Proven Effectiveness of Missouri 4-H Camps in Developing Life Skills in Youth

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Abstract: Camping is generally believed to be a context for positive youth development. The 4-H Camp environments presumably focus on the development of life skills including managing and thinking; relating and caring; giving and working and; living and being. However, the effectiveness of the Missouri 4-H Camp environments in developing life skills among campers had never been evaluated in a consistent manner across the multiple camping programs.

In order to evaluate the efficacy of these camp programs, resident campers within the 10-13 year age range were surveyed about their camping experience during the summer of 2005 and a similar group was surveyed in 2006. Parents of campers were also surveyed both years to gather their perceptions of 4-H Camp’s impact on their children in developing the life skill areas identified above. Parents and youth agreed strongly that the 4-H Camp experience was substantially valuable in developing the life skills identified in the Targeting Life Skills Model (Hendricks, 1998).

Introduction

The University of Missouri Extension 4-H field faculty conduct several 4-H resident camps throughout the state each summer. Camping is believed to be a context for positive youth development. Camp participation by youth has been found to affect youth in multiple ways, enhancing many forms of growth (Garst, & Bruce, 2003). The Missouri 4-H Camp environments presumably focus on the development of life skills relating to Head (managing and thinking), Heart (relating and caring), Hands (giving and working), and Health (living and being) (Hendricks, 1998). However, the effectiveness of the camp environments in developing life skills
among campers has seldom been evaluated in a consistent manner across statewide camping programs. Bari S. Dworken, Ed.D., (as cited by Garst, & Bruce, 2003), points out that, “Unfortunately, the majority of evaluations conducted in camp settings have been internal process evaluations aimed at program improvement and identifying levels of participant satisfaction.” This has been the case in Missouri as well.

Additionally, it is important to be more intentional and systematic in determining the impacts of the program on youth participants (Astroth, 2003; Guion, & Rivera, 2006). Given the investment of faculty time, resources and facilities to produce a residential camp experience, this study was undertaken to systematically measure the development of life skills in youth attending 4-H resident camps in Missouri.

**Methodology**

**Research questions**
In 2004 an informal study group comprised mainly of county-based field faculty formed to consider the following questions:

- "Do youth ages 10 to 13 perceive an increase in their own life skills in the domains of Learning to Learn, Social Skills, Teamwork and Self-Responsibility as a result of their experiences at 4-H resident camp?"
- "Do parents perceive their children to have increased or improved in those same life skill dimensions during camp?"

**Subjects**
Youth participants aged 10 to 13 attending one of twenty regional 4-H resident camps in Missouri and their parents were invited to take part in the study. The initial study was conducted during the summer of 2005 and replicated with a similar group of campers during the summer of 2006. The 4-H Camping programs in Missouri vary widely throughout the state regarding camp facilities, the administrative structure and the specific educational content. Some camps are planned and staffed by Regional Camp Associations, responsible for multiple sessions at a common facility utilizing hired camp staff. Others are single-session camps that are planned on a single-county or multi-county level, staffed by volunteers and local Extension faculty only. All sessions within this study were either two-night or three-night resident camps.

**Methods/Instruments**
Two instruments, one for youth and one for parents, were developed by an evaluation team of several Extension field faculty and a faculty member of the University of Missouri-Kansas City (UMKC) Institute for Human Development (IHD). Both instruments were designed to gauge life skill development in youth based on the “Developing Life Skills Model” (www.extension.iastate.edu/4H/lifeskills/homepage.html).

The Youth and Parent instruments each contained the same three sections. The first section asked campers/parents to provide demographic information. The second section asked campers/parents to respond to a series of statements with one of the following responses: Strongly Agree, Agree, Disagree, or Strongly Disagree. The third section asked campers/parents to state in their own words what they felt were the most important aspects of the camp
experience. The camper instrument was developed at the 4th grade reading level and was pilot tested with a small group of 4th and 5th graders.

A protocol document was developed for 4-H Camp supervisors to direct them in collecting parental consent and youth assent and in the implementation of the youth and parent instruments. Active assent was obtained from both campers and parents. The instruments and methodology were approved by University of Missouri Campus Institutional Review Board (IRB).

**Data Collection**
Campers were surveyed near the end of their respective camp sessions. Parents were surveyed by mail in the weeks following each camp session.

**Analysis Procedures**
Both data sets were analyzed in 2005 using the Cronbach’s Alpha scale for reliability (Youth=0.874 and Parent=0.865). Both scores demonstrate high levels of data reliability.

**Results**
In 2005, four hundred twenty-five (425) campers participated and one hundred thirty (130) parents responded (this is an estimated 31% response rate from parents). In 2006, three hundred six (306) campers participated, and one hundred forty-two (142) parents responded. The results in both study years were nearly identical, except for some minor differences to be described below. A summary of the results can be found in Table 1.

In the quantitative section of the instruments in the 2005 study, parents perceived their child’s Social Skills to have improved more than in any other domain because of attending 4-H Camp (Parent mean: 3.08). (4=“Strongly Agree”; 1=“Strongly Disagree”). Youth agreed even more frequently (Youth mean: 3.11). Youth reported their Teamwork skills improved most because of attending 4-H Camp (Youth mean: 3.22). Parents agreed slightly less frequently (Parent mean: 3.02).

