COMPARISON BETWEEN GROUPS OF TEACHERS ON LOCUS OF CONTROL AND PHILOSOPHY OF EDUCATION

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VANESSA CRAIG EGGERS

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BY

VANESSA CRAIG EGGERS

APPROVED BY:

H. E. Schmuck
Chairman, Thesis Committee

Eric J. Hales
Associate Professor of Psychology

Glenda J. Hubbard
Associate Professor of Counseling,
Education, and Research

Joyce G. Crouch
Chairman, Department of Psychology

Joyce V. Lawrence
Dean of the Graduate School

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Abstract

The relationships between locus of control and philosophy of education were analyzed according to the variables of grades taught and type of class taught. Results indicated that there were not statistically significant relationships between philosophy of education or locus of control and grades taught; elementary and junior high teachers did not differ significantly on their philosophies of education or locus of control. Further results indicated that there were statistically significant relationships between philosophy of education and locus of control, and type of class. Resource teachers were found to be more internally oriented than regular classroom teachers. The data also revealed that a negative relationship exists between locus of control and philosophy of education indicating that teachers with an external locus of control tend to have a traditional philosophy of education, and teachers with an internal locus of control tend to have a progressive philosophy of education.

Chapter 1

INTRODUCTION

The philosophies of a person guide the way s/he behaves. Each person has her/his own set of beliefs and values and s/he bases her/his actions and attitudes, whether consciously or unconsciously, on these beliefs. These beliefs are acquired through the process of socialization, and education is often seen as a factor in the socialization process. Marshall (1973) identifies the teacher as the most important and vulnerable member of the educational process. These teachers hold to many philosophies and exhibit many different personalities, and the variables which may effect these philosophies and personality types are numerous.

The two ends of the continuum which may be used to research the philosophies guiding teachers' methods are a traditional approach and a progressive approach. These terms may not be the most appropriate ones available to refer to the various philosophies but will be employed here because of their widespread use in relevant literature. Thus for the sake of consistency the same terminology used in the majority of related research will be employed in this paper. The traditional approach centers around the belief that education should teach the three R's--reading, writing, and arithmetic--without centering primarily on the child, but viewing the purpose of the classroom as the teacher conveying

the education to the child who attends and retains the ideas (Bennett, 1976).

The progressive approach, coming to us from England, centers around the child, viewing the process of education as the teacher and child working together in a warm, friendly atmosphere focusing on a broad range of subjects including personal growth. Following this philosophy the child is the focus of the classroom with the teacher facilitating in the child's own educational endeavors (Bennett, 1976).

More appropriate terms for these philosophies might be teacher-directed and teacher-facilitated. The approach generally referred to as traditional can be viewed as teacher-directed because the primary role of the teacher is to direct the educational endeavors of the students. The approach generally referred to as progressive can be viewed as teacher-facilitated because the primary role of the teacher is to facilitate the child's own educational endeavors. The majority of the work in a teacher-directed approach is conducted on an individual basis with other students working on their own while the teacher facilitates student endeavors one at a time.

An important consideration in discussing philosophies at two ends of a continuum is the existence of many viewpoints in varying degrees between the endpoints. Thus a teacher may employ an approach which is basically traditional but also includes elements of a progressive approach. Thus results must be viewed in relative terms rather than absolute terms.

Related to teachers' philosophies is their locus of control which may be either external or internal. The origin of control, external or internal, pertains to the place a person looks to as being the controlling factor of her/his life, either outside or inside her/himself.

Statement of the Problem

The study is an attempt to explore the effect of several variables on the philosophies of education and the loci of control exhibited by teachers. These variables will include number of years of teaching experience, grade(s) presently taught, and area of teaching speciality (regular classroom or special type classroom). Special classrooms include classes for emotionally mentally handicapped, educably mentally handicapped, trainable mentally handicapped, and learning disabled.

Purpose of the Study

The purpose of this study is to examine how the variables of teaching experience, grade(s) taught, and speciality area in teaching are related to locus of control and philosophy of education. The degree to which these variables affect the teacher may produce significant differences among the behaviors of teachers, in turn, affecting the way children learn. These differences may be expressed through their philosophies of education, e.g. ideas on open versus traditional classrooms and through their loci of control.

