

## **The Seriousness of Student Misbehavior in Vocational Agriculture**

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Student misbehavior has been a concern of educators for many years. According to Lucas (1972), as long as 3000 years ago schoolmasters would "cane" boys for being late to school. Today, student behavioral problems appear to be as prevalent as they always have been. The thirteenth annual Gallup Poll of public attitudes on education reported that "discipline continues, as it has for many years, to be regarded as the number one problem facing the local public schools" (Gallup, 1981, p. 34).

Literally thousands of articles have been written which give suggestions on how to handle student behavioral problems. More articles appear almost daily in both the popular press and professional literature discussing causes as well as solutions of student behavioral problems. However, there is little current research on the precise nature of student misbehavior in the public schools. This article reports a national survey of vocational agriculture teachers which sought to measure their perceptions of the seriousness of student misbehavior in their classrooms and laboratories (Garrison, 1982).

### Purposes

The primary purpose of this study was to determine the seriousness of student behavioral problems as perceived by vocational agriculture teachers. The secondary purpose was to determine if differences in the perceived level of seriousness of disciplinary problems exist among groups of vocational agriculture teachers based on the following selected demographic and situational variables: years of teacher experience, region of country, school size, grades taught, setting of school (urban, rural, suburban, central city), educational level of teacher, and sex of teacher.

### Methodology

The population consisted of the 12,726 vocational agriculture teachers listed in the 1981 Agriculture Teachers' Directory. A systematic sampling procedure with a random start was used to select

teachers for inclusion in this study. A sample size of 373 was determined to be appropriate for a population of 12,726, according to Krejcie and Morgan (1970), assuming a 5% error rate with 95% confidence level. However, for the purposes of this study the sample size was increased to 605 to facilitate the factor analysis procedures on the instrument. Assuming a return rate of 65%, and a requirement of at least five responses times the number of items (86) on the instrument, as specified by Hair, Anderson, Tatham, and Grablowsky (1970) a sample size of 604 was determined to be appropriate. At least one teacher from all 50 states was included in the sample.

A questionnaire was used to collect data from the sample. The questionnaire sought the biographical information specified and contained the 86 item Student Misbehavior Survey (SMS), by Camp (1981). The SMS uses the following five point Likert-type rating scale:

- 0 = NOT A PROBLEM (never observed or so unimportant it is not a problem to me)
- 1 = MINOR PROBLEM (presents no real problem to me)
- 2 = MODERATE PROBLEM (presents somewhat of a problem to me)
- 3 = MAJOR PROBLEM (presents a serious problem to me)
- 4 = CRITICAL PROBLEM (causes an extreme problem to me)

A questionnaire and a cover letter were mailed to each participant in the sample. After three weeks from the first mailing a postcard reminder was sent. A week later, a second copy of the instrument and a different cover letter were sent to remaining nonrespondents. These procedures yielded useable returns from 437 teachers (72%). A subsequent telephone follow-up showed no systematic differences between nonrespondents and respondents.

All data were analyzed using programs provided in the *Statistical Package for the Social Sciences* (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975) and the SPSS Update 7-9 (Hull & Nie, 1981). Common factor analysis with varimax rotations (Child, 1970) combined with scree test procedures (Cattell, 1978) were used to determine the underlying misbehavior factors on the instrument. After the underlying factors were isolated, multivariate analysis of variance (MANOVA) was used to test for significance using weighted standardized factor scores as multiple dependent variables, and the biographic and situational data as the independent variables. A separate MANOVA was run for each independent variable. The analysis of variance (ANOVA) procedure was used when significance was found in the MANOVA for a given independent variable. When significant differences in the ANOVA were observed, the Scheffe' post-hoc multiple comparisons test was used to identify the specific sources of significant differences. This procedure avoids the weakness of multiple *t* testing as pointed out by Oliver (1981). Pearson Product-Moment correlation was used to test for a relationship between teacher years of experience and total seriousness score. In all cases, an alpha of .05 was established for tests for significance.

## Results

Sample means were computed for each item on the survey. The student misbehavior with the highest mean seriousness rating was ambivalence (doesn't care attitude) followed by failing to bring books, paper, and pencil. Examination of the data revealed that only 2 items had mean ratings of 2.0 or above (2.0 on the scale represented a moderate problem to the responding teacher). The misbehavior with the lowest mean seriousness rating was rape (actual or attempted). The median item rating was 0.97 (note that 1.0 represents a minor problem). The clear implication of this is that virtually no student misbehavior represented more than a moderate problem to the responding agriculture teachers and that most were viewed as not even being minor problems.

