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"A STUDY OF METACOGNITIVE ABILITY OF SECONDARY SCHOOL STUDENTS IN RELATION TO GENDER AND LOCALITY"

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ABSTRACT

The present study intends to examine the Meta cognitive ability of secondary school students in relation to theirself-concept, achievement motivation and social status. Investigator studied Belagavi district secondary school student's opinions in relation to Meta cognitive ability. The sample of the study consists of 400secondary school Xth standard students oftentalukas of Belagavi district. Investigator used Descriptive Survey method for the present study. Investigator used standard tool of meta cognition which is prepared by PunitGovil consists of 30 items on the scale established the validity and found the 'r' by test and re-test method with the help of Karl Pearson's Correlation Coefficient Method. The 'r' is highly reliable. And also used standard tool of self concept which is prepared by Dr.SP.Ahluwalia and Dr.Hari Shankar Singh, contains 80 statements.

Investigator personally visited the secondary schools of Belagavi district and collected data from the students. The differential statistics is used for the analysis of collected data.

The results of the study reveal that the Mean and SD of Meta cognitive ability scores by boy and girl students of secondary schools. The total mean score of meta cognitive ability of students of secondary school is 89.47±13.02. In which, the girl students (92.43±12.78) have higher Meta cognitive ability scores as compared to boy students (86.52±12.62). The Mean and SD of self-concept and its dimensions scores by boy and girl students of secondary schools is 57.25±9.23. In which, the boy students (58.77±8.85) have higher self-concept scores as compared to girl students (55.73±9.38).

KEYWORDS: *Meta cognitive Ability, self-concept.*

INTRODUCTION :

Education is the process of developing the capacities and potentials of the individuals. 'Good Education requires good Teachers' with the help of good teachers and their proficiency in teaching we can achieve in literacy, develop in academic achievement and quality education. The teachers should accept and adopt new techniques, methods and approaches in their teaching definitely it will help to academic achievement of the students. Academic achievement occupies a very help important place in education as well as in the

learning process. In considered as a key criterion to judge ones total potentialities and capacities. Academic achievement is influenced by personality, Motivation, opportunities, education and training. There are several other factors also which influence the academic achievement of students like Meta cognitive abilities, social status, personality adjustment, socioeconomic status, and study habits, Self-Concept,intelligence etc.

Meta cognitive ability enables us to be successful learners and has been associated with intelligence. Meta cognition refers to one's knowledge concerning one's own cognitive processes and products or anything related to them. Meta cognition also thinks about one's own thinking process such as study skills, memory capabilities and the ability to monitor learning. This concept needs to be explicitly taught along with content instruction. Meta cognition knowledge is about our own cognitive processes and our understanding of how to regulate those processes to maximize learning. Meta cognitionrefers to a level of thinking that involves active control over the process of thinking that is used learning situation. Meta cognition contains three skills that are: 1- Planning, 2-Monitoring, 3-Evaluating.Meta cognition is one of the latest buzz words in educational psychology. Meta cognition refers to higher order thinking which involves active control over the cognitive process engaged in learning. 'Meta cognition' is often simply defined as 'thinking about thinking'. Meta cognition has been linked with intelligence and it has been shown that those with grater Meta cognitive abilities fend to be more successful thinkers. UNESCO learning without frontiers-Meta cognition is thinking about one's thinking processes. It has to do with the active monitoring and regulation of cognitive processes. May 2003-Metacognition is defined in the Mayer text as knowledge and awareness of one's own cognitive processes.

Metacognition refers to higher order thinking which involves action control over the cognitive processes engaged in learning. Activities such as planning how to approach a given learning task, monitoring comprehension, and evaluating progress towards a completion of a taskare Metacognitive in nature.

2.NEED OF THE STUDY:

The study of Meta cognitive ability has provided educational psychologists with insight about the cognitive processes involved in learning and what differentiates successful students from their less successful peers. It also holds several implications for instructional interventions such as teaching students how to be more aware of their learning processes and products as well as how to regulate those processes for more effective learning. As students become more skilled at using metacognitive strategies, they gain confidence and become more independent as learners. Independence leads to ownership as students realize needs they can pursue their own intellectual needs and discover a world of information at their fingertips.

From the above discussion the relevance of Metacognitive ability seems to be very clear as it seems to be one of the predictors of successes in one's life career. Keeping the relevance of achievement in mind, a very relevant question arises. What are the various determinants which may most likely affect Metacognitive ability either negatively or positively? So keeping this the investigator selected this topic for the study.

3.OBJECTIVES OF THE STUDY:

1) To find out the Metacognitive ability of Xth standard students in relation to gender (Male and Female).
2) To find out the Metacognitive ability of Xth standard students in relation to locality (Rural and Urban).

4.HYPOTHESIS OF THE STUDY:

1) Boys and Girls of Xth standard students do not differ significantly with respect to Metacognitive Ability.
2) Rural and Urban studentsof Xth standard do not differ significantly with respect to Metacognitive Ability.

5.DESIGN OF THE STUDY:

Investigator used the Descriptive Survey method for collecting the opinions of 400 Xth standard students from secondary school of Belagavi district. Investigator used the random Sampling Technique for the selection of 400 samples in the present study. The secondary schools Xth standard students boys, girls, rural and urban who were belonging to the Kannada medium and English medium Schools of ten talukas of Belagavi district.

In the present study investigator used Descriptive Statistics and Differential Statistics for the analyses of the collected data.

Investigator used standard tool of Meta cognition inventory prepared by Punit Govil. The questionnaire which consists of 30 items. Investigator found that content validity of the tool using Karl Pearson's correlation coefficient the 'r' test and retest method. The 'r' of the tool is 0.7176 which is highly reliable. And also the investigator used standard tool of self-concept which is prepared by Singh. The questionnaire contains 80 statements.

6.DATA ANALYSIS AND RESULTS:

After the data had been collected, it was processed and tabulated using Microsoft Excel - 2007 Software. The data collected on Meta cognitive ability from students from secondary schools. Investigator intends to find the out whether differences in the independent variables namely, gender (Male and Female), location (Rural and Urban) with respect to Meta cognitive ability and self-concept from students of secondary schools and consequently others.

DESCRIPTIVE STATISTICS

In this section, the mean and standard values of Meta cognitive ability, self-concept scores are calculated according to gender (Male and Female), location (Rural and Urban)of students of secondary schools. Further, the mean and standard values Meta cognitive ability also calculated by low and high self-concept of students of secondary schools and presented in the following section.

Table: Mean and SD of Meta cