RELATIONSHIP BETWEEN DECISION-MAKING AND CRITICAL THINKING OF PROSPECTIVE TEACHERS

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ABSTRACT

The main objective of the study was to find out the relationship between decision-making and critical thinking of prospective teachers. The investigator used the survey method for collecting data. The investigator randomly selected 500 prospective teachers of Tiruchirappalli district for the present study. Among them 162 were male and 338 were female prospective teachers. Decision-making questionnaire prepared and validated by the investigator and the guide and Critical Thinking Inventory (CTI) prepared and validated by Rani and Porgio were used to collect the data from the prospective teachers. Percentage analysis, Mean, standard deviation, t-test, ANOVA, Post ANOVA and correlational analysis were used to analyse the data. The results revealed that there was significant relationship between decision-making and critical thinking of prospective teachers.

INTRODUCTION

The progress of a country depends upon the quality of its teachers and for this reason teaching is the noblest among all professions. Professional education should focus on the person as an individual who is in practice and seek to broader his human, that is his mental, moral and emotional, capacities. The education which we want to provide to the teacher should be such that will be helpful in developing their inner capacity and power. Only such teachers will be capable in relating theoretical insight to practice and will be able to improve preparation programme.

The teacher of tomorrow should be one who can design a teaching situation which is conducive for the growth of their pupils' mental health and develops in them a commitment to a set of values. In today's world the teacher and the students are facing so many difficulties in their teaching learning process. To remove the difficulties they need to use their cognitive processes, such as applying critical thinking in decision-making.

The concept of critical thinking has a crucial role to play when it comes to problem solving and decision-making. Critical thinking is not only about thinking analytically but also about thinking differently. Critical thinking is of great importance in many professions. It is especially important in the teaching profession nowadays. The behavior modification of the student is done by the enlightened emancipated and empowered teachers. So the teachers of future should be aware of critical thinking processes to make use of the decision making skill in a right way. It will be useful for them to become a successful teacher.

SIGNIFICANCE OF THE STUDY

Education consists of two things – subject matter and evaluation of subject matter. As far as the subject matter is concerned, it is properly transmitted from the teachers to the students. But when it comes to evaluation of the subject matter by the students, it seems like a difficult process, mainly because the students lack basic critical thinking skills. The teacher should understand that developing critical thinking skills in the student is as important as transmitting knowledge. Critical thinking is that mode of thinking — about any subject, content, or problem — in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing it. The ability to think clearly and rationally is important whatever the teacher chooses to do. The concept of critical thinking has a crucial role to play when it comes to problem solving and decision making.

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A decision is the selection of a course of action. Decision-making can be regarded as the cognitive process resulting in the selection of a belief or a course of action among several alternative possibilities. For educational administration and teaching the teacher must be a good decision maker. To develop an understanding of the close relationship between the society and the school, between life and school work, the teacher should be able to take the right decision in a right time at the right situation. If the teacher has a good decision making ability then he/she will achieve a high point of success in their teaching profession.

Without a doubt, decision-making skills can be introduced successfully in a broad range of classroom settings, a fact which lies at the heart of our hope for students to become active and creative decision-makers. So the prospective teachers must develop their decision-making skills during the training period with help of the critical thinking skill. It helps them to solve their personal and academic problems. Well trained teachers will mould the students to actively participate in their learning process, to use the critical thinking skill, and to take good decisions in their life.

OBJECTIVES

1. To find out whether there is any significant difference between male and female prospective teachers in their decision-making and its dimensions.
2. To find out whether there is any significant difference among educational qualification of the prospective teachers in their decision-making and its dimensions.
3. To find out whether there is any significant difference between rural and urban prospective teachers in their critical thinking and its dimensions.
4. To find out whether there is any significant difference among birth order of prospective teachers in their critical thinking and its dimensions.
5. To find out whether there is any significant relationship between decision-making and its dimensions and critical thinking of prospective teachers.

HYPOTHESES

1. There is no significant difference between male and female prospective teachers in their decision-making and its dimensions.
2. There is no significant difference among prospective teachers with differing educational qualification in their decision-making and its dimensions.

