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RESEARCH PAPER

# A Study of Kerlinger's Educational Attitudes among College Students in respect of some Attribute Variables

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**Key words:** Educational attitudes, traditionalism, progressivism, traditionalists, progressives, college students etc.

#### **ABSTRACT**

Attitude has been defined in number of ways, but fewer authors and researchers have revealed the underlying constructs especially in a context. Kerlinger classified educational attitudes in to traditionalism and progressivism as first order factors, which later also explained conservatism and liberalism as second order factors. Investigator used only the former classification to develop a measure to classify individual as traditionalist or progressive also to assess respective magnitudes. Investigator studied educational attitudes of college students as a population as well as variation in sub groups and variations of classification across gender variation. It has been found that college students have mixed educational attitudes irrespective of gender, locality and qualification. Also two complementary attitudes are equally distributed irrespective of the sub group being male, female, urban, rural, graduate or post graduate. Study concludes that students have mixed attitudes so educational process should also be mixed in its orientation.

### Introduction

Kerlinger (1972) an attitude is an enduring emotional, motivational, perceptual, and cognitive organization of beliefs about referents, or sets of referents, that predispose individuals to behave positively or negatively toward the referents. He states that a referent is a construct that stands for a set or category of social objects, ideas, or behaviors that is the focus of an attitude. Referents are differentially criterial to different sets of individuals. To progressives, referents like child-centered curriculum, activity program in schools, and pupil interaction are criterial. To individuals who are traditional, on the other hand, referents like subject matter, the three R's and moral standards in education are criterial.

In other words educational attitudes could be classified as progressivism and traditionalism correspondingly people could be classified as progressives and traditionalists. Progressivism advocates change, modernity, experimentation whereas traditionalism likes to maintain status-quo,

believes in authority, discipline, perseverance and the like.

### **Emergence of the problem:**

Attitudes have been studied extensively in many ways on hundreds of subjects and issues. But it has always been confused with beliefs and values. It was Kerlinger's effort to distinguish the three entities and especially in educational context. Although progressivism and traditionalism are not entirely opposite to each other but are definitely different in approach towards education. Educational approach keeps on changing from time to time due to change scenario of market forces. Students in higher education need to match in attitudes to the underlying attitudinal framework of curriculum and educational process in vogue. As per present situation educational paradigms are being shifted in favor of progressivism, investigator became interested to find state of affair of educational attitudes among college students. Further it is thought that influence of attribute variables could also be of significance in this regard.

### Objectives of the study

The study has been undertaken to attain the following objectives

Construction and standardization of Educational Attitudes (Traditional Vs progressivism) Measure.

Assessment of educational attitudes of college students in terms of traditional and progressive attitudes

Comparing educational attitudes across dichotomous variables- Gender, Locality, Type of institution.

## **Hypotheses**

The study has been conducted to test the following hypotheses

H1: College students have mixed educational attitudes

H2: College students have mixed attitudes in respect of sub groups- male, female, urban, rural, graduate and post graduate.

H3: Traditional attitudes do not differ significantly across gender, locality and qualification variation.

H4: Progressives attitudes do not differ significantly across gender, locality and qualification variation.

### **Development of Educational Attitudes scale**

#### Theoretical constructs of the measure

Kerlinger's (1967) study revealing traditionalism and progressivism orientation of attitudes formed basis for the theoretical constructs of the scale.

A traditionalist learner is one who takes great care of past achievement and believes in possessing and

following traditional indicators of education and an educated man. These may include education as master of subject matter/content oriented, authoritarianism, maintaining knowledge and accuracy, perfect right or wrong, objectivity and competition is welcomed. An educated man would be conservative, likes perfection, is organized and values achievement.

On the other hand a learner with person progressive attitudes considers education is an instrument rather than end in itself. Contents are dynamic and objectives are always in transition. Education need be egalitarian, child centered, skill oriented and creativity based and right or wrong are contextual and subjective. An educated person is liberal, looks for reality and permits experimentation, values learning rather than achievement and the like.

### Framing of items

Items have been framed taking good care of psychometric considerations. Items need to have possibility of making a graded response in terms of available normative options, related with theoretical constructs, in simple sentences and grammatically correct, should include both positive and negative directions, need not be indirect. Items should not self-suggestive and involving double negative.

