

## **EXPLANATORY STYLE OF FAMILY AND CONSUMER SCIENCES TEACHERS**

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*Using the Attributional Style Questionnaire developed by Seligman (1984), the explanatory style of 47 family and consumer sciences (FACS) teachers was described according to their Composite Negative (CoNeg) Composite Positive (CoPos), and Composite Negative and Composite Positive (CPCN) scores. Based on results of composite scores, (CoPos, CoNeg, and CPCN), FACS teachers were optimistic. The planned comparisons approach on years of teaching experience revealed no significant difference between teacher groups. The results of this study indicated that secondary FACS teachers in Georgia had an optimistic rather than a pessimistic explanatory style.*

During the past two decades, the curriculum in family and consumer sciences (FACS) education has undergone many changes. These changes are partly due to such events as the series of publications by Marjorie Brown and those she coauthored with Beatrice Paolucci (1978, 1979, and 1980) and The Carl D. Perkins Vocational and Applied Technology Education Act Amendments (1990 and 1998). The effects of these two phenomena are recognizable in the FACS education curriculum through both program and course offerings. In fact, secondary FACS education programs are moving toward career preparation and an interdisciplinary curriculum, and many programs deliver the content using a critical science perspective (Smith, 1998).

In the early 1980s, Marjorie Brown stimulated interest with her proposal of a different curriculum approach in FACS education, critical science. This approach was very different from the traditional technical (how-to) perspective. The critical science perspective was practical, problem-based, and focused on practical perennial problems that families encounter. On the other hand, the traditional technical perspective shared expert ways of completing tasks. Although Brown's proposals have not been labeled as revolutionary, they have helped to promote changes in the way FACS educators view, conceptualize, and deliver the subject matter of FACS.

The Carl D. Perkins Vocational Education Act, first established in 1984, focused on improving vocational programs and serving special populations--such as the underemployed, unemployed, and disadvantaged. The law was reauthorized in 1990 as the Carl D. Perkins Vocational and Applied Technology Education Act (American Vocational Association, 1993), and again in 1998 as the Carl D. Perkins Vocational-Technical Education Act (Hettinger, 1999). The 1990 act, known as Perkins II, strongly advocated the integration of occupational and academic skills to better compete in the world's economy. The most recent law, Perkins Act 1998, is expected to give states and local districts greater flexibility to develop programs while making them more accountable for student performance.

Although FACS programs have responded to the many mandates and proposals with innovative curricular and course offerings, the success of these programs depends on the perspective of the teacher toward change and adaptability. According to Pellatiro (1989),

American vocational-technical schools need teachers who exhibit positive professional attitudes. A positive attitude is generally conceived as a state of readiness to respond effectively in challenging situations. Organizing and managing curricular and program changes may prove to be challenging for FACS teachers. How FACS teachers react to various changes and additions in the curriculum can be detected through one's explanatory style. Explanatory style is a descriptive term used to describe the manner in which individuals habitually explain why life events occur as they do (Seligman, 1990). This study was designed to examine the explanatory style of FACS teachers.

## **Background**

Explanatory style has been used extensively in psychological research to predict depression (Hjelle, Busch, & Warren, 1996; Peterson & Seligman, 1984; Seligman, 1990). The explanatory style theory offers a framework for examining optimism and pessimism (Seligman, 1990) and is a construct that emerged from the concept of learned helplessness. Explanatory style is a descriptive term used to explain variations in people's response to uncontrollable events; it reflects individual differences along three dimensions in how people habitually explain good and bad events they encounter in life. The first dimension is the extent that explanations are internal AI'ts I@ versus external AI'ts someone else.@ The second dimension contrasts stable AI'ts going to last forever@ versus unstable AI'ts short lived@ elements. The third is the global AI't affects everything that happens to me@ versus the specific AI'ts only going to affect this@ dimension (Gottschalk, 1996; Peterson, Buchanan, & Seligman, 1995). According to Seligman (1990), individuals who give internal, stable, and global explanations for bad events are more prone to have a pessimistic explanatory style, whereas individuals who explain bad events in terms of external, unstable, and specific causes have an optimistic explanatory style.