The scree test was used to determine the number of underlying constructs of factors to retain for subsequent reduction of the data through a varimax rotation procedure. This procedure resulted in three factors retained for further analysis. The three retained factors were named based on the items most heavily loading on each as follows: Factor I, student attitude; Factor II, violence related; and Factor III, use of drugs. There were 52 items loading in Factor I, 23 items loading in Factor II, and 10 items loading on Factor III. Only one item failed to load on any of the three factors retained in this analysis. A loading of .30 or greater was considered to be sufficient to indicate that an item was loaded on a given factor (Child, 1970). Where a variable loaded on more than one factor, the highest loading was considered to be the factor to which the item belonged (Child, 1970).

Factor scores were computed for each participant across all three factors and factor score means were then computed. The resulting factor score means were analyzed for significant differences across the levels of each independent variable using first MANOVA procedures and then ANOVA procedures to isolate the source of significance when it was found on the MANOVA. Only those variables producing significant MANOVA differences are reported here.

Table 1

*ANOVA Summaries of Factors Across Grade Levels Taught*

Factor	SS	MS	F value	Prob. of F
I. Student attitude	11.235	5.617	6.029	.003
II. Violence related	1.393	.696	.757	.470
III. Use of drugs	2.154	1.077	1.311	.271

The MANOVA across factor mean scores and across grade levels taught produced a Wilks' Lambda of 0.961, which was significant. Table 1 contains the ANOVA summary for the grade levels taught by vocational agriculture teachers. The source of significance on the MANOVA lay in Factor I, student attitude as indicated by the F value of 6.029. This, followed by Scheffe' comparisons indicated that combination junior-senior high school vocational agriculture teachers perceived student attitude problems to be more serious than did vocational agriculture teachers in senior high schools.

The MANOVA across factor mean scores by geographic regions, as defined by National Vocational Agriculture Teachers Association (NVATA) boundaries, produced a Wilks' Lambda of 0.922 which was significant. Subsequent ANOVA computations for each factor mean score across geographic regions are summarized in Table 2.

As indicated by the  $F$  of 4.325, the source of significance lay in Factor III, use of drugs. The Scheffe' post-hoc multiple comparisons test revealed that significant differences existed between NVATA Region 1 and Region 4. Comparisons of mean scores indicated that teachers in Region 4 perceived student use of drugs to be a less serious problem than did teachers in Region 1.

Table 2

*ANOVA Summaries of Factor Scores Across Regions of the Country*

Factor	SS	MS	F value	Prob. of F
I. Student attitude	8.854	1.771	1.878	.097
II. Violence related	3.020	.604	.651	.661
III. Use of drugs	17.677	3.535	4.325	.001

The MANOVA for factor mean scores by school size produced a Wilks' Lambda of 0.963, which was significant. Subsequent ANOVA computations are summarized in Table 3. The  $F$  of 8.207 for Factor III was significant, indicating that the source of significance on the MANOVA was in this factor. The Scheffe' post-hoc multiple comparisons test revealed significant differences as follows: mean scores of teachers in both schools of under 1000 and of 1000-2000 perceived student use of drugs to be less serious problem than did teachers in schools with enrollments of over 2000.

The correlation between teacher years of experience and each of the three factor mean scores was computed. Of the three, only one correlation was significant. The correlation between years of experience and student attitude was  $-.20$ . While this correlation was significant and the direction of the relationship was as expected, such a small value accounts for very little of the variance and can be considered to be of little practical value.

MANOVA's calculated for the following independent variables were not significant: setting of school, educational level of teacher, and sex of teacher.

Table 3

*ANOVA Summaries of Factors Across School Sizes*

Factor	SS	MS	F value	Prob. of F
I. Student attitude	.074	.037	.038	.962
II. Violence related	.220	.110	.118	.888
III. Use of drugs	13.160	6.580	8.207	.000

Conclusions

The findings of this study warrant the following conclusions regarding the seriousness of student misbehavior as perceived by vocational agriculture teachers in public schools in the United States.

1. Senior high school teachers of vocational agriculture perceive student attitude problems to be less serious than do vocational agriculture teachers who work with younger students.
2. Vocational agriculture teachers in NVATA Region 1 perceive use of drugs to be a more serious problem than do teachers in Region 4.
3. Vocational agriculture teachers in schools of over 2000 enrollment perceive use of drugs to be more serious than do teachers in schools with enrollments of less than 2000.
4. Problems with student attitude seem to diminish somewhat as the number of years of teaching experience increase.

George Gallup and many others notwithstanding, student misbehavior does not appear to be a major problem for vocational agriculture teachers in general.

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