

## **The Influence of Foundational and Expressed Values on Teacher Behavior**

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### **Abstract**

Although there is general agreement on the need for teaching values in the American high schools, there is no consensus on the values to be taught. The purpose of this study was to examine the relationship between selected personal and school characteristics on the value system of educators and to determine if value systems and personal and school characteristics contribute to teacher behavior. To accomplish this goal, the following objectives were developed: (1) explore the influence of selected personal and school characteristics on foundational values; (2) explore the influence of selected personal and school characteristics on expressed values; (3) describe the relationship of selected personal and school characteristics, foundational values, and expressed values on teacher behavior.

Two hundred agricultural education teachers were sampled nationwide. The sample was proportional and stratified by state. One hundred forty-one teachers responded to the survey for a return rate of 70.5%. Factor analysis was performed and resulted in the two derived variables of foundational and expressed values. Multiple regression analysis was then performed on selected personal and school characteristics and the derived variables. An additional regression was performed on teacher behavior using selected personal and school characteristics, foundational, and expressed values.

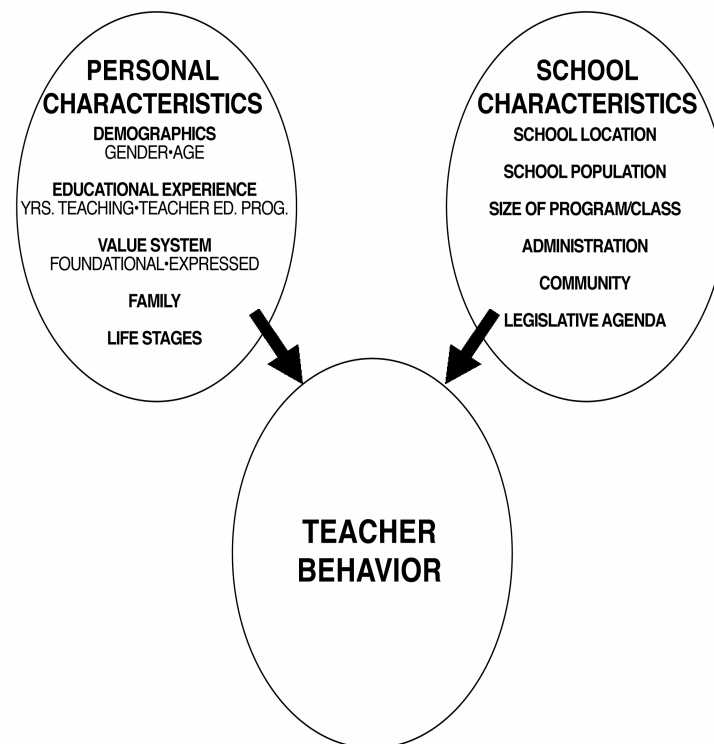
A significant amount of variance in expressed values was explained by a linear combination of personal and school characteristics. Respondents who had a higher number of students in their agriculture courses tended to have a higher level of agreement that there was a need to teach expressed values. Additionally, a significant amount of variance in teacher behavior was explained by a linear combination of foundational and expressed values along with selected personal and school characteristics. Respondents who held stronger levels of agreement toward expressed values tended to exhibit more positive teacher behaviors. Since the personal and school characteristics influence teacher behavior in the classroom, efforts should be made to incorporate value system education into pre-service and in-service educational programs.

### **Introduction/Theoretical Framework**

Over 90% of Americans believe there is a significant “moral decline” in our country (Gough, 1998). In a recent poll of adult Americans conducted by *The Wall Street Journal* (1998), “moral decline” was cited as the biggest problem America faces in the next twenty years. Fortunately, this decline is not going unnoticed. According to Nussel (1994), almost all societal problems can be reduced to the failure to do something, and people make mistakes as a result of inaccurate information or a lack of information. Since the school transmits knowledge, skills and values regarded as critical within the society, it can be held accountable when problems arise (Nussel, 1994). Great strides are

being made in incorporating moral education into the whole school environment, including the agricultural education curriculum. However, the instruction of value education is of yet not clearly defined in the current American educational system.