Seligman (1990) distinguished the beliefs of optimists and pessimists to illustrate their opposing perspectives on difficult life events. Optimists believe that defeat is a temporary, situational setback that is not their fault. Pessimists believe that bad events are long-lasting, potentially undermining large portions of their lives, and likely to be their fault. The differing beliefs that distinguish optimists and pessimists have a direct impact upon their abilities to take actions in difficult situations.

According to some researchers, (Fry & Hibler, 1993; Moss & Johansen, 1991), optimism is described as an ability to consider challenging situations as opportunities rather than perceiving challenging situations as threatening, insurmountable tasks. Thus, whether FACS teachers view changes and initiatives as opportunities or threats may be understood using the explanatory style construct. Initially, we hypothesized that FACS teachers who adjust readily to change are needed to initiate these changes in curriculum and programs.

The explanatory style thesis is a new phenomenon in education; consequently, little is known about the explanatory style of teachers. Hall and Smith (1999) began the discourse on the explanatory style of teachers with a study on vocational teachers. Results from their study indicated that vocational teachers had an optimistic explanatory style. Further results of their study indicated that vocational teachers were similar on positive events (CoPos), different on negative events (CoNeg) and all events (CPCN). On negative events (CoNeg), business and marketing teachers were more optimist that trade and industrial teachers, family and consumer sciences and marketing teachers were more optimist than agricultural teachers. On all events (CPCN), business teachers were more optimistic than family and consumer sciences teachers and

business teachers were more optimistic than trade and industrial, technology and agricultural teachers.

Therefore, in this study, the researchers have attempted to determine the explanatory style (optimism or pessimism) of secondary FACS teachers. A secondary purpose was to determine if a relationship existed between years of teaching experience and explanatory style. Specifically, objectives of the study were to determine: the explanatory style of secondary FACS teachers based on positive events (CoPos)--how positively/optimistically one reacts to good events, negative events (CoNeg)--how positively/optimistically one reacts to bad events, and all events (CPCN)--how positively/optimistically one reacts to all events; and if differences exist based on years of teaching experience and positive events (CoPos), negative events (CoNeg), and all events (CPCN).

## **Method**

The population of 760 secondary FACS teachers was used to achieve the sample. Based on Krejcie and Morgan's (1970) sample size table, the number of participants for a simple random sample was established at 67. For descriptive research, using the largest sample possible is recommended (Gay, 1987; Gall, Borg, & Gall, 1996). According to Fraenkel and Wallen (1990), the larger the sample, the more likely it is to represent the population from which it comes. Therefore, the sample size was doubled and the actual sample included 134 possible participants. Forty-seven (47) or 35% of the participants responded.

The data were collected using a mailed questionnaire developed by Seligman (1984) entitled "Attributional Style Questionnaire." The ASQ is designed to determine the individual's style of thinking; pessimistic or optimistic. The ASQ presents hypothetical good and bad events (e.g., "You are out on a date and it goes badly."). Participants are asked to imagine the event happening to them. The self-reporting questionnaire contains 12 hypothetical situations: 6 negative events and 6 positive events. Six of the questions relate to interpersonal/affiliation and six are achievement-related. There are four responses per situation. The first response is not scored; it is used to prepare respondents for the next three responses. It asks respondents to provide a reason or cause for the situation. The second response deals with the internal or external dimension of explanatory. The third response deals with stable or unstable dimension of explanatory style, and the fourth response, is concerned with the global or specific dimension of explanatory style.

Respondent indicates on a 7-point rating scales, 1=completely external/completely unstable/completely specific to 7=completely internal/completely stable/completely global, the degree to which the cause was internal or external, stable or unstable, and global or specific with each dimension being rated separately. On the rating scale, positive situations range from a high of 7 to a low of 1, whereas negative situations range from a high of 1 to a low of 7.

The reliability for subscales of the ASQ (internal/external, stable/unstable, and global/specific) ranged from .39 to .64 and can be said to have unsatisfactory reliability (Reivich, 1995). However, when composite scores are formed (CoPos, CoNeg, CPCN), substantially higher and satisfactory levels of internal consistency are found (Reivich, 1995). The formation of composite scores (CoPos, CoNeg, CPCN) will be addressed in the following paragraph. On the composite measures, reported reliabilities were .69 and .73 for positive and negative scores, respectively. Some studies have found reliabilities of .72 for CoPos and .75 for CoNeg (Peterson, et al., 1982). For our study, reliabilities on the composite scores of .64 (CoPos), .61 (CoNeg), and .76 (CPCN) were calculated.