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3. There is no significant difference between male and female prospective teachers in their critical thinking and its dimensions.
4. There is no significant difference among educational qualification of prospective teachers in their critical thinking and its dimensions.
5. There is no significant relationship between decision-making skill and its dimension and critical thinking in prospective teachers.

METHODOLOGY

The investigator used the survey method for collecting data.

POPULATION

The population for the study was the prospective teachers studying B.Ed., degree in colleges of education at Tiruchirappalli district, affiliated to Tamil Nadu Teachers Education University, Chennai.

SAMPLE

The investigator used the stratified random sampling technique to select 500 prospective teachers from Tiruchirappalli district for the present study. Among them 162 were male and 338 were female prospective teachers.

TOOL USED

Decision-making questionnaire (2014) prepared and validated by the investigator and the guide and Critical Thinking Inventory (CTI) prepared and validated by Rani and Porgio (2010) were used to collect the data from the prospective teachers.

STATISTICAL TECHNIQUES USED

Mean, standard deviation, t-test, ANOVA, Post ANOVA and correlational analysis were used to analyse the data.

DATA ANALYSIS

Hypothesis 1

There is no significant difference between male and female prospective teachers in their decision-making and its dimensions.

Table 1

DIFFERENCE BETWEEN MALE AND FEMALE PROSPECTIVE TEACHERS IN THEIR DECISION-MAKING AND ITS DIMENSIONS

Dimension	Male		Female		Calculated 't' Value	Remark
	N=162		N=338			
	Mean	SD	Mean	SD		
Rational thinking	31.99	4.429	32.87	3.817	2.170	S
Satisfaction	27.39	4.485	29.00	3.689	3.966	S
Deferment	22.93	4.312	22.73	3.949	0.479	NS
Optimize	35.63	5.519	36.93	4.246	2.645	S
Time-management	30.44	5.012	30.86	4.336	0.908	NS
Dependability	35.57	5.846	36.50	4.853	1.742	NS
Decision-making in toto	183.94	22.815	188.88	17.764	2.423	S

(At 5 % level of significance the table value of 't' is 1.96)

It is inferred from the above table that there is significant difference between male and female prospective teachers in their decision-making dimensions rational thinking, satisfaction and optimize and decision-making in toto, whereas, there is no significant difference between male and female prospective teachers in their dimensions deferment, time-management and dependability.

Female prospective teachers are better than male prospective teachers in their decision-making dimensions rational thinking, satisfaction and optimize and decision-making in toto.

Hypothesis 2

There is no significant difference among UG, PG and M.Phil. qualified prospective teachers in their decision-making and its dimensions.

It is inferred from the table below that there is significant difference among UG, PG and M.Phil. qualified prospective teachers in the dimension satisfaction, whereas there is no significant difference among UG, PG and M.Phil. qualified prospective teachers in the dimensions rational thinking, deferment, optimize, time-management, and dependability and decision-making in toto.

Table 2

DIFFERENCE AMONG UG, PG AND M.PHIL QUALIFIED PROSPECTIVE TEACHERS IN THEIR DECISION-MAKING SKILL AND ITS DIMENSIONS

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Dimension	Sum of squares		MSV		Calculated Value of 'F'	Remark
	Between	Within	Between	Within		
Rational thinking	4.778	8148.860	2.389	16.396	0.146	NS
Satisfaction	99.707	8007.005	49.854	16.111	3.094	S
Deferment	1.973	8251.219	0.987	16.602	0.059	NS
Optimize	1.140	11163.828	0.570	22.462	0.025	NS
Time-management	18.440	10380.360	9.220	20.886	0.441	NS
Dependability	58.323	13473.075	29.161	27.109	1.076	NS
Decision-making in toto	230.661	192580.139	115.330	387.485	0.298	NS

(The table value of 'F' at 5% level of significance for df 2, 497 is 3.00)

Post ANOVA

Table 2 (A)

MEAN VALUE OF SATISFACTION WITH RESPECT TO EDUCATIONAL QUALIFICATION

Educational Qualification	N	Subset for alpha = 0.05
		Mean
PG	90	27.67
UG	402	28.62
M.Phil.	8	30.50

While comparing the mean scores of prospective teachers with respect to educational qualification, the prospective teachers who have M.Phil degree (30.50) are better in satisfaction than the prospective teachers who have UG(28.62) and PG(27.67) degree.

