

An Investigation of Soft Skill Development of California Agricultural Education Students Participating in An FFA Career Development Event

INTRODUCTION

The National Research Council's 2009 and 2012 reports called for the development of 21st century skills among U.S. students (Roberts et al, 2016). To address this need, numerous research studies have analyzed the relationships between soft skills development and experiential learning in agricultural education.

This research study sought to determine changes in soft skills development by students enrolled in agricultural education programs at five high schools in California. The study also analyzed the difference in soft skills development between students who competed in a Career Development Event (CDE) called the Opening and Closing Ceremonies (O/CC) and those who did not compete. Soft skills were measured using the Life Effectiveness Questionnaire-H (LEQ-H). This instrument was developed by Neill, Marsh and Richards (1997) for the purpose of measuring the changes associated with adventure or other experiential education intervention programs" (McLeod & Craig, 2004, p. 4). The reliability of the LEQ-H was established by the researchers utilizing the Tucker-Lewis index (TLI) and relative noncentrality index (RNI), resulting in coefficients of .945 and .959, respectively (Neil, Marsh and Richards, 1997)

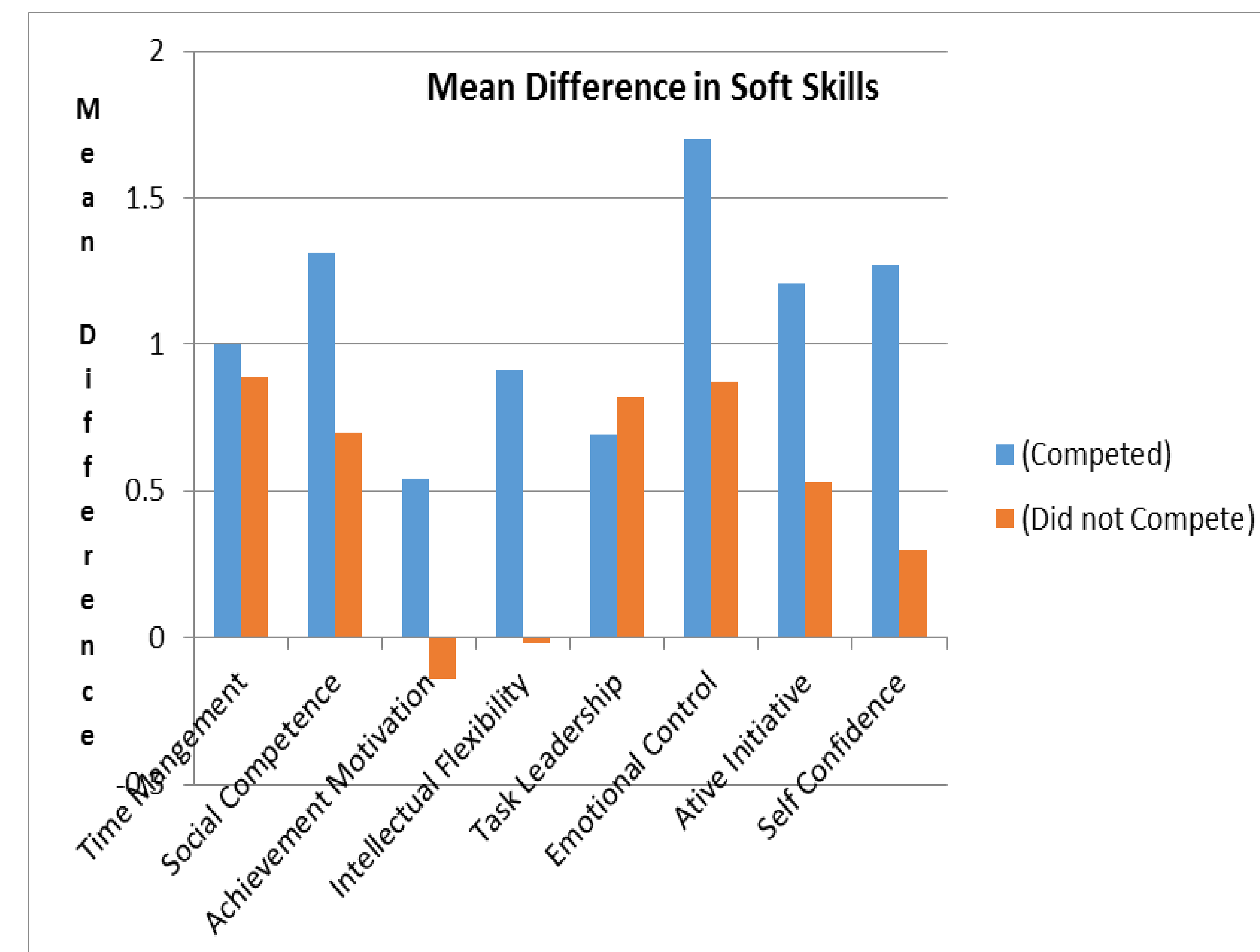
METHODOLOGY

The research design employed a descriptive study of how FFA members' soft skills changed through participation in the O/CC contest. Agriculture teachers from five California high schools were contacted in early August, 2016. Agriculture students were asked to complete the LEQ-H Soft Skills Survey in mid-August prior to the competition and again after the completion at the end of September. The questionnaire consisted of 24 questions asking students to indicate their self perceptions for the following soft skills on a scale of one (lowest) to eight (highest): time management, social competence, achievement motivation, intellectual flexibility, task leadership, emotional control, active initiative, and self-confidence (Kechagias, 2011). Each construct consisted of three items, which were combined to calculate each participant's mean score for the eight constructs. Of the 400 FFA members who participated in the survey, 164 FFA members completed both surveys (41%), prior to and following the O/CC contest. Paired Sample t-Tests compared scores for students who competed in the contest to those students who did not compete. There were 94 participants in the group who did not participate in the competition (Group 1) and 70 participants that competed in the O/CC competition (Group 2).

REFERENCES