It is felt that the results of this study may offer suggestions, if not supporting data, concerning the effect of

these variables on teachers' teaching methods. These results which are taken from elementary and junior high schools in rural areas of Piedmont North Carolina can perhaps be generalized to other schools and/or generate other related areas of research such as placement considerations based on student-teacher matching.

Hypotheses

The hypotheses deal with the educational philosophies, locus of control, grades taught and specialty. The data was analyzed according to the variables mentioned earlier. All of the hypotheses are stated in the null form.

Major Hypothesis

There is no significant difference between the educational philosophies and locus of control scores of teachers with regard to the variables of experience, grade(s) taught, or area of teaching experience. There is no significant relationship between the scores of the teachers on the Kerlinger Educational Scale (ES-VII) and the MacDonald-Tseng Internal-External Scale (I.E.).

Null Subhypotheses

There are five null subhypotheses offered.

Null Subhypothesis 1. There is no significant difference between the scores on the ES-VII for elementary teachers versus junior high school teachers.

Null Subhypothesis 2. There is no significant difference between the scores on the ES-VII for regular teachers versus

special classroom teachers.

Null Subhypothesis 3. There is no significant difference between the scores on the I.E. for elementary teachers versus junior high school teachers.

Null Subhypothesis 4. There is no significant difference between the scores on the I.E. for regular teachers versus special classroom teachers.

Null Subhypothesis 5. There is no significant relationship in scores on the ES-VII and I.E.

Definitions

For the purpose of this study the following terms are defined for clarity and consistant usage:

Special Classroom

Special classrooms are those in which predominant placement is based on the identification of learning disabilities, educable mental handicaps, trainable mental handicaps, and emotional mental handicaps. These classifications are based on the rules and regulations of the State Department of Education of North Carolina (Rules Governing Programs and Services for Children with Special Needs, 1979).

Regular Classroom

Regular classrooms are those in which most of the children in a class are not receiving special services. Because of current policies, some learning disabled and educable mentally handicapped children will be present in these classes.

Elementary Grades

Elementary grades in the school system studied include kindergarten through sixth grade.

Junior High Grades

Junior high grades in the school system studied include seventh through ninth grade.

Traditional Philosophy of Education

Traditional education is content-centered. The teacher is the distributor of knowledge and the pupil assumes a passive role with no say in curriculum planning. The accent is on memory, practice and rote (Bennett, 1976).

Progressive Philosophy of Education

Progressive education is student-centered. The teacher is the guide to educational experiences and the pupil assumes an active role by participating in curriculum planning. The accent is on learning by discovery techniques (Bennett, 1976).

Locus of Control

Williams and Long's (1979) definition is employed defining locus of control as the "perceived origin of the events in one's life" (p. 284).

Internal Locus of Control

Individuals possessing an internal locus of control feel they are in control of their actions which in turn are responsible for rewards and punishment received (Williams and Long, 1979).

External Locus of Control

Individuals possessing an external locus of control feel their lives are controlled by fate and/or by chance (Williams and Long, 1979).

Assumptions and Limitations

Several assumptions and limitations must be considered when reviewing the results of the study.

Assumptions

Three assumptions are offered.

Assumption 1. The sex variable is not a factor considered in this study.

Assumption 2. All subjects answer surveys seriously and honestly.

Assumption 3. The race of the teacher is not a factor considered in this study.

Limitations

Three limitations are offered.

Limitation 1. The age factor of the teacher is not considered, and inexperience may not necessarily mean younger or more recently educated.

Limitation 2. The sample is from small towns in rural areas; therefore, results should not be generalized except to similar populations.

Limitation 3. The respondents may represent a biased perspective since they represent a small proportion of the teachers asked to participate in the study (one-third).

Chapter 2

REVIEW OF RELATED LITERATURE

In order to understand the importance of philosophies in guiding teaching methods and the possible effectiveness of different methods as well as the influence of locus of control on teaching effectiveness one needs to consider the research which has been done in these areas.