Hypothesis 3

There is no significant difference between male and female prospective teachers in their critical thinking and its dimensions.

Table 3

DIFFERENCE BETWEEN MALE AND FEMALE PROSPECTIVE TEACHERS IN THEIR CRITICAL THINKING AND ITS DIMENSIONS

Dimension	Male N=162		Female N=338		Calculated 't' Value	Remark
	Mean	SD	Mean	SD		
Analyticity	36.92	6.331	36.19	6.102	0.544	NS
Self-confidence	33.87	5.717	33.65	5.532	0.400	NS
Inquisitiveness	33.99	6.044	33.78	5.599	0.371	NS
Maturity	34.27	5.287	34.10	4.964	0.339	NS
Open-mindedness	30.18	5.076	30.14	4.614	0.079	NS
Systematic	32.65	5.765	32.01	5.532	1.170	NS
Truth seeking	37.52	5.857	37.46	5.805	0.097	NS
Critical thinking in toto	239.00	32.374	237.35	30.569	0.544	NS

(At 5 % level of significance the table value of ' t ' is 1.96)

It is inferred from the above table that there is no significant difference between male and female prospective teachers in the dimensions analyticity, self-confidence, inquisitiveness, maturity, open-mindedness, systematic, and truth seeking and critical thinking in toto.

Hypothesis 4

There is no significant difference among UG, PG and M.Phil. qualified prospective teachers in their critical thinking and its dimensions.

Table 4

DIFFERENCE AMONG UG, PG AND M.PHIL QUALIFIED PROSPECTIVE TEACHERS IN THEIR CRITICAL THINKING AND ITS DIMENSIONS

Dimension	Sum of squares		MSV		Calculated Value of 'F'	Remark
	Between	Within	Between	Within		
Analyticity	19.533	19407.467	9.767	39.049	0.250	NS
Self-confidence	34.296	15547.616	17.148	31.283	0.548	NS
Inquisitiveness	77.967	16375.175	38.983	32.948	1.183	NS
Maturity	55.122	12751.396	27.561	25.657	1.074	NS
Open-mindedness	10.373	11312.769	5.187	22.762	0.228	NS
Systematic	121.525	15587.713	60.763	31.364	1.937	NS
Truth seeking	25.071	16855.767	12.536	33.915	0.370	NS
Critical thinking in toto	1358.096	482599.942	679.048	971.026	0.146	NS

(The table value of 'F' at 5% level of significance for df 2, 497 is 3.00)

It is inferred from the above table that there is no significant difference among UG, PG and M.Phil. qualified prospective teachers in the critical thinking dimensions analyticity, self-confidence, inquisitiveness, maturity, open-mindedness, systematic, and truth seeking and critical thinking in toto.

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Hypothesis 5

There is no significant relationship between decision-making and critical thinking and its dimensions of prospective teachers.

Table 5

RELATIONSHIP BETWEEN DECISION-MAKING AND CRITICAL THINKING AND ITS DIMENSIONS OF PROSPECTIVE TEACHERS

Dimension	Df	Calculated value of 'γ'	Remark
Analyticity	498	0.343	S
Self-confidence		0.300	S
Inquisitiveness		0.407	S
Maturity		0.382	S
Open-mindedness		0.398	S
Systematic		0.384	S
Truth-seeking		0.394	S
Critical thinking in total		0.463	S

(At 5% level of significance for 498 df, the table value of 'g' is 0.088)

It is inferred from the above table that there is significant relationship between decision-making and critical thinking and its dimensions of prospective teachers.

MAJOR FINDINGS

1. Based on gender, female prospective teachers are better than male prospective teachers in decision-making in toto and its dimensions rational thinking, satisfaction and optimize.
2. Based on educational qualification, the prospective teachers who have M.Phil. degree are better in the dimension satisfaction than the prospective teachers who have UG and PG degrees.
3. Based on gender, there is no significant difference between male and female prospective teachers in the dimensions analyticity, self-confidence, inquisitiveness, maturity, open-mindedness, systematic, truth seeking and critical thinking in toto.

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