META COGNITION OF B.ED. STUDENT IN RELATION TO THEIR DECISION MAKING IN VIRUDHUNAGAR DISTRICT

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Abstract

The goal of this study is to determine the importance of differences in Meta Cognition of B.Ed. Student in relation to their Decision Making in Virudhunagar District. The sample was drawn from the Virdhunagar district B.Ed. College students and was fitted with the normative survey approach. The investigator chose a sample from the population using a basic random sampling approach. A total of 300 B.Ed. students from Viurdhunar District were included in the study. The finding of result revels that there is significant difference between male and female B.Ed. college students in their meta cognition. The finding present study shows that there is significant difference between rural and urban college students in their metacognition. Rural B.Ed. students. The finding of result revels that There is significant relationship between metacognition and decision-making B.Ed. students. A very high (positive) linear relationship between metacognition and decision-making B.Ed. students.
Keywords: *Meta Cognition and Decision Making and B.Ed. Students.*

Introduction

Cognition is the study of mental processes underlying one's ability to perceive the world, remember talk about and learn from one's experiences, and modify out behaviour accordingly. It includes perception, memory, language and thought. Cognition is the product of top-down and bottom-up processes. Top-down processing refers to the influence of knowledge expectations on language perception and memory. Bottom-down processing is processing driven by an external stimulus. Cognitive functions are assumed to be modular that is to operate independently of each other. Metacognition is a very complex phenomenon. It refers to the cognitive control and monitoring of the cognitive processes; action, memory and reasoning. Metacognition is the knowledge of one's process and the efficient use of this awareness to self-regulate these cognitive processes (Brown, 1987). It is defined as knowledge and experiences of cognitive processes.

Metacognition

In the field of educational psychology, metacognition is an emerging concept. Metacognitive activities are there in every one's daily life. Metacognition enables an individual to become a successful learner. It is being association with intelligence. Metacognition refers to higher order of thinking which involves active control over the cognitive process engaged in learning. Activities such as planning how to approach a given learning task monitoring comprehension and evaluating process towards the completion of a task are metacognitive in nature. Metacognition refers to awareness of one's own thoughts. It has recently become a popular topic for theorizing and empirical research, and it is of interest

because it implies that models of teaching might be divided that lead to more effective learning than the general level currently attained in school both theory and research which are hampered by difficulties that have been encountered in defining metacognition and in assessing the degree of it in an individual.

Need for the Study

In this rapidly changing world the challenge of teaching is to help the students to develop skills which will not become obsolete. The teacher is a pivot of the educational system for the younger students. If the teachers are well educated and trained and if they are intellectually sound and take keen interest in their jobs, the success is ensured; but on the other hand, if they lack training in education or if they are not able to give their best to their job, the system is destined to fail. The teacher trainee has to put his heart and soul on the course. As the duration of the B.Ed programme is one year, the stress is more on the content than the development of attitudes, skills and competencies. All the teachers are facing the ongoing challenges of making their teaching more effective. Teachers must develop their skills to meet students educational needs during this training period itself. Metacognitive strategies are essential for the students of 21st century. Metacognition involves the knowledge of cognition and regulation of cognition. They will enable students to successfully cope with new situations. The teacher having metacognitive strategies can develop curiosity, critical thinking and creativity, initiative and self-determination among the pupils. Knowledge without thought is useless but thought without knowledge is empty. So, it is the main duty of a teacher to impact knowledge and also he should make his students to think and to think over his thinking and to act accordingly. Metacognition is one of the holy grains of education. People engage in a metacognitive activities every day. Metacognition enables us to be successful learners and it has been associated with intelligence. Metacognition literally means cognition about cognition or knowledge about knowing of learning. Metacognition is simply defined as “thinking about thinking”. Metacognition refers to one’s knowledge concerning one’s own cognitive processes and products or anything related to them. It is high order thinking which involves active control over the cognitive processes engaged in learning. Metacognitive activities help the teacher to determine how students can be taught to apply their cognitive resources through metacognitive control.

The metacognitive knowledge in compassed all the information about a proposal task that is available to a person. This knowledge guides the individual in a management of a task and provides information about the degree of success that he or she is likely to produce. The B.Ed college students have hypothetical thinking ability and they can solve any types of problem. Our decisions that determine the outcome of our lives. People forget the great power they hold within-that will shape their life and they ignore the importance of decision making. Well don’t be one of those underplaying the importance of being one of life’s decision makers. Our life is shaped by the choices we make. We are the one who chooses how to live our life or create our life’s path. So make the decisions which will take our life in the direction we require. “Success and failure are not overnight experiences. It’s the small decisions along the way that cause people to fail or succeed.” Anthony Robbins. Sometimes

we rush into making decisions and regret the choices we make. A hasty decision could lead to long term disappointment. So it's best you think through everything clearly, but don't delay to long, because sometimes we'll go past the point where our decisions matter. Our decision is final is an expression we hear a lot. This will help us to make decisions in align with our dreams. We should stop and examine the choices we make, evaluating them to determine they fit with our chosen path. Hence the researcher wants to know the decision-making style college students school students. Hence the conduct of the current study.