Progressive Versus Traditional Classroom

It is important first of all to review the behaviors considered characteristic of the different philosophies guiding teachers. The research in this area falls under two main areas: (1) progressive education and (2) traditional education. Bennett (1976, p. 38) compiled lists of behaviors considered to be characteristic of progressive and traditional classrooms by interviewing teachers from 12 different schools (see Table 1).

Beitz (1973) believes that parents and educators all over the country are using different approaches which are more beneficial to children's mental and spiritual growth by being more humane and involving. Although the programs vary in their names (i.e. open classroom, open education, free school, open school, open corridor), the basic building blocks are the same. They include children having choices about activities based on interest and abilities, learning at their own pace and with their own style, and actively engaging with people and their environment for meaningful learning.

Table 1

Behavior Characteristic of Classrooms

Progressive	Traditional
1. Subjects are integrated	1. Subjects are kept separate
2. Teachers facilitate educational activities	2. Teachers direct educational activities
3. Pupils take an active role	3. Pupils take a passive role
4. Pupils participate in curriculum planning	4. Pupils have no say in curriculum planning
5. Learning is predominantly by discovery techniques	5. Learning is predominantly by memory, practice, and rote
6. External rewards and punishments are not necessary	6. External rewards are used, e.g. grades
7. Conventional academic standards are not a main concern	7. Conventional academic standards are of primary concern
8. There is little testing	8. There is frequent testing
9. The accent is on cooperative group work	9. The accent is on competition
10. Teaching is extended outside the classroom base	10. Teaching is confined to the classroom base
11. The accent is on creative expression	11. The accent is on academic achievement characterized more by memorization than creative expression

Research has been conducted on the effectiveness of the open classroom in American schools which have tried to model England's original efforts. Observors of the classroom in England emphasize the freedom the students have and how strongly the student responds to the flexible learning situation (Hapgood, 1972). Thus the hallmark of the open classroom method is the student's freedom to choose the direction her/his academic endeavors will pursue with the teacher's role being that of helping without instructing or lecturing.

George (1975) encountered several problems with the open classroom including a high noise level and a failure to demonstrate academic superiority over traditional classrooms. However, the study concludes that open classrooms do facilitate the growth of more positive self-concepts in the learners. Another study revealed that while parents felt their children were improving academically and socially, they reported two concerns--the lack of quiet areas for independent study and the lack of an adequate system for progress reporting to the parents (Nesset, 1974). A review of the research done on open space classrooms by Sanders and Wren (1976) concludes that the open educational approach is more effective than the self-contained in terms of academic achievement and attitudes on the part of teachers, parents, and pupils. The authors reported the development of favorable attitudes. These attitudes were measured by

the Minnesota Teacher Attitude Inventory, the Children's Personality Questionnaire, and a Parental Attitude Inventory designed by the authors of the study. According to the authors "Statistically significant differences on several factors indicated that pupils who had been in the open school for more than a year were more assertive, more independent, more aggressive, more persistent, and more dominant" (Sanders & Wren, 1976, p. 59).

Other research on this topic includes another two-year study which compared the effects of open classroom versus traditional instruction on children's self-concept, attitudes toward school, and achievement of basic skills. This comparison study concludes that the open classroom was not more effective than the traditional concerning instructional strategies, but produced positive changes in the affective areas of self-concept and attitude toward school (Reynolds, 1975).

Rogers and Church (1975) support open education because it fosters independence and self-direction. They have found the following:

> Relatively low achievement motivation in school is related to a lack of independence and choice on the part of the child, children who have independence and self-direction will develop higher achievement motivation, fewer discipline problems, and more effective learning. (p. 85).

These authors review many researchers who conclude that open education enhances feelings of internal control and fosters positive attitudes toward school by promoting choice, independence, success experiences and self-direction. These authors also include research relating a student's internal locus of control with higher IQ scores, active exploratory behavior, and excitement about learning. However, the variable of teachers' locus of control and how it relates to the open classroom is not addressed.

Further research includes a study to determine whether locus of control scores for students in open classrooms changed significantly over a one-year period and whether there was any change experienced by students in a traditional program. The results indicated that students in the open classroom did not acquire a greater sense of internal control for achievement successes or failures than students in a traditional program (Kocher, 1977). Thus conflicting research exists on the issue of whether or not open classrooms foster internality.