Educators have realized for some time that what a student accomplishes depends on his/her attitude, philosophy and value judgments. According to Pullias and Lockhart (1963) educators must recognize that students possess value systems which influences the teaching/learning process, which in turn provides feedback to their individual system. It is part of the learning process to help students develop and utilize their individual system. However, students are not the only ones to possess a value system. The teachers' behavior in the school setting is largely based on their personal characteristics and the school characteristics. The model of the effects of personal characteristics and school characteristics on teacher behavior depicts factors that affect teachers' behavior in the school setting (Figure 1). The personal characteristics sphere is a modification of Fessler's Teacher Career Cycle Model (Burden, 1990) in which he describes how personal environment and organizational environment influence the career cycle.



**Figure 1.** Effects of personal characteristics and school characteristics on teacher behavior.

In the teacher behavior model, school characteristics refer to those attributes that affect the overall climate of the school and consequently influence teacher behavior. Fessler refers to these loosely as management style, societal expectations, regulations and public trust (Burden, 1990). Examples of school characteristics include: school location, school population, size of program/class, administration, community, and legislative agenda. Personal characteristics include demographics of the teacher (gender and age); educational experience factors refer to the number of years teaching (specifically the number of years teaching agriculture) and the teacher education program that prepared them for their program experience. Family and life stages refer to the personal traits of the teachers. The value system, or more specifically the foundational and

expressed values, refer to the character of the teacher. According to Phipps and Osborne (1988), teachers of agriculture must possess unquestionable character as it is essential to be a successful teacher.

In the foundational and expressed values model (Figure 2), values that are defined as foundational are those values a person must develop before other values can be expressed. For example a person must have a foundation of courtesy before it can be expressed as respect and tolerance; honesty is the foundation for truth; the expressions of commitment, self-respect and service must first have the foundation of honor. The foundation values do have some overlap when they are expressed. For example kindness can be expressed as caring, and generosity can be expressed with service (an overlap with honor), caring (overlap with kindness) and friendship (an overlap with loyalty.) The foundational value of loyalty is expressed as friendship and trust, while diligence, prudence and responsibility express the foundation value of perseverance.

The authors propose that there is a time dimension to the development of a value system. A noted values and morals theorist, Kohlberg (1973) illustrates the characteristics of personal development stages as first described by Piaget. One characteristic is that stages imply distinct or qualitative differences in structures (modes of thinking) that perform the same function at various points in development. Therefore the researchers contend that in order to exhibit the expressed value, a person must first have developed the foundational value and in time will express it accordingly.

### **Purpose and Objectives**

The purpose of this study was to examine the relationship between personal and school characteristics on the value system of educators and to determine if value systems and personal and school characteristics contribute to teacher behavior. As a means of accomplishing the purpose, the following objectives were developed:

1. Explore the influence of selected personal and school characteristics on foundational values.
2. Explore the influence of selected personal and school characteristics on expressed values.
3. Describe the relationship of selected personal and school characteristics, foundational values, and expressed values on teacher behavior.

### **Methodology**

#### Population/Study Design

The current study was a part of a larger study that sought to determine perceptions of agricultural education teachers nationwide as to what values should be taught to students enrolled in high school agriscience courses, and identify if differences exist in perceptions of the

