

# The Influence of Selected FFA Factors In Developing the Interpersonal Skills of Students Studying Vocational Agriculture

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The Future Farmers of America (FFA) is a national organization founded in 1928. In 1950, it was chartered by the 81st United States Congress under Public Law 740 and became a co-curricular part of the vocational agricultural education program. Bender, Clark and Taylor (1962) stated, "The main purpose of the FFA is to develop leadership, citizenship and cooperation." Stogdill (1948) defined the personal factors of leadership to include interpersonal skill development. Graham, who wrote an overview on the value of co-curricular activities in secondary schools in 1964, stated:

Evidence is lacking to support the assumption that activity programs always or even often function in line with stated objectives. As is the case in many other areas of education, assumptions, opinions and faith are accepted in place of controlled evaluations. In almost all schools, student activities are probably more beneficial to participants in theory than in practice. (p. 3)

Bullock, in a 1965 study on the characteristics of students who participated in co-curricular activities and those who did not, found there was no significant difference between participants and non-participants in co-curricular activities when measured for personality and citizenship traits. Bullock further stated:

. . . this study does not agree with what other studies have claimed, which is that participants are better adjusted than non-participants. . . . Proponents of the extracurricular program would do well to consider claims that participation in activities will lead to better adjustment for students. (pp. 280-281)

## Purpose of the Study

The purpose of this study was to examine the influence of selected FFA factors in developing the interpersonal skills of students enrolled in Pennsylvania's vocational agriculture programs. The objectives of the study were:

1. To determine the relationship between level of FFA participation and interpersonal skill development.
2. To determine the relationship between level of FFA advisor participation and interpersonal skill development.
3. To determine the relationship between the level of chapter activities and interpersonal skill development.

## Methodology

The population for this study consisted of first-year vocational agriculture students in 21 vocational agriculture programs distributed throughout the state of Pennsylvania. A stratified random sample was used to obtain a cross section of Pennsylvania vocational agriculture programs with FFA chapters. Schools were proportionally stratified based on the number of programs within each of the ten Pennsylvania Vocational Agriculture Teacher Association (PVATA) regions in the state. Since this is the first phase of a four-year longitudinal study being conducted by the Department of Agricultural and Extension Education, participation was limited to those students who were in the first year of a four-year program. This will allow the researchers to follow the group of students through a complete high school cycle. The results reported here deal only with data obtained during the first year of the study.

Data for this study were collected in four specific areas. Data on interpersonal skills were collected using the California Psychological Inventory (CPI) (Gough, 1956). CPI scales were used to measure changes in interpersonal behavior in the following seven areas: dominance, self-acceptance, responsibility, socialization, good impression, communality and achievement via conformity. Reliability coefficients for the California Psychological Inventory were established using the test-retest method. Six CPI scales used in this study had reliability scores between .71 and .85. One CPI scale, communality, had a reliability coefficient of only .59. The test authors suggested that the modest reliability coefficients reflect the differing rates of maturation among high school adolescents during the year between testing. The authors further suggest that the consistency of measurement is high enough to permit use of the scales in both group and individual testing.

Data on the level of student participation were collected using the FFA Activity Participation Inventory developed by Townsend (1981) at Iowa State University. Content and face validity for the Townsend instrument were established by the original researchers through the use of a panel of experts which included teacher educators, state department of education personnel, teachers and the national FFA advisor. Demographic data on chapter activities and advisors were collected with two instruments developed by the researchers. These two instruments were the Chapter Index, which measured the number of FFA activities throughout the school year and the number of students who become involved in committees and contest work, and the Advisor Index, which quantitatively measured the advisor's level of participation in planning and supervising activities for the FFA. Content and face validity for both instruments were established by a select panel of teacher educators, graduate students, teachers and state FFA officers.

Data were collected through the use of mail questionnaires. Each teacher was asked to administer the California Psychological Inventory and complete the Advisor Index questionnaire. The first mailing was made in November 1983 and included a cover letter explaining the use of the instruments and a checklist for the chapter secretary to record all events and activities that took place during the school year. All teachers completed and returned the CPI student pretest instruments and the Advisor Index by December 1983.

In April 1984, a second mailing containing the CPI posttest instrument, the FFA Activity Participation Inventory and the Chapter Index was sent to all schools participating in the study. Also included with this packet were directions for completing each of the instruments. All

completed instruments were returned May 15, 1984. Participants who did not return the instruments were contacted by phone and urged to do so.

Statistical Analysis

A factorial analysis of covariance was selected to analyze the data. The three independent variables were chapter activities, advisor participation and student participation. These were assigned one of three levels: high, medium and low. This method of analysis adjusted the California Psychological Inventory posttest mean scores on the basis of the covariate (pretest) means and then compared the adjusted posttest means to determine if there was significant difference. The seven posttest variables were separately analyzed with the appropriate pretest as a covariate in each analysis.

Findings

The findings of this study are summarized in terms of: (a) relationship between the pretest and posttest mean scores of the seven CPI scale posttest scores; (b) the influence of level of chapter activities on the seven CPI scale posttest scores; (c) the influence of the level of advisor participation on the seven CPI scale posttest scores; and (d) the influence of the student level of FFA participation on the seven CPI scale posttest scores.

CPI Pretest and Posttest Mean Scores

The data in Table 1 show the mean pretest and posttest scores for the seven CPI scales used in the study. A correlated t test between the mean pretest and posttest scores for each CPI scale showed no significant difference at the .05 level of significance.