Research dealing with the issue of teacher's attitudes according to the classroom setting concluded that there was not a significant difference in classroom behavior and attitude between teachers in open and traditional settings (Sewell & Dornseif cited in Dobb, 1974).

Thus one conclusion which can be drawn from available research is the positive influence open atmospheres have on

affective growth. However, neither the open nor traditional approach seems consistently superior in other areas such as academic growth. Unmeasurable variables are involved such as attitude of person implementing the method and perception of person experiencing the employed method.

Current innovations in the area of classroom instructional strategies includes an integration of cognitive, affective, and behavioral learning domains. A specific module incorporating the philosophy that "life skill enhancing experiences" can be integrated in regular subject matter has been developed by Eric Hatch and entitled "A Holistic Approach to Individual Growth" (Hatch, 1980). This approach seeks to "increase rather than detract from the accomplishment of the traditional academic goals of American education" (Hatch, 1980, p. 4). Such a module would strive to incorporate the affective benefits of an open atmosphere classroom while still accomplishing traditional goals of education. Thus directive and facilitative as well as creative process components are employed. Creative implies student self-management; according to the module it is more than student centered because the teacher encourages the students to make decisions about content and outcomes and to collaborate with each other.

"A Holistic Approach to Individual Growth" includes exercises and examples of ways to increase growth in intrapersonal, interpersonal, and extrapersonal areas by including

behavioral, affective, and cognitive domains in instructional strategies. According to the authors, this would require the use of facilitative and directive processes as well as a third component--a creative process.

A study investigating the effects of letting children have choices concerning the difficulty of their curriculum concluded that students having a choice were significantly higher in their engagement in tasks but were lower in their academic performance (Fisher, 1974). The results of this experiment indicate that other variables, such as reinforcement schedules used in the learning task and the manner in which the curriculum is organized and presented to students, also affects academic performance. Therefore, this experiment offers evidence that an open approach alone may not be effective but an approach such as the holistic which attempts to integrate all aspects of the individual, (behavioral, affective, and cognitive), by using reinforcement schedules, student involvement, and curriculum organization may be more effective.

If all domains of an individual need to be considered in teaching strategies, and the ideal setting would involve aspects of both the open and traditional classrooms, the important question then may be what type of locus of control would be the most beneficial, or necessary, for the teacher.

Research on the Variable of Locus of Control

This section will deal with research exploring the variable of locus of control in teachers and the effect of locus of control on teacher effectiveness.

First of all, it is important to realize the importance of the teacher in the educational process. Marshall (1973) states that the teacher must serve multiple roles of educator, thinker, role model, counselor, and participant. He also states that the teacher is the most vital participant in the education process so must constantly reassess what s/he does and why. Marshall states that it would be more possible for teachers to function and organize efficiently when they know themselves and what is possible for them. Each teacher can do this by "...knowing the options available to him and the rationales for them provided by the philosophies of education" (p. 91).

Research dealing with locus of control variable concludes that "the 'self-controlling' or well-integrated teachers were generally more effective, whereas the 'fearful' or poorly integrated were ineffective" (Pledsoe, Cox, and Burnham, 1967, p. 25).

Considerable research has centered around the student's locus of control and its effect upon achievement. Many of these studies conclude that internally oriented students achieve at a higher level according to grades and achievement tests (Skeen, 1973). These results indicate that the

teacher needs to consider the cognitive styles of their students in designing their teaching strategies. Kuchinskas (1979), after several years of observing students, teachers, and reading materials in elementary classrooms to determine the effect of cognitive style on the activities in the classroom, concludes the following:

> To date, cognitive style has little or no influence on classroom instructional changes. It is almost totally ignored in the preparation and use of instructional materials except for superficial attention to auditory or visual modalities. (p. 270)

She cites Chall (1967) who concluded from research on how children learn to read that failure in learning to read seems to result when a child with a predisposition for learning is exposed to a method that ignores this predisposition. Interpreting "predisposition" as meaning cognitive style Kuchinskas cites this research to support her stance that cognitive style in teaching does make a difference in effectiveness. Other research Kuchinskas cites includes a study based on a series of research projects sponsored by the United States Office of Education in the 1960's to determine which set of instructional materials would result in the most effective learning by first grade students in reading. The results indicated that the teacher rather than the materials or methods made the difference (Bond and Dykstra, 1967). Another study cited by Kuchinskas which examined

teaching styles and pupil progress in Great Britain found a strong relationship between the aims and opinions of teachers and the way teachers actually teach; further, the effect of teaching style was statistically significant in all attainment areas tested in the study (Bennett, 1976). However, none of this research indicates that any certain teaching style or cognitive style is more effective than any other.