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Life Effectiveness Questionnaire (LEQ-H)	
Soft Skills Factors	Description
Time Management	Makes optimum use of time.
Social Competence	Personal confidence and self-perceived ability in social interactions.
Achievement Motivation	Motivated to achieve excellence and put the required effort into action to attain it.
Intellectual Flexibility	Can adapt his/her thinking and accommodate new information from changing conditions and different perspectives.
Task Leadership	Can lead other people effectively when a task needs to be done.
Emotional Control	Maintains control when he/she is faced with potentially stressful situations.
Active Initiative	Likes to initiate action in new situations.
Self Confidence	Confidence in his/her abilities and the success of their actions.



RESULTS

Analyzing Group 1 results determined a mean increase in soft skills of 3.93 (6%), indicating that students enrolled in agriculture courses did acquire soft skills. A mean increase in soft skills of 8.64 (13.5 %) was experienced by Group 2, indicating that career development events doubled the overall gains in soft skills, as compared to Group 1. The researcher also conducted Paired Sample t-Test Statistics on Groups 1 and Group 2 to evaluate mean scores in each of the eight soft skill areas and analyze group differences. FFA members in Group 1 (n = 94) scored higher on the second survey in six of the eight soft skills. The results indicated a mean difference in growth in all areas except achievement motivation and intellectual flexibility. Time management (p = .02), task leadership (p = .03), and emotional control (p = .02) experienced significant change. An evaluation of 12th grade mean difference scores identified that selection bias had affected these last two skills dramatically due to the extremely high scores on survey one. FFA members in Group 2 (n = 70) gained soft skills in all eight categories. Significant increases were found in six of the eight soft skills: time management, social competence, intellectual flexibility, emotional control, active initiative, and self-confidence. The greatest improvements were in the areas of emotional control (p = .00) and social competence (p = .00).

CONCLUSIONS

Career and Technical Education programs can benefit from highlighting the need for 'soft' skills, as well as 'hard' or technical skills. Agricultural Education students can improve their soft skills development through classroom activities and continued participation in career development events. Continued involvement in Career Development Events and periodic soft skills assessments to track students' soft skills development could better prepare students to meet the challenges of the 21st Century.

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