature programs as they are aligned with the 4-H program model.

### **Increasing Likelihood of Attending OSU**

As mentioned, one of the key goals for 4-HSC is to encourage youths to consider attending OSU. The results of the study revealed a modest impact on youths in this area. In addition, contrary to what we predicted, middle school youths were significantly more likely to report wanting to attend OSU. A potential reason for this finding is that 4-HSC may provide early initial exposure to the idea of college for younger participants who have not yet explored other possible college options. Older youths, who are in the more advanced stages of college consideration, may have greater awareness of the fit of OSU with their college and career goals. Additional research is needed to assess the longitudinal impact of attending 4-HSC on college choice.

### **Significant Differences**

A significant difference was found between boys and girls in the area of openness to challenge and discovery. This finding is consistent with research that shows that boys may be more open to experience (Lehman, Denissen, Allemand, & Penke, 2013). Recent research on growth mind-sets, and the contribution they make to youth thriving, has indicated a high level of plasticity, meaning that growth mind-sets can be developed (Dweck, 2016). The gender differences found in our study serve as a reminder that girls in particular may need to be encouraged to be open to new challenges and ideas. Those developing or conducting programs intended to contribute to thriving among youths may want to pay particular attention to methods that encourage challenge and exploration for girls.

A second significant difference was found in the area of prosocial development, with survey responses indicating that high school youths have higher levels of this characteristic than middle school youths. This difference reflects the developmental nature of prosocial attitudes and skills. Whereas basic moral understanding, such as the ability to distinguish right from wrong, develops in early childhood, prosocial awareness develops across the adolescent years, as youths form a better understanding of themselves, their own needs and desires in relation to those of others, and a higher common good (Malti, Dys, & Zuffianò,

2015).

The results of our study provide some nascent forays into understanding the impact of the 4-HSC program through the theoretical lens of the new 4-H program model. Although more work needs to be done, the findings are positive, and consistent with previous research in child and adolescent development.

## Implications for Extension

Although our study was focused on the preliminary testing of a model specifically developed for the 4-H program, the study has implications for the broader extension field. The study demonstrates how research can be translated into a program model that can be tested and used for program planning, evaluation, and improvement. As proposed previously (Arnold, 2015), Extension program "umbrella models" such as the one developed for the Oregon 4-H program can be effective tools for translating research into Extension program practice.

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