Other research dealing with the variable of locus of control and classroom setting includes a study by Robert Wright and J. D. Ducett (1976). These authors state that research examining the influence of locus of control on student achievement must examine the educational setting and teacher instead of just the relationship between the student's locus of control and achievement. The authors propose that achievement is largely determined by external forces (e.g. the teacher) and therefore effort is not the only factor contributing to academic success. Their research includes matched samples of fifth grade students enrolled in traditional and open schools. Their results indicate that there is a positive relationship between internality and achievement in "open" schools but locus of control was not correlated with achievement in a traditional setting. This research is included in the review of related literature because of its conclusion that the correlation between setting (open or traditional) and the student's locus of control and achievement varies according to the specific type of setting. These

findings appear to support the open classroom setting, but other variables also need to be considered. One of these variables is the impact of the teacher. If the teachers' locus of control varies with the setting then this may be a determining variable in whether or not the students' locus of control affects their achievement. The relationship between teachers' locus of control and philosophy regarding education (open or traditional) is the focus of this paper.

Experiments by Shadbolt (1978) concluded that highly extroverted students were more effective at problem-solving after being taught by unstructured methods. In contrast, highly introverted students were more effective at problem-solving after being taught by structured methods. This research explicitly correlates teaching method with cognitive style of the student but does not address the issue of what methods correlate with cognitive styles of teachers.

Bhagat and Chassie (1978) conducted research on people's perception of their environment and its effect on their attitudes and behaviors. They had individuals who perceive themselves to be in reasonable control of their environment and individuals who perceive themselves to be in fairly poor control of their environment perform task related activities. The study concludes that individuals who perceive themselves to be in reasonable control of their environment tend to be relatively better performers, report greater task-role satisfaction, and are generally more adjusted compared with those

who perceive themselves to be in poor control of their environment. This research does not examine the effect of locus of control on teaching effectiveness but indicates that internally oriented persons are better task performers. This research may be extended to suggest that internally oriented teachers might be expected to perform the task of teaching better than would externally oriented teachers. However, this type of conclusion cannot be positively concluded from the research since it was not done with teachers.

Research dealing with the personal characteristics of teachers and the relationship between those characteristics and student achievement was conducted in an inner city with 58 teachers and their students, fourth through eighth graders. The authors support their research by stating that the influence teachers have on students is powerful and pervasive. Therefore, knowledge of teacher's motivational beliefs and orientation (perception of locus of control) helps to account for variations in student achievement (Porter & Cohen, 1977). The results of this study indicated that a relationship exists between general locus of control as a teacher characteristic and student achievement such that the more internal a teacher's perceived locus of control, the higher the level of student achievement.

The author of this study believes that student achievement is the most appropriate way to measure teacher effectiveness and therefore, the study by Porter and Cohen (1977)

indicates that teachers' locus of control and effectiveness are related. The research in this study may be useful because of its uniqueness and the information it adds to the area of teacher effectiveness according to the variables of locus of control and setting.

Chapter 3

DESIGN AND PROCEDURES

In this chapter, the participants in the study are identified, the design is discussed, the instruments and data gathering devices are described, and the statistical tests and procedures are explained.

Participants in the Study

The subjects were elementary and junior high school teachers from four schools in the Newton-Conover City School System and two schools in the Wilkesboro City School System. They taught in levels kindergarten through ninth grade. There was a total of 69 teachers involved in the study.

Design

The teachers were divided according to two variables--grades taught and type of class taught. The range of grades taught was from kindergarten through ninth grade. The groups were divided on this variable according to the school system. Thus elementary teachers were defined as those teaching grades kindergarten through sixth, and junior high school teachers were defined as those teaching grades seventh through ninth. The total of elementary teachers was 36, and the total of junior high teachers was 32. Also, one special teacher taught at both levels (see Table 2).