Statement of Problem

The area of the study selected by the investigator is "**Meta Cognition of B.Ed. Student in relation to their Decision Making in Virudhunagar District**"

Terms and Definitions

Metacognition

According to investigator, metacognition is a process that enables learners to take control of their own cognition, emotion and motivation. It includes knowledge of cognition and regulation of cognition. Knowledge of cognition refers to learners, acquired knowledge about their own cognitive processes. Regulation of cognition refers to learners' understanding and control of their cognitive processes.

Decision making style- refers to selection of a belief or a course of action among several alternative possibilities

B.Ed. Students

In this study B.Ed. students means the trainees undergoing the B.Ed. programme in colleges of Education affiliated to Tamil Nadu Teachers Education University, Chennai

General Objectives

1. To find out the level of metacognition of B.Ed. students.
2. To find out the level of decision making of B.Ed. students
3. To find out the significant differences, if any in metacognition of B.Ed. students with reference to background variables.
4. To find out the significant differences, if any in decision making of B.Ed. students with reference to background variables.
5. To find out the relationship metacognition and decision making of B.Ed. trainees

Null Hypotheses

Metacognition of B.Ed. Students

1. There is no significant difference between male and female B.Ed. trainees in their metacognition
2. There is no significant difference between rural and urban B.Ed. trainees in their metacognition.
3. There is no significant difference among arts, science and mathematics, commerce B.Ed. college students in their metacognition.

Decision Making of B.Ed. Students

1. There is no significant difference between male and female B.Ed. trainees in their Decision Making.
2. There is no significant difference between rural and urban B.Ed. trainees in their Decision Making.
3. There is no significant difference among arts, science and mathematics, commerce B.Ed. college students in their Decision Making.
4. There is significant relationship between metacognition and decision-making B.Ed. students.

Population for the Study

Population is the aggregate or totality of objects or individuals, who are proposed to be covered under the scheme of study. The population for the present study is college students in Virudhunagar district.

Samples for the Study

The sample is a small proportion of a population selected for observation and analysis. John. E. Conklin defines, "A sample is a representative group of people chosen from a large population". The investigator has used cluster sampling technique for selecting the sample from the population. The sample size is 300 students from 10 college in Virudhu Nagar district.

Tool used for Present Study

The tool used for the present study was

1. Personal Data form
2. Meta cognition scale
3. Decision making inventory

Statistics Technique

Data Analysis

Objective 1

To find out the level of Decision Making of B.Ed. Students.

Table 1 Level of Decision Making of B.Ed Students

Low		Moderate		High	
Count	**%**	**Count**	**%**	**Count**	**%**
82	27.3	143	47.7	75	25.0

It is inferred from the above table that, 27.3% of college students have low, 47.7% of them have moderate and 25.0% of them have high level of Decision

Inferential Analysis

Null Hypothesis: 1

There is no significant difference between male and female B.Ed. college students in their meta cognition.

Table 2 Difference Between Male and Female B.Ed. College Students in their Meta Cognition

Gender	N	Mean	SD	Calculated 't' value	Remarks at 5% level
Male	171	83.865	10.7741	5.774	**S**
Female	129	76.612	10.7677		

(At 5% level of significance, for df 298, the table value of 't' is1.96)

It is inferred from the above table that calculated 't' value (2.071) is greater than the table value (1.96) for df 298 and at 5% level of significance. Hence the null hypothesis is rejected. It shows that there is significant difference between male and female B.Ed. college students in their meta cognition.

Null Hypothesis: 2

There is no significant difference between rural and urban B.Ed. college students in their metacognition.

Table 3 Difference Between Male and Female College Studetns in their Meta Cognition

Locality of college	N	Mean	SD	Calculated 't' value	Remarks at 5% level
Rural	198	82.424	11.9382	3.643	**S**
Urban	102	77.490	9.2957		

(At 5% level of significance, for df 298, the table value of 't' is1.96)

It is inferred from the above table that calculated 't' value (3.643) is greater than the table value (1.96) for df 298 and at 5% level of significance. Hence the null hypothesis is rejected. It shows that rural students better than urban students in their metacognition.