### Scoring the Questionnaire

The three attributional dimensions (internal, stable, and global) rating scales associated with each event description are scored in the directions of increasing internality, stability, and globality. That is, the scales are anchored so that external, unstable, and specific attributions receive lower scores (optimistic), and internal, stable, and global attributions receive higher scores (pessimistic). So on the negative dimension low scores are more optimistic and high scores are more pessimistic, while on the positive dimension low scores are more pessimistic and high scores are more optimistic. The formula for determining composites of negative dimensions/events, positive dimensions/events, and all events are following. For the positive events, Composite Positive Attributional Style (CoPos), you sum the total of all positive situations scores and divide by the total number of positive situations. For example, the best score is 7 multiplied by 3 questions per situations multiplied by 6 situations then divided by 6 positive situations equals 21. The worst score is 1 multiplied by 3 questions per situations multiplied by 6 situations then divided by 6 positive situations equals 3. The range of scores is 21 to 3. This score reflects how positively or optimistically one reacts to good events.

For the negative events, Composite Negative Attributional Style (CoNeg), you sum the total of all negative situations scores and divide by the total number of negative situations. For example, the best score is 1 multiplied by 3 questions per situations multiplied by 6 situations then divided by 6 negative situations equals 3. The worst score is 7 multiplied by 3 questions per situations multiplied by 6 situations then divided by 6 negative situations equals 21. The range of scores is 3 to 21. This score reflects how positively or optimistically one reacts to bad events.

For all events, Composite Positive minus Composite Negative (CPCN), was computed by subtracting the lowest scores 3 (lowest CoPos) - 21 (lowest CoNeg) = -18 and the highest scores 21 (highest CoPos) - 3 (highest CoNeg) = 18. The negative score (-18) is less optimistic (pessimistic) whereas the positive score (18) is most optimistic. Therefore, the range of scores for CPCN is -18 to 18. This score reflects how positively or optimistically one reacts to all events, a measure of overall explanatory style, optimism or pessimism.

### Procedures

A cover letter and questionnaire were mailed to 134 secondary FACS teachers in Georgia. The questionnaire packet included a pre-addressed, stamped return envelope. According to Dillman (1978), a follow-up postcard should be sent in approximately 14 days. Thus, in 10 days, a letter was mailed to participants who had not responded, reminding them to complete the survey. Dillman (1978) further states that after a two-week period, a second questionnaire should be sent. Consequently, two and a half weeks later, a second questionnaire was mailed to participants who had not responded. At the end of the data collection period, 47 (35%) of the participants had responded.

According to Miller and Smith (1983), comparing early respondents with late respondents will allow one to estimate the representativeness of late respondents to nonrespondents. So as questionnaires were received, dates were recorded. After data collection ended, a *t*-test was used to compare early and late responses to determine if they were different. Results revealed no statistically significant difference between early and late respondents. With the assumption that late respondents are more typical of nonrespondents, generalizing from respondents to the population was warranted. Therefore, generalizations were made to secondary family and consumer sciences teachers in Georgia.

## **Findings**

In order to determine the relationship between years of teaching experience on explanatory style of FACS teachers, means, standard deviations, and the planned comparisons approach were used. Based on mean scores that ranged from 2.46 to 15.55 (see [Table 1](#)), FACS teachers had an optimistic explanatory style.

To determine the explanatory style of teachers based on years of teaching experience, descriptive statistics were used. On the range of years of teaching experience among FACS teachers in this study, interestingly enough, one teacher had one year of teaching experience and one teacher had 30 years of teaching experience with the highest count of four teachers with 10 years of teaching experience. Therefore, in order to better understand the effect of teachers in various stages of their careers, teachers were subgrouped according to number of years of teaching experience. This grouping yielded the following categories of teachers: 1-10, 11-20, 21 and over. On the Certified Personnel Data section of the Georgia Public Education Report Card, teachers are grouped in ten-year increments for years of experience (Georgia Department of Education, 1998). Teachers in this study were divided accordingly to stay with this categorization. In our study, there were only two participants with more than 30 years of teaching experience, therefore, they were included in the 21 and over group of teachers.