The other division made for the purpose of this research was according to type of class taught. There were 50 regular teachers and 19 special teachers (see Table 3).

Table 2

Subjects Involved in the Study

Group	N
Elementary Teachers	36
Junior High School Teachers	32
Teachers at Both Levels	1
Total	69

Table 3

Subjects Involved in the Study

Group	N
Regular Classroom Teachers	50
Special Classroom Teachers	19
Total	69

Each of the teachers was asked to complete two surveys--the ES-VII and the I.E. All participants were asked to include the following information on their surveys: grades presently taught, number of years' experience, age, race, sex, type of subject taught, and comments. Almost all of the participants were white females; therefore, race and sex were eliminated as variables to analyze. Age ranged from 22 to 58 and experience ranged from less than one year to 37 years. However, neither of these variables was analyzed because of the comparatively experienced nature of the group. A great majority of the teachers had more than three years' experience.

There were 208 sets of surveys originally but only 69 of these were returned (this lack of participation was also acknowledged as a possible limitation of the study).

Instruments

Two different surveys were used to collect the data.

Kerlinger Educational Scale VII (ES-VII)

Kerlinger designed and validated this scale as an attempt to measure attitudes toward education and issues that may revolve around education (Bledsoe et al, 1967).

There are two factors present in the thirty questions. Strong agreement with Factor A questions represents a strong progressive philosophy toward education. Strong agreement with Factor B questions shows a strong traditional trend. Factor B scores are subtracted from Factor A to get a

difference (D), with the mean being zero. A positive D means the subject holds generally progressive philosophies toward education, and a negative D means the subject holds generally traditional philosophies toward education. Scores from zero to ± 30 are in the average range meaning the subject is somewhat progressive or traditional depending on the direction. Scores of ± 31 to 45 indicate a strong inclination toward a certain philosophy, and a D of ± 45 or more indicates a definite inclination toward a certain philosophy. The scale has been found to be factorially valid and reliable (Kerlinger, 1968). In this study fifty points was added to each score so the actual mean was fifty.

Bledsoe, Cox, and Burnham (1967) state that considerable evidence has been offered concerning the reliability and validity of Kerlinger's Educational Scale VII indicating that it possesses a high degree of "predictive and construct validity" and indicates the degree to which a "consistent, pervasive philosophy of education has crystalized" (p. 166).

The Kerlinger's Educational Scale VII, because of its known validity and reliability, was used by the researchers attempting to validate the Barth's Assumptions about Learning and Knowledge scale (Green, 1973). The analysis yielded support for Barth's scale because it correlated significantly with the ES-VII.

MacDonald-Tseng Internal-External Scale

This survey indicates one's locus of control. Scores range from zero to 63 with several of the 33 questions used as fillers and ignored during scoring. A low score indicates that the subject has an internal locus of control. The higher the score, the more the subject is under the influence of external factors and thus has an external locus of control.

Statistical Procedures

In order to test for a significant difference between sub-groups on both the ES-VII and the I.E., *t* tests were performed on the data. The .05 level was considered statistically significant.

To test for a significant relationship between the ES-VII and the I.E. for the total group a Pearson Product-Moment correlation was performed.

Chapter 4

ANALYSIS OF THE DATA

In this chapter the data are analyzed according to the five null subhypotheses. The mean number of years of experience for the total group of teachers was 10.13. The mean number of years of experience for elementary teachers was 10.03, and the mean number of years of experience for the junior high teachers was 10.25. Thus the subjects were a fairly homogeneous group.

Null Subhypothesis 1

The null subhypothesis one was stated as follows:

There is no significant difference between the scores of the ES-VII for elementary teachers and junior high teachers.

The null subhypothesis one was not rejected. The main effect of grades taught was not significant $F(1,67) = .40$, $p = .528$. The mean score on the ES-VII for elementary teachers was 58.43, and the mean score for junior high teachers was 56.65. This indicates that the elementary and junior high teachers do not differ significantly on their philosophies of education (see Table 4 for summary table and the means and standard deviations).