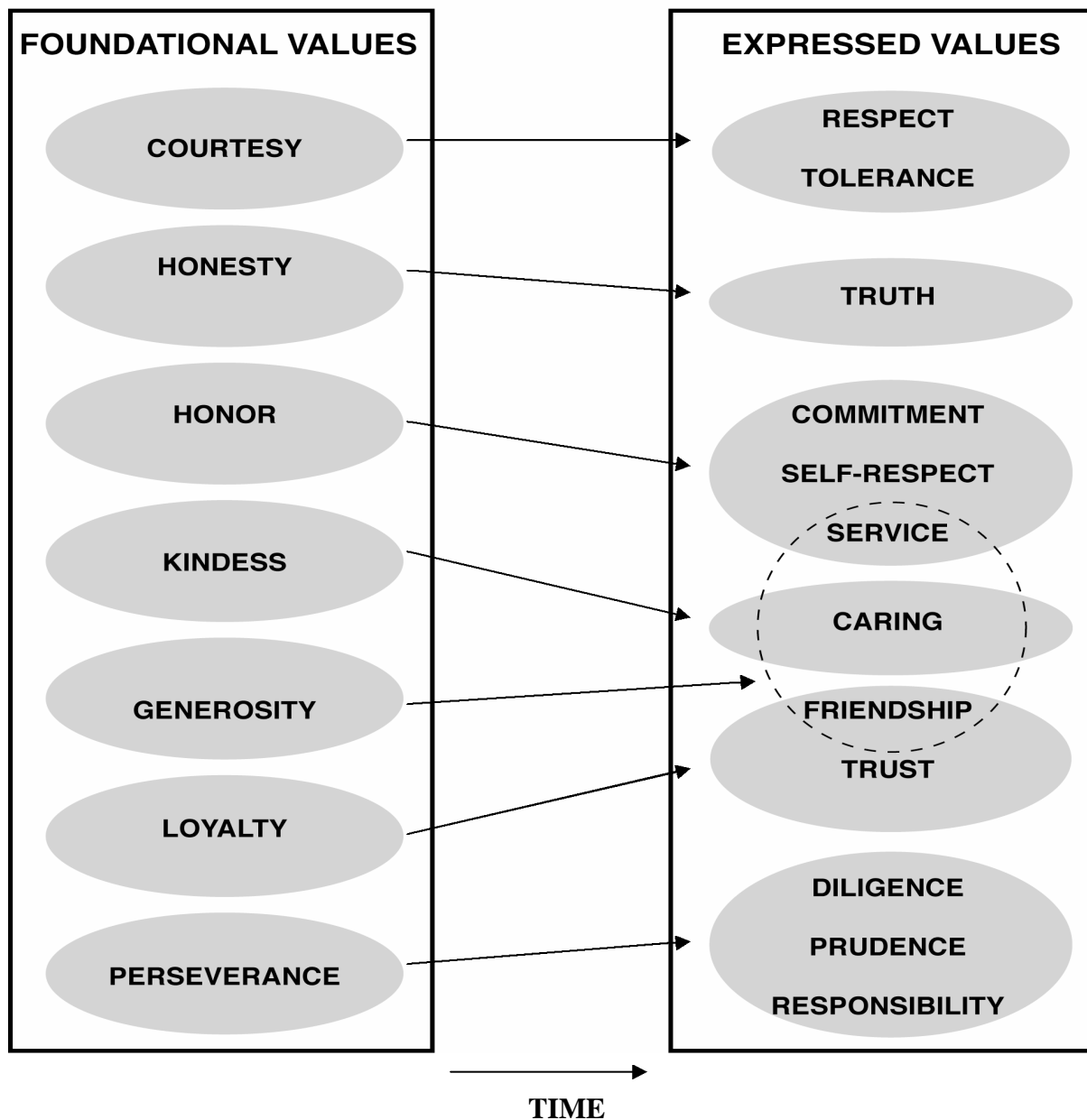


Figure 2. Foundational and expressed values model

teachers. The target population of this study was all agricultural teachers who taught in public secondary schools in the United States during the 1997-98 school year. In 1996, there were approximately 10,250 agricultural education teachers in the 50 states and government territories where agriscience courses were offered (National FFA Association, 1997). The list of individuals in the target population was taken from the Agricultural Educators Directory (Henry, 1997). By using a formula for estimating sample size (Cochran, 1977; & Dillman, 1978) it was determined that a sample size of 175 was sufficient. Over-sampling was used because past national surveys of agricultural education teachers have shown low response rate. A total of 200 names were

selected using techniques described by Borg and Gall (1994). The sample was proportional and stratified by state. One hundred forty-one teachers responded to the survey for a return rate of 70.5%.

### Instrumentation

To control for nonresponse error, major portions of the Total Design Method (TDM) developed by Dillman (1978) were adopted. Modifications to the design were made to meet mailing requirements. The instrument for the study was a three-part, mailed questionnaire. It was researcher-designed and composed in a booklet format according to the TDM. Part One was used to gather demographic information from the subjects. Part Two consisted of a two-column, five-point Likert-type scale using questions to determine which values should be taught in the agriscience curriculum as suggested by an extensive literature review (Berg, 1996; Carnegie Council on Adolescent Development, 1996; Character Education Curriculum [Brochure]; Hague, 1993; Heaven, 1992; Kahle, 1983; Lewis, 1990; Licona, 1991; Noyd & Richardson, 1996; Pullias & Lockhart, 1963; Rokeach, 1970; Unell & Wyckoff, 1995) and which component of the curriculum (classroom, laboratory, FFA, or Supervised Agricultural Experience program) would be the best vehicle of instruction. Part Three was designed by the researcher to collect implicit information about teacher behavior.