The planned comparisons approach was used to determine if teacher groups were different on years of teaching experience and positive events (CoPos), negative events (CoNeg), and all events (CPCN). Rather than testing whether several populations have identical means, the planned comparisons approach determines whether one population mean differs from a second population mean or whether the mean of one set of populations differ from the mean of a different set of populations (Olejnik & Hess, 1997). Analysis indicated no significant difference in positive events (CoPos), negative events (CoNeg), or all events (CPCN) and any teacher group.

## **Conclusions and Implications**

The purpose in this study was to describe the explanatory style (pessimistic or optimistic) of secondary FACS teachers. Therefore, the following conclusions were drawn for FACS teachers in Georgia. First, FACS teachers had an optimistic explanatory style as indicated by scores on the dimensions of positive events (CoPos), negative events (CoNeg), and all events (CPCN). An optimistic explanatory style is characterized by attributing negative events to external (someone else), unstable (short-lived), and specific (not pervasive) causes rather than internal, stable, and global causes.

Second, teachers in this study are alike with respect to years of teaching experience and positive events (CoPos), negative events (CoNeg), and all events (CPCN). Family and consumer sciences teachers, regardless of the number of years of teaching experience, did not view negative events, positive events, and all events differently; they viewed them optimistically rather than pessimistically.

What is the connection between explanatory style and FACS education? During the past several years, FACS teachers have been faced with legislative mandates and curriculum issues. In the late 1980s, the critical science approach to curriculum development was a new phenomenon and was finding its way into some programs; whereas in the early 1990s, Perkins II had been passed, and as we approach the milieu the 1998 Perkins Act with its increased accountability was in effect. However, little attention has been given to how FACS teachers

adjust and adapt to program changes and revisions as dictated by legislation and issues. To ensure the success of mandates and related activities, it is important to explore the attributes of those responsible for implementing such programs.

The Seligman instrument has been found to be valid and reliable in the prediction of depression (Hjelle et al., 1996). However, in this study, it was used to predict what kind of disposition educators will display toward change and to predict how well individuals might adjust to change.

According to the explanatory style thesis, the difference between an optimist and a pessimist will determine how difficult situations are handled. The task of implementing, evaluating, and revising programs can be a challenging and demanding. However, based on the results of this study, secondary FACS teachers in Georgia, are optimistic and will view new initiatives as a challenge rather than a threat. Additionally, FACS teachers appear to be similar on the dimensions measured regardless of years of teaching experience, teachers at all stages of their careers appear to be able to respond to new developments and initiatives equally well. We believe that these teachers will adjust well to change and are inclined to try new programs and change curricular to meet the demands of legislation and the workforce.

Generally, in an educational environment where greater attention is given to required courses and preparation for post-high school education rather than vocational programs, these findings should support and enhance the discussion and decision making process concerning curricular changes and new mandated programs. Specifically, the optimistic disposition of FACS teachers ensures the likelihood of new programs experiencing some degree of success.

Based on the results of this study, it is anticipated that FACS teachers will approach challenges presented by changing conditions in education and vocational education in general and in FACS education specifically, optimistically.

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## About the Authors

Table 1  
*Explanatory Style of Family and Consumer Sciences Teachers based on Composite Scores*

Variable	n	M	SD
<u>COPOS</u>	47	15.48	2.2
<u>CONEG</u>	47	12.10	2.4
<u>CPCN</u>	47	3.36	2.7

Table 2  
*Explanatory Style of Family and Consumer Sciences Teachers for Years of Teaching Experience by Composite Scores*

Variable	n	CONEG		COPOS		CPCN	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Years							
1-10	17	15.54	1.8	12.63	1.6	2.88	2.0
11-20	17	15.05	2.4	11.64	2.8	3.40	3.0
21 – over	9	15.58	3.3	12.34	1.7	4.3	1.8
Missing	4						
Total	47						