Null Hypothesis: 3

There is no significant difference among arts, science and mathematics, vocational B.Ed. college students in their metacognition.

Table 4 Difference Among Arts, Science and Mathematics, Vocational College Students in their Meta Cognition

Variables	Sources	Sum of square	Degrees of freedom	Mean square	Calculate 'F' Value	Remarks at 5% Level
Metacognition	Between	2791.436	3	930.479	7.725	S
	Within	35651.310	296	120.444		
	Total	38442.747	299			

(At 5% level of significance, the table value of 'F' is 3.02)

The above table indicates that, at a 5% level of significance, the calculated "F" value (7.725) is better than the table value (3.00) for df (2, 297). As a result, the null hypothesis is disproved. It demonstrates that there are notable differences in the metacognition of vocational B.Ed. college students studying the arts, sciences, and mathematics.

Table 4 (A) Scheffe Test Showing the Significant Difference in Meta Cognition of B.Ed. College Students with Regard to Subject

Mean value of Decision making behaviour with respect to subject				
Arts	**Science**	**Mathematics**	**Commerce**	**Remarks**
78.09	78.32	-	79.56	-
-	-	85.06	-	*
-	-	-	-	-

*****The mean difference is significance at the 0.05 level.

The results of the Scheffe test reveal a substantial difference in the metacognition of B.Ed. college students studying mathematics compared to other subjects. However, there are no discernible differences in the metacognition of B.Ed. college students who study the arts and sciences. When comparing the mean values of mathematics and other disciplines, mathematics students do better on average than students in the other arts, sciences, and business subjects.

Null Hypothesis: 4

There is no significant difference between male and female B.Ed. college students in their Decision Making

Table 5 Difference between Male and Female B.Ed. College Students in their Decision Making

Gender	N	Mean	SD	Calculated 't' value	Remarks at 5% level
Male	171	81.579	9.0663	4.769	**S**
Female	129	76.868	7.6069		

(At 5% level of significance, for df 298, the table value of 't' is1.96)

The above table indicates that, for df 298 and at a 5% level of significance, the estimated 't' value (4.769) is higher than the table value (1.96). As a result, the null hypothesis is disproved. It demonstrates that male and female B.Ed. college students make decisions differently from one another.

Null Hypothesis: 5

There is no significant difference between rural and urban B.Ed. college students in their Decision Making.

Table 6 Difference between Male and Female College Students in their Decision Making

Locality of college	N	Mean	SD	Calculated 't' value	Remarks at 5% level
Rural	198	80.414	9.0739	2.386	S
Urban	102	77.882	7.9357		

(At 5% level of significance, for df 298, the table value of 't' is1.96)

The above table indicates that, for df 298 and at a 5% level of significance, the estimated 't' value (3.643) is higher than the table value (1.96). As a result, the null hypothesis is disproved. It demonstrates the stark differences in decision-making between college students from rural and urban areas.

Null Hypothesis: 6

There is no significant difference among arts, science and mathematics, commerce B.Ed. college students in their Decision Making.

Table 7 Difference Among Arts, Science And Mathematics, Vocational College Students in their Decision Making

Variables	Sources	Sum of square	Degrees of freedom	Mean square	Calculate 'F' Value	Remarks at 5% Level
Decision Making	Between	2481.534	3	827.178	11.926	S
	Within	20530.612	296	69.360		
	Total	23012.147	299			

(At 5% level of significance, the table value of 'F' is 3.02)

The above-mentioned table indicates that, at a 5% level of significance, the calculated "F" value (11.93) is greater than the table value (3.00) for df (2, 297). As a result, the null hypothesis is disproved. It demonstrates that there are considerable differences in decision-making among vocational B.Ed. college students majoring in the arts, sciences, and mathematics.

Table 7 (A) Scheffe Test Showing the Significant Difference in Decision Making of B.Ed. College Students with Regard to Subject

Mean value of Decision-making behaviour with respect to subject				
Arts	**Science**	**Mathematics**	**Commerce**	**Remarks**
-	75.61	-	-	-
-	-	79.64	79.56	-
84.16	-	-	-	*

***The mean difference is significance at the 0.05 level.

The Scheffe test result shows that there is significant difference between arts and others subject of B.Ed. college students in their Decision Making And also there is significant difference between science and Mathematics of B.Ed. college students in in their Decision Making. While comparing the mean value of arts and other subjects, the mean value of arts subject students are better than the other Mathematics, science and commerce subjects.

Major Finding

Percentage Wise Analysis

Meta Cognition of B.Ed. Students

1. 26.3% of college students have low, 45.7% of them have moderate and 28.0% of them have high level of meta cognition of B.Ed. Students.