Table 1

Means and Pearson Product Moment Correlation Coefficients for Selected Variables

California Psychological Inventory Scales	Factor		
	Mean Pretest Scores for Scales (n=221)	Mean Posttest Scores for Scales (n=221)	Mean on the CPI for High School Students (n=3,814) <sup>a</sup>
Dominance	20.84	22.55	23.40
Self-Acceptance	18.27	18.89	28.80
Responsibility	19.27	20.49	28.30
Socialization	28.83	29.91	37.80
Good Impression	13.41	14.71	15.40
Communality	18.96	18.71	25.60
Achievement via Conformance	18.43	19.91	23.20

<sup>a</sup>These means were reported in the California Psychological Inventory Manual for a national high school sample of 3,814.

### Level of Chapter Activities

The level of chapter activities or Chapter Index score measured the number of FFA activities throughout the school year and the number of students who became involved in committees and contest work. The levels of participation were: low, 0-12 activities/year; medium, 13-25 activities/year; and high, 26 and above activities. Table 2 shows that the only CPI scale significantly influenced by the level of chapter activities was "responsibility." Those students involved in a medium active chapter had significantly higher responsibility scores than those students involved in either high or low active chapters.

Table 2

#### ANCOVA: Adjusted Mean Posttest Responsibility Scores

Source	df	SS	MS	F	p
Covariate					
Pretest Responsibility Score	1	2342.15	2342.15	131.83	0.001
Main Effects					
Chapter Activities Index	2	110.36	55.18	3.11	0.047
Advisor Index	2	143.30	71.65	4.03	0.019
Student Participation Index	2	6.93	3.46	0.20	0.823
Residual	206	3659.96	17.77		
Total	213	6247.48	29.33		

### Level of Advisor Participation

The level of advisor participation or Advisor Index score quantitatively measured the advisor's level of participation in planning and supervising activities of the FFA. The levels of participation were: low, ranging from 0-46 planning interactions; medium, ranging from 47-49 planning interactions; and high, ranging from 51-90 planning interactions. Two posttest CPI scores, "self-acceptance" and "responsibility," were significantly influenced by the level of advisor participation. Table 2 presents main effects for both Chapter Index and Advisor Index on the CPI scale "responsibility." Table 3 shows main effects for the level of advisor participation (Advisor Index) on the CPI scale self-acceptance.

### Level of Student Participation

Level of student participation, measured by the FFA Activity Participation Inventory, consisted of 37 weighted questions which measured individual students' level of participation in chapter activities. The levels of participation were: low, with scores ranging from 0-99; medium, with scores ranging from 100-136; and high, participation with scores ranging from 137-462. None of the seven CPI scale posttest scores were significantly influenced by the level of student participation.

Table 3

ANCOVA: Adjusted Mean Posttest Self-Acceptance Scores

Source	df	SS	MS	F	p
<b>Covariate</b>					
Pretest Self-Acceptance	1	624.88	624.88	68.26	0.001
<b>Main Effects</b>					
Chapter Activities Index	2	16.79	8.39	0.92	0.401
Advisor Index	2	130.13	65.07	7.11	0.001
Student Participation Index	2	11.66	5.83	0.64	0.530
Residual	206	1885.81	9.15		
<b>Total</b>	<b>213</b>	<b>2665.31</b>	<b>12.51</b>		

## Conclusions

In considering the conclusions of this study, a few limitations should be noted: (a) there was a relatively short time (approximately six months) between the pretest and posttest administration of the CPI; (b) the FFA Activity Participation Inventory Instrument placed high values on such activities as being an officer, chairing committees and attending leadership conferences; and (c) student respondents were exclusively freshmen in high school. Any one of the three limitations, or a combination of the three limitations, could have had an impact upon the final conclusion of the study.

The following conclusions were drawn based on the findings of the study.

1. There was no relationship between level of FFA participation and the interpersonal skill development of students studying vocational agriculture at the secondary level.

2. Six of the CPI scales showed no relationship between the level of chapter activities and the interpersonal skill development of students studying vocational agriculture at the secondary level. However, scales on the CPI Index for the interpersonal skill of "responsibility" were significantly higher for individuals from programs where the FFA chapter was classified as having a medium level of chapter activities. A medium level of chapter activities was defined as 13-25 activities per year.

3. There were two significant relationships between the CPI Index score for "self-acceptance" and "responsibility" and the level of FFA advisor participation. Students of advisors who exhibited a high or medium level of involvement in planning FFA activities exhibited significantly greater growth in the interpersonal skill areas of "self-acceptance" and "responsibility." High FFA advisor participation was defined as 51-90 planning interactions/year; medium level of FFA advisor participation was defined as 47-49 planning interactions/year.

## Recommendations

The following recommendations are made for further research:

1. A follow-up study should be conducted to determine the impact of FFA participation on the interpersonal skill development of students over an extended period of time.
2. Consideration should be given to developing various studies which look at the interactive effects of FFA participation, interpersonal skill development and occupational success after high school graduation.

## References

- Bender, R. E., Clark, R. M., & Taylor, R. E. (1962). The FFA and You. Danville, IL: Interstate.
- Bullock, K. V. (1965). Certain characteristics of participants and non-participants in extracurricular school activities. Unpublished doctoral dissertation, University of Southern California, Los Angeles.
- Gough, H. G. (1956). Manual for the California Psychological Inventory. Palo Alto, CA: Consulting Psychologists Press.
- Graham, G. (1964). Student activities--An overview and a rationale. National Association of Secondary School Principals, 48(294), 1-16.
- Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. Journal of Psychology, 25, 35-71.
- Townsend, C. (1981). FFA participation and personal development as perceived of Iowa vocational agriculture seniors. Unpublished doctoral dissertation, Iowa State University, Ames.
- Wegner, S. (1980). Extracurricular activities are an essential factor in the student's self-concept, socialization, and future success. South Bend: Indiana University. (ERIC Document Reproduction Service No. ED 196 171)

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