Null Subhypothesis 2

The second null subhypothesis was stated as follows:

There is no significant difference between the scores on the ES-VII for regular teachers versus special teachers.

Table 4

ANOVA Summary Table and

Means and Standard Deviations

for ES-VII Scores and Grades Taught

a. ANOVA Summary

Source	DF	Mean Square	F	Significance of F
Grades Taught	1	54.135	.403	.528
Within Subjects	67	134.481		
Total	68	133.300		

b. Means and Standard Deviations

Elementary	58 (12.8)
Junior High	56 (9.8)

The null subhypothesis two was rejected. The main effect of type of class was significant $F(1,67) = 6.92$, $p = .011$. The mean score on the ES-VII for regular teachers was 55.37, and the mean score for resource teachers was 63.10. This indicates that resource teachers are more progressive in their philosophy of education than regular teachers (see Table 5 for the summary table and the means and standard deviations).

Null Subhypothesis 3

The null subhypothesis three was stated as follows:

There is no significant difference between the scores on the I.E. for elementary teachers versus junior high school teachers.

The null subhypothesis three was not rejected. The main effect of grades taught was not significant $F(1,67) = 2.00$, $p = .162$. The mean score on the I.E. for elementary teachers was 28.05, and the mean score for junior high teachers was 24.53. This indicates that there is no significant difference (see Table 6 for the summary table and the means and standard deviations).

Null Subhypothesis 4

The null subhypothesis four was stated as follows:

There is no significant difference between the scores on the I.E. for regular teachers versus special classroom teachers.

Table 5

ANOVA Summary Table and

Means and Standard Deviations

for ES-VII Scores and Type of Class

a. ANOVA Summary

Source	DF	Mean Square	F	Significance of F
Type of Class	1	849.247	6.926	.011
Within Subjects	67	122.614		
Total	68	133.300		

b. Means and Standard Deviations

Regular	55 (10.4)
Special	63 (12.4)

Table 6

ANOVA Summary Table and

Means and Standard Deviations

for I.E. Scores and Grades Taught

a. ANOVA Summary

Source	DF	Mean Square	F	Significance of F
Grades Taught	1	212.951	2.003	.162
Within Subjects	67	106.325		
Total	68	107.893		

b. Means and Standard Deviations

Elementary	28 (12.9)
Junior High	24 (5.9)

This hypothesis was rejected. The main effect of type of class was significant $F(1,67) = 4.79$, $p = .032$. The mean score on the I.E. scale for regular class teachers was 28.12, and the mean score for resource teachers was 22.25. This indicates that resource teachers are more internally oriented than regular classroom teachers (see Table 7 for the summary table and the mean and standard deviations).

Null Subhypothesis 5

The null subhypothesis five was stated as follows:

There is no significant relationship in scores on the ES-VII and I.E.

The null subhypothesis five was rejected. There is a negative relationship between the scores on the ES-VII and I.E., $r = .238$, $p = .024$.. This indicates that teachers with an external locus of control tend to have a traditional philosophy of education and teachers with an internal locus of control tend to have a progressive philosophy of education.

Further analysis of the data indicates that there is a correlation between the ES-VII and the number of years of experience the teacher has $r = -.214$, $p = .038$. For this crossectional sample as the number of years of experience increased the teacher's philosophy toward education was more traditional. There is not a correlation between the I.E. and the number of years of experience the teacher has $r = .037$, $p = .381$.

Table 7

ANOVA Summary Table and

Means and Standard Deviations

for I.E. Scores and Type of Class

a. ANOVA Summary

Source	DF	Mean Square	F	Significance of F
Type of Class	1	489.796	4.793	.032
Within Subjects	67	102.193		
Total	68	107.893		

b. Means and Standard Deviations

Regular	28 (11.0)
Special	22 (7.3)

Chapter 5

SUMMARY, DISCUSSION, AND RECOMMENDATIONS FOR FURTHER RESEARCH

Chapter five includes a summary of the study, a discussion of the conclusions and implications drawn from the data, and recommendations for further research.

Summary and Discussion

The study examined the relationship between locus of control and philosophy of education in teachers related to the variables of grades taught and type of class taught. The results indicated that there was not a significant difference between elementary and junior high teachers in their philosophy of education. Also, there was not a significant difference between elementary and junior high teachers in their locus of control.