After development, the instrument was presented to a panel of agricultural educators for review. The review was used to verify the validity of the instrument's content. A pilot test was also conducted using a group of 20 agriscience instructors who participated in a cooperating teacher conference sponsored by an agricultural education department.

Data collected from the two rounds of testing were analyzed using SPSS 10.0.7. Relationships between the first and second measures were used to determine a coefficient of stability for the instrument. Coefficients ranged from .90 to 1.0 for each of the questions/statements.

In an effort to establish unidimensionality of the constructs, factor analysis was conducted. For the analysis of this instrument, the maximum likelihood method of analysis was used. The suitability of the data set for exploratory factor analysis was examined. Correlations among the items, the correlation matrix, the Kaiser-Meyer-Olkin (KMO) statistic, and the measure of sampling adequacy were examined. The results of factor analysis was two derived variables (Foundational Values and Expressed Values) accounting for almost 50% of the variance in the respondents' perceptions towards what values should be taught to students enrolled in high school agriscience courses.

A third section was also entitled "Teacher Behavior." Data reduction was conducted for this section resulting in the removal of three components due to loadings below .4. Based on factor analysis, a grand mean was calculated for all three sections for the purpose of analysis. To determine teacher behaviors, agricultural science teachers were asked to respond to scenario statements using a Likert-type scale. Examples of the statements are "I always strive to give accurate information;" "I consciously keep confidential matters told to me by a co-worker to myself;" "When working with students and co-workers, I keep my temper under control;" "I can

list numerous examples where I have ‘gone the extra mile’ to help students;” “I consciously incorporate the teaching of values and morals into the agri-science curriculum;” and “I try to see the other side of situations in which I find myself.”

Using Cronbach’s coefficient alpha, reliability was assessed. Reliability of foundational values was  $r = .93$  and expressed values was  $r = .89$ . Reliability for the teacher behaviors was  $r = .73$ .

## Results

### Objective One

To determine the amount of variance explained by personal and school characteristics in the foundational values, a multiple regression analysis was performed at the .05 level of significance (Table 1). The dependent variable for the regression was the foundational values as perceived by agricultural science teachers. The selected independent variables were the personal and school characteristics of the respondents’ gender, number of years they have taught agriculture, and number of students enrolled in agriculture courses.

Table 1

#### Regression On Foundational Values

Variables	Mean	S.D.	b	t	p
Gender	1.13	1.43	-.028	-.23	.818
Number of students in agriculture courses	157.46	167.49	.267	2.397	.018
Number of years teaching agriculture	16.46	16.83	-.141	-1.216	.226
(Constant)				66.90	<.001

$N = 138$ ,  $F = 2.135$ ,  $p = .099$ ,  $R^2 = .046$ , Standard error = .5449

A linear combination of gender, number of years teaching and number of students enrolled in agriculture courses explains five percent of the variance in foundational values but was not found to be significant ( $R^2 = .046$ ,  $F = 2.135$ ,  $p = .099$ ).

### Objective Two

A multiple regression analysis was performed at the .05 level of significance to determine the amount of variance explained by the personal and school characteristics in the expressed values (Table 2). The dependent variable for the regression was the expressed values as perceived by agricultural science teachers. The independent variables were the personal and school variables of gender, number of years teaching agriculture and number of students enrolled in agriculture courses.

Approximately 12% ( $R^2 = .117$ ,  $F = 5.934$ ,  $p = .001$ ) of the variance on expressed values was attributed to the combined independent variables. As reported, a significant amount of variance in expressed values was explained by a linear combination of gender, number of

Table 2

Regression On Expressed Values

Variables	Mean	S.D.	b	t	p
Gender	1.13	1.43	-.160	-1.365	.175
Number of students in agriculture courses	157.46	167.49	.427	3.981	<.001
Number of years teaching agriculture	16.46	16.83	-.023	-.209	.835
(Constant)				98.915	<.001

$N = 138$ ,  $F = 5.934$ ,  $p = .001$ ,  $R^2 = .117$ , Standard error = .3611

students in agriculture courses, and number of years teaching agriculture. The most meaningful independent variable was number of students in agriculture courses. Respondents who had more students in their agriculture courses tended to have a higher level of agreement with the need to teach expressed values ( $b = .427$ ,  $t = 3.981$ ,  $p = <.001$ ).