#### **Selection of items**

Inter rater evaluation method was used for items selection to ascertain validity and reliability of the measure. Two by three selection criterion (out of three two judges approved) was used to select an item. Thirty two items, sixteen for traditionalism and sixteen for progressivism were approved for final scale.

#### **Distribution of items**

Sixteen traditionalism items are followed by sixteen progressivism items leading to thirty two total items in the measure. Measure is structured to respond on Likert format from strongly agree to strongly disagree on five point scale. Positive and negative items are mixed to avoid response set.

#### Scoring scheme

For positive items scored 5 to 1 in order of strongly agree to strongly disagree and in reverse fashion for negative items.

#### Reliability of the measure

Reliability has been found by split half method for traditionalism as well as traditionalism scale. Values are detailed in table 1.

Table1: Reliability details of the constructed measure for attitudinal assessment

Sr. No.	Sub measure	Reliability		
		Half Length (r)	Full Length (R)	
1.	Traditionalism	.69	.82	
2.	Progressivism	.63	.77	

The calculated reliability values are gratifying and ensure reliability of the measure.

## Validity:

Mouly (1964) recommendation was used to ascertain validity of the measure where recorded response of ten participants was correlated with their verbal responses. Eighty five percent responses were matched in two stances, thus approved the validity of the instrument.

### Sample for the study

A snow ball sample of eighty college students spread across attribute variables taken for study constituted the sample for the study.

### Methodology

Investigator collected the data on interval scale and compared the means across traditional and progressive attitudes for whole sample using paired t-test. Simple t-test was used to compare the means across the complementary attitudes in respect of sub groups of male, female, urban, rural, graduate and post graduate. Similarly means were compared for traditional and progressive attitudes across gender, locality and qualification attributes variation.

### **Application of K-S test**

K-S test is used to ascertain normality of the sample for both traditionalism and progressivism attitudes. Tables 2 & 3 show detail of calculations performed for K-S test.

Table2: Application of K-S Test on traditional attitudes score

C. I	f	C. f	c.p <sub>e</sub>	Xu	$\mathbf{Z} = (\mathbf{X}_{\mathbf{u}} - \mathbf{M})/\mathbf{\sigma}$	c.po	I c.p <sub>e</sub> - c.p <sub>o</sub> I
75-79	2	80	1.0000	78.5	2.1020	0.9821	0.0179
70-74	5	78	0.9750	74.5	1.8019	0.9641	0.0109
65-69	3	73	0.9125	69.5	1.4267	0.9236	0.0111
60-64	11	70	0.8750	64.5	1.0515	0.8531	0.0219
55-59	10	59	0.7375	59.5	0.6763	0.7517	0.0142
50-54	13	49	0.6125	54.5	0.3011	0.6179	0.0054
45-49	11	36	0.4500	49.5	-0.0741	0.4721	0.0221
40-44	13	25	0.3125	44.5	-0.4493	0.3264	0.0139
35-39	2	12	0.1500	39.5	-0.8245	0.2061	0.0561
30-34	2	10	0.1250	34.5	-1.1997	0.1151	0.0099
25-29	4	8	0.1000	29.5	-1.5749	0.0582	0.0418

$$M_{pop} = 50.4875$$
 
$$I \ c.p_e - c.p_o I_{max} = 0.0219$$

$$S. D = 13.33$$

For sample to be normal

I c.pe- c.po
$$I_{max}$$
.=< 1.36/(N) $^{1/2}$  at 0.05 level   
=< 1.36/(80) $^{1/2}$  =< 0. 1520

I c.pe- c.po
$$I_{max}$$
.=< 1.63/(N) $^{1/2}$  at 0.01 level   
=< 1.63/(80) $^{1/2}$  =< 0.1834

As the observed value of I  $c.p_e$ -  $c.p_oI_{max}$ . = 0.0219 is much lower than the requires value at 0.01 level of significance. This implies the sample in respect of traditionalism attitudes.