The data further indicated that a significant difference existed between regular teachers and resource teachers in philosophy of education and locus of control. Resource teachers were more internally oriented and more progressive in their philosophy of education than regular teachers.

The data also indicated that there was a negative relationship between the scores on the ES-VII and I.E. Teachers with an external locus of control tended to have a traditional philosophy of education, and teachers with an internal locus of control tended to have a progressive philosophy toward education.

Overall, the results indicated that grade taught, elementary or junior high level, was not a significant variable in philosophy of education or locus of control displayed by the teachers involved in the study. The resource teachers were more progressive in their philosophy of education and more internally oriented. Thus it appears that resource teachers felt they were in control of their actions which in turn were responsible for rewards and punishments received to a greater degree than regular teachers. Further, resource teachers viewed education as student-centered with the teachers' role being that of a guide while pupils assumed an active role of participating in curriculum planning. In contrast, regular teachers viewed education as content-centered with the teachers' role being that of a distributor of knowledge while pupils assumed a passive role with no say in curriculum planning.

The data does not indicate why resource teachers were more internally oriented and progressive toward their philosophy of education. Perhaps the nature of their job (being responsible for step-by-step details of lesson plans for each student, working with each student for only a short amount of time each day, and attempting to coordinate their remediation with regular classroom instruction) influenced their locus of control and philosophy of education. Perhaps the wide variance in the types of students the resource teachers work with influenced their locus of control and philosophy of education.

Since there are fewer students than a regular classroom teacher deals with, there is greater opportunity for student-centered instruction, and since the type of difficulties the students experience are varied, it appears more practical and beneficial to center the instruction around the student. Another reason why resource teachers were more internally oriented and progressive may just have been the preference of the person involved regarding job considerations. Perhaps an internally oriented person who prefers a student-centered curriculum with an active student role is drawn toward the position of a resource teacher more than the position of a regular classroom teacher. Possibly an internally oriented person would be more likely to accept the challenge of constructing individualized instruction programs for a wide variety of needs because there is not a need for an external guideline applicable to all students. Caution should be used here in generalizing this type of analysis to say that all regular teachers have a need for an external guideline. It just appears that as a group resource teachers reflected a greater degree of internality than the regular teachers did as a group. Further, as a group, the resource teachers reflected a greater degree of progressiveness than the regular teachers did as a group.

The author of this study began this research because of an interest in the possibility of matching locus of control of teacher with instructional strategies, content-centered

or student-centered, and then matching students to these arrangements. It was felt that perhaps a certain locus of control may be more suited to certain instructional strategies. Further, it was felt that students may learn better with different types of instructional strategies. The research of this thesis did not deal with students but focused instead on teachers. The data was broken down by the variables of type of class taught and subjects taught.

While involved in this study, the author encountered research which offered what appeared to be a viable approach to classroom instruction. The Holistic Approach to Education emphasized the integration of affective, behavioral, and cognitive domains in a classroom setting. This approach is designed to be useful for any teacher who is willing to attempt it (thus locus of control would not be applicable). Still it would be interesting to research whether a teacher does need a certain locus of control to effectively integrate all domains in her/his classroom instruction, or if attempting an approach such as the Holistic Approach fosters or changes the person and her/his locus of control.

The interest in matching students to certain learning environments or implementing an approach such as the Holistic Approach is based on a desire to increase the scope of education to obtain maximum benefits. This broadened scope involves dealing with the affective domain of students. Hopefully more students will remain or develop interest in their

education and become caring and sensitive individuals as well as educated individuals.

Recommendations for Further Research

Future research could deal with the benefits of matching teachers and students by the variables of locus of control. Other related research could deal with the affective benefits students would and do experience under instructional programs which emphasize domains other than cognitive. Also, research dealing with the locus of control and philosophy toward education resource students experience would be interesting. Other research could analyze the change, if any, students in resource classes experience. This could be done by obtaining data before entrance into a special education program and then obtaining follow-up data after the student has been in the program for at least a year. This type of research would be more valid if the results were analyzed according to each subject rather than generalized according to groups because of the variance in individual student characteristics and the amount of time spent in the program.

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