While Learning to Learn skills was the lowest strength-area of the four life skills evaluated, (Parent mean: 2.93/Youth mean: 2.92), both parent mean and youth mean reflected agreement that Learning to Learn skills increased as a result of attending 4-H Camp.

Both youth and parent respondents were highly positive about the overall experience of campers at 4-H Camp (see Figure 1). Campers stated overwhelmingly that they wanted to return to camp the following year. Parents felt strongly that their child’s self confidence improved after the camp experience and that the benefits of their child’s attendance at 4-H Camp outweighed the cost. Finally, parents overwhelmingly stated that they were glad they had sent their child to 4-H Camp. In fact, this single statement by parents showed the most positive response with approximately 94% agreeing or in strong agreement.
The overall evaluation of Missouri’s 4-H Youth Resident Camp program is incredibly positive. The vast majority of surveyed parents and youth indicated that 4-H Camp provides a wealth of growth experiences for campers. Camp clearly does have perceived value to both parents and children in developing life skills.

In the 2006 study, additional analyses were conducted on the data as it related to camper demographics.

- Females were found to be more likely to score higher on the Teamwork scale than males.
- There was a strong correlation found between years attending camp and satisfaction with camp. See Figure 2. It is clear that responses to the statement “I want to come back to camp” decreases noticeably after the 3rd year.
- Age revealed no significant relationship with the skill scores.
- A T-test revealed there was no difference in the skill score given by the parent based on gender, whether the parent had themselves been a 4-H member or whether the parent had attended camp as a 4-H member themselves.
- There was a significant correlation for age of the child and the parent’s score of the youth’s Learning to Learn skill. See Figure 3.

**Figure 3**

**Parents Assessment: Learning to Learn**

![Graph showing percentages of parents' assessment of Learning to Learn skill](image)

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Differences between the 2005 and 2006 study

Differences between the 2005 and 2006 scores from parents and campers were slight. There was mild significance between the scores of some items, but little to indicate a shift in camp programming from 2005 to 2006. There were slight modifications in the study instrument between the 2005 and 2006 instruments, but these changes seem to have had little impact on the overall results of the study. See Table 1.

There were only slight differences between the means from one year to the next on camper and parent responses. Means were computed and compared using Independent Sample T-Test for Equality of Means. Only three questions in the parent responses indicated though the Levene's Test for Equality of Variance a need for consideration through Equal Variances Not Assumed scores. None of the camper variances exceeded the Levene's Test parameters.

There were a few statistically significant differences between the 2005 and 2006 means on some items, but the differences were very slight. “At camp, I learned that my way is not always the only way to be successful” showed the greatest difference among campers between survey years, though with only a difference of 0.121 between the mean 2005 responses and 2006 responses.

Among parents, the most statistically significant difference between 2005 and 2006 was the response to the question “Because of camp my child takes more responsibility in caring for him/herself.” The t-test for Equality of Means difference was at the .998 significance level; however the difference between the means was only 0.130.

Replicating the study in 2006 confirms the positive outcomes reported in 2005. Additionally, the replication confirms the reliability of the instrument in terms of obtaining consistent results when administered with different groups of parents and campers.

Table 1

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<tr>
<th></th>
<th>Campers</th>
<th>Parents</th>
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<tr>
<td></td>
<td>Mean 2006 N=306</td>
<td>Mean 2006 N=142</td>
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<tr>
<td>Mean Social Skills Responses</td>
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<tr>
<td>Mean Learning to Learn Responses</td>
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<td>Mean Self-Responsibility Responses</td>
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<tr>
<td>“After attending camp, my child is more confident”</td>
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</tr>
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</table>
Discussion, Implications, and Conclusion

• This study has proven to be an effective measure of the 4-H Camp experience in increasing life skills in youth who attend Missouri 4-H Camps. The questionnaire and methodology are proven sound, developmentally appropriate, and are likely transferable to other camping programs.

• The instruments have proven to be valid in evaluation design and process for measuring the increase in life skills attributed to youths’ participation in 4-H Camping programs, with verification by parents following camp.

• The results of this study can be used for marketing purposes to educate the parents of potential participants, financiers and decision-makers. 4-H Camps have a greater impact than they may imagine—camp is more than “just fun and games and campfires.”

• The data sets of this study need to be analyzed further to answer a number of research questions related to camp attendance, staff/camper ratios and others. This study could be used as baseline data for longitudinal studies.

• Although the individual 4-H Camping programs in Missouri are developed and managed independently from one another, there is surprising uniformity in the responses from youth and parents regarding the quality and value of the camping experience. Future studies might examine what is present within the core values of Missouri 4-H that led to these outcomes? What is occurring on a larger scale across Missouri 4-H Youth Development Programs that created this strength and uniformity?

• Further investigation would be beneficial to discover the reason behind declining agreement among 3rd year campers and above, regarding their desire to return to camp next year.

The 4-H Camping programs in Missouri vary widely throughout the state. Yet in spite of those differences, each year hundreds of 4-H Campers grow and develop important life skills in surprisingly similar ways. What are the common themes and organizational values that have led to such consistent statewide results? Evidence is beginning to emerge through research conducted in Tennessee which may give some indication that a variety of factors relating to physical and emotional safety rather than camp format and structure, may be key to youth developing life skills at camp (Martz, 2007). It is clear, however, that further research will be needed.

References