Table3: Application of K-S Test on progressive attitudes score

C. I	f	C. f	c.p <sub>e</sub>	Xu	$\mathbf{Z} = (\mathbf{X}_{\mathrm{u}} - \mathbf{M})/\sigma$	c.po	I c.p <sub>e</sub> - c.p <sub>o</sub> I
31-34	2	2	0.0250	34.5	-1.7000	0.0443	0.0193
35-38	1	3	0.0375	38.5	-1.3190	0.0934	0.0559
39-42	13	16	0.2000	42.5	-0.9381	0.1736	0.0264
43-46	10	26	0.3250	46.5	-0.5571	0.2863	0.0387
47-50	16	42	0.5250	50.5	-0.1762	0.4286	0.0964
51-54	9	51	0.6375	54.5	0.2048	0.5793	0.0582
55-58	5	56	0.7000	58.5	0.5857	0.7224	0.0224
59-62	7	63	0.7875	62.5	0.9667	0.834	0.0465
63-66	5	68	0.8500	66.5	1.3476	0.9115	0.0615
67-70	7	75	0.9375	70.5	1.7286	0.9554	0.0179
71-74	5	80	1.0000	74.5	2.1095	0.9821	0.0179

$$M_{\text{pop}} = 50.4875$$

$$c.p_e-c.p_oI_{max}=0.0964$$

$$S. D = 13.33$$

For sample to be normal

I c.pe- c.po
$$I_{max}$$
.=< 1.36/(N) $^{1/2}$  at 0.05 level   
=< 1.36/(80) $^{1/2}$  =< 0. 1520

I c.pe- c.poI
$$_{max}$$
.=< 1.63/(N) $^{1/2}$  at 0.01 level =< 1.63/(80) $^{1/2}$ 

$$=<0.1834$$

As the observed value of I  $c.p_e$ -  $c.p_oI_{max}$ . = 0.0964 is much lower than the required value at 0.01 level of significance. This implies the sample in respect of progressivism attitudes. This implies that we can apply parametric tests for statistical inferences.

### Calculations in respect of hypotheses

### H<sub>1</sub>: College students have mixed educational attitudes

The paired score obtained on traditionalism and progressivism measures are compared in using paired samples T-test as follows.

$$t = \frac{\frac{(\sum D)/N}{\sum D^{2} - (\frac{(\sum D)^{2}}{N})}{(N-1)(N)}}$$

 $\Sigma D$ : Sum of the differences among pairs

 $\Sigma D^2$ : Sum of the squared differences

 $(\Sigma D)^2$ : Sum of the differences squared.

$$A = (-149)/80 = -1.8625$$

$$B = SQRT \{(20013 - 22201/80)/(79*80)\}$$

= 1.7671

$$t = A/B = -1.8625/1.7671$$

= 1.0540

The obtained t-value is lesser than the table values at an alpha level of .05 ( $t_{0.05} = 1.99$  &  $t_{0.01} = 2.64$ ; df = 79). The p-value is greater than the alpha level: p <.05. We accept the null hypothesis that there is no difference between means. In other words college students have mixed educational attitudes.

Hypotheses H<sub>2</sub>, H<sub>3</sub> and H<sub>4</sub> are further elaborated and respective calculations are presented below.

H<sub>2a</sub>: Male students have mixed educational attitudes

H<sub>2b</sub>: Female students have mixed educational attitudes

H<sub>2c</sub>: Urban students have mixed educational attitudes

H<sub>2d</sub>: Rural students have mixed educational attitudes

H<sub>2e</sub>: Graduate students have mixed educational attitudes

H<sub>2f</sub>: Post graduate students have mixed educational attitudes

Table 4: Comparing means of traditional and progressive attitudes in respect of individual groups of attribute variables