Decision Making of B.Ed. Students

1. 27.3% of college students have low, 47.7% of them have moderate and 25.0% of them have high level of Decision Making of B.Ed. Students.

Interpretation and Discussion

The results show that male and female B.Ed. college students' metacognition differs significantly from one another. In terms of meta cognition, male B.Ed. students perform better than female B.Ed. students. It might provide more chances for the teachers' students to think, plan, and participate in all of these activities. This could aid teacher candidates in properly using and carrying out their cognitive techniques.

The results of this study demonstrate that college students from rural and urban areas differ significantly in their metacognition. In terms of metacognition, rural B.Ed. students perform better than urban students. This might be because rural universities tend to have more effort, more dedication, and more interest. The exposure from the materials mentioned above may benefit the students in improving their academic performance. Also, it has been discovered that students in rural areas are given better opportunities and encouragements to take part in various programmes including quizzes, debates, seminars, and symposiums..

The results of the Scheffe test indicate that there is a substantial difference in the metacognition of B.Ed. college students studying mathematics compared to those studying other subjects, and that there is no significant difference between those studying the arts and sciences. When comparing the mean values of mathematics and other disciplines,

mathematics students do better on average than students in the other arts, sciences, and business subjects. This might be as a result of the fact that students majoring in mathematics have practical knowledge of their subject matter. They can solve riddles, Sudoku, and other puzzles thanks to their problem-solving skills. This helped them think more clearly than those who majored in arts, science, and languages.

Decision Making of B.Ed. Students

The results of this study demonstrate that male and female B.Ed. college students make significant differences in their decision-making. Men B.Ed. students make better decisions than female students in this area. The fact that the male trainees genuinely enjoy reading books and using library resources may be the cause of this. They might be enthusiastic enough to grasp the ideas. This might be because the male trainee paid close attention to the lecture in the classroom.

According to the results of the current study, decision-making among B.Ed. college students in rural and urban areas differs significantly. In terms of decision-making, rural pupils perform better than urban students. This might be as a result of urban universities' potential for confidence, cooperation, team spirit, adjustment, and adoption in any circumstance. The exposure from the materials mentioned above may aid the kids in improving their academic performance. Also, it has been discovered that rural universities give their students better possibilities and incentives to participate in a variety of activities.

The decision-making of B.Ed. college students in the arts, sciences, and mathematics, as well as in commerce, varies significantly. The results of the Scheffe test reveal a considerable difference in the decision-making abilities of B.Ed. college students studying the arts compared to other subjects. Also, there are notable differences between B.Ed. college students' decision-making in science and mathematics. When comparing the mean values of arts and other subjects, arts students perform better than those in other subjects like math, science, and commerce. This may be because B.Ed. candidates studying arts subjects have a real interest in reading books and using library resources. They might be enthusiastic enough to grasp the ideas. Students who studied the arts took part in all college activities.

Correlation Analysis

There is significant relationship between metacognition and decision-making B.Ed. students. A very high (positive) linear relationship between metacognition and decision-making B.Ed. students.

Recommendations of the Study

On the basis of findings, the investigator has given the following recommendations to the educational administrators.

1. Create metacognitive environment in schools as well as in colleges. In creating a metacognitive environment, teachers should monitor and apply their knowledge deliberately, in modelling cognitive behaviours to assist students to become aware of their own thinking.

2. Metacognitive teaching strategies must be included in the teacher education programme.
3. Problem based and Project based methods must be given importance in teacher education programme.
4. The study of Decision Making Behaviour of college students should be part of syllabus.
5. Co-curricular and extracurricular activities should be encouraged to promote awareness of Decision Making Behaviour.
6. Teachers should provide opportunities for their students to become aware of Decision Making Behaviour.

Suggestions for Further Research

1. College students' learning preferences in relation to their capacity for reasoning may be the subject of a study.
2. Research on how metacognition and innovative teaching techniques affect higher secondary students' academic performance is possible.
3. Emotional intelligence and metacognition's effects on teacher candidates' use of technology in the classroom could be investigated.
4. It may be investigated how metacognition and computer science achievement of secondary teacher education students relate to one another.
5. Primary school teachers' ability to solve problems and the organisational climate may be examined.
6. A study on the academic success of higher secondary students' decision-making styles may be done.
7. Research on the engineering college students' metacognition and self-efficacy may be done.
8. The connection between higher-secondary students' metacognition and learning preferences

Conclusion

Metacognition explains both fast and slow decision-making methods. Rational style is positively explained by regulation of cognition. Knowledge about cognition effectively explains intuitive and impulsive behaviour. None of the metacognition elements can account for the two maladaptive styles.

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