Objective Three

In determining the amount of variance that personal and school characteristics, foundational values, and expressed values explained in overall teacher behavior, a multiple regression analysis was performed at the .05 level of significance (Table 3). The dependent variable for the regression was teacher behavior. The selected independent variables used for the multiple regression included the personal and school characteristics of gender, number of years teaching agriculture and number of students in agriculture courses, as well as factor scores for foundational values and expressed values.

Table 3

Regression On Teacher Behavior

Variables	Mean	S.D.	b	t	p
Gender	1.13	1.43	-.136	-1.23	.221
Number of students in agriculture courses	157.46	167.49	.044	.417	.678
Number of years teaching agriculture	16.46	16.83	.072	.684	.495
Foundational Values	4.64	.552	-.006	-.059	.953
Expressed Values	4.59	.38	.475	4.54	<.001
(Constant)				7.48	<.001

$N = 138$ ,  $F = 8.33$ ,  $p = <.001$ ,  $R^2 = .240$ , Standard error = .306

Twenty-four percent ( $R^2 = .240$ ,  $F = 8.33$ ,  $p = <.001$ ) of the variance in teacher behavior was explained by a linear combination of foundational and expressed values along with gender, number of years teaching agriculture and number of students in agriculture courses. The most meaningful independent variable was expressed values. Respondents who held stronger levels of agreement toward expressed values tended to exhibit more positive teacher behaviors ( $b = .475$ ,  $t = 4.54$ ,  $p <.001$ ).

## **Conclusions and Recommendations**

The personal and school characteristics included in the initial model did not contribute significantly to the teachers' perceived importance of foundational values. This finding will enable state staff members, school district administrators, and curriculum development specialists to prepare instructional programs on the importance of foundational values without tailoring such programs based upon teacher gender, student enrollment, and years of teaching experience. However, the question remains, are there explanatory variables that exist that explain foundational values? Clearly some would argue that as adults regardless of teacher background, there would be almost widespread agreement among the importance of foundational values such as honesty, courtesy, honor, kindness, generosity, loyalty, and perseverance. This current study certainly substantiates such a claim.

When exploring the influence of the same set of personal and school characteristics on perceived importance of expression values upon the teachers' perceived importance of expression values, a statistically significant relationship was discovered. Although neither of the personal characteristics was practically meaningful, the lone school characteristic was found to be statistically meaningful. Teachers with larger enrollments tended to view expressional values as being more important. One plausible explanation regarding this finding is that larger enrollments are found in urban or suburban areas or in small cities – and they are typically plagued with more social problems, compared to their rural school counterparts. It is likely that urban, suburban, and large city residents receive more influence from the mass media. O'Connor (Performax Systems International, 1985) proposed that culture is a key variable in determining one's value system. It is therefore recommended that in agricultural education, statewide or national curricular initiatives focus on larger school districts and their students' particular needs, which may differ from the needs and/or concerns of smaller school students.

This study showed that the combination of personal and school characteristics had a significant influence upon positive teacher behaviors. Teacher perceptions of expression values were the single most important factor included in this explanatory model. This provides solid evidence that this personal characteristic plays an essential role in a teacher's behavior. Agricultural education faculty need to make preservice teachers cognitively conscious that the higher one values acting upon the foundational values, the greater the likelihood that an individual will exhibit positive teacher behaviors.

Although not certain, it stands to reason that teachers who more highly value expressed values are more likely to actually practice those behaviors, and are consequently more effective teachers. If so, is this because they treat their students with more dignity and respect than others? This would clearly indicate the importance of teaching in the affective domain. In conclusion, like in most studies the authors' conclude that more research on these complex constructs is needed. Future researchers should consider other factors which may influence positive teacher behaviors in order to add to the foundational theory in teaching and learning.

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