Traditionalist Progressives	33	52.1515	12 6420		
Progressives			12.6420	2.7711	0.2406
	33	52.8181	12.6742		
Traditionalist	47	49.3191	13.7999	2.5861	1.0449
Progressives	47	52.0213	11.1306		
Traditionalist	53	49.1509	14.0704	2.4010	0.9037
Progressives	53	51.3208	10.3715		
Traditionalist	27	53.1111	11.5270	3.0196	0.4170
Progressives	27	54.3704	10.6451		
Traditionalist	47	52.2553	14.4365	2.7066	0.04717
Progressives	47	52.3830	11.6573		
Traditionalist	33	47.9697	11.3012	2.4890	1.7410
Progressives	33	52.3030	8.7589	1	
]	Progressives Fraditionalist Progressives Fraditionalist Progressives Fraditionalist Progressives Fraditionalist	Fraditionalist 53 Progressives 53 Fraditionalist 27 Progressives 27 Fraditionalist 47 Progressives 47 Fraditionalist 33	Traditionalist         53         49.1509           Progressives         53         51.3208           Traditionalist         27         53.1111           Progressives         27         54.3704           Traditionalist         47         52.2553           Progressives         47         52.3830           Traditionalist         33         47.9697	Traditionalist         53         49.1509         14.0704           Progressives         53         51.3208         10.3715           Traditionalist         27         53.1111         11.5270           Progressives         27         54.3704         10.6451           Traditionalist         47         52.2553         14.4365           Progressives         47         52.3830         11.6573           Traditionalist         33         47.9697         11.3012	Traditionalist         53         49.1509         14.0704         2.4010           Progressives         53         51.3208         10.3715           Traditionalist         27         53.1111         11.5270         3.0196           Progressives         27         54.3704         10.6451           Traditionalist         47         52.2553         14.4365         2.7066           Progressives         47         52.3830         11.6573           Traditionalist         33         47.9697         11.3012         2.4890

The obtained t-values in all the cases are lesser than the table values at an alpha level of .05. The p-value is greater than the alpha level: p < .05. We accept the null hypothesis that there male, female, urban, rural, and graduate and post graduate college students have mixed attitudes.

H<sub>3a</sub>: Traditional attitudes do not differ significantly across gender variation

H<sub>3b</sub>: Traditional attitudes do not differ significantly across locality variation

H<sub>3c</sub>: Traditional attitudes do not differ significantly across qualification variation

Table 5: Comparing means of traditional attitudes across attribute variables

Group	Attitudes	N	M	Σ	$SE_D$	$\mathbf{t} = (\mathbf{M}_1 \mathbf{-} \mathbf{M}_2) / SE_D$
Traditionalist	Male	33	52.1515	12.6420	2.7711	0.2406
	Female	47	49.3119	13.7100		
Traditionalist	Urban	53	49.1509	14.0704	2.9422	1.3460
	Rural	27	53.1111	11.5270		
Traditionalist	Graduate	47	52.2553	14.4365	3.3460	1.2808
	Post graduate	33	47.9697	11.3012		

The obtained t-values in all the cases are lesser than the table values at an alpha level of .05. The p-value is greater than the alpha level: p < .05. We accept the null hypothesis that there traditional attitudes do not differ across gender, locality and qualification variation.

H<sub>4a</sub>: Progressives attitudes do not differ significantly across gender variation

H<sub>4b</sub>: Progressives attitudes do not differ significantly across locality variation

H<sub>4c</sub>: Progressives attitudes do not differ significantly across qualification variation

Table 6: Comparing means of progressive attitudes across attribute variables

Group	Attitudes	N	M	Σ	$SE_D$	$\mathbf{t} = (\mathbf{M}_1 \mathbf{-} \mathbf{M}_2) / SE_D$
Progressives	Male	33	52.8182	9.6742	2.3392	0.3407
	Female	47	52.0213	11.1306		
Progressives	Urban	53	51.3208	10.3715	2.4953	1.2221
	Rural	27	54.3704	10.6451		
Progressives	Graduate	47	52.3830	11.6573	2.2839	0.0350
	Post graduate	33	52.3030	8.7589		

The obtained t-values in all the cases are lesser than the table values at an alpha level of .05. The p-value is greater than the alpha level: p < .05. We accept the null hypothesis that there progressive attitudes do not differ across gender, locality and qualification variation.

### **Findings**

- College students have mixed education attitudes, meaning thereby they do not have specific orientation for being rationalists or progressives.
- College students maintain their being mixed in educational attitudes irrespective of being male, female, urban, rural, and graduate or post graduate.
- Traditionalism and progressivism is not a matter of attribute variance rather it is specific to the individual. Traditional or progressive valences of attitudes do not differ across gender, locality and qualification variation.

### **Educational Significance of the study**

Present study revealed that educational attitudes are independent of attribute variables, implying we should not expect people to behave as traditionalists or progressives on the basis of gender or locality or even one's qualification. Female can be progressive or a rural students can be progressive and a post graduate may be a traditionalist. Thus educational planning, curriculum, procedures, rules, regulations, methods of teaching, strategies for discipline maintenance should not be chosen to be traditional or progressive in terms of attribute variation. As students are of mixed attitudes so should be the variables of educational process in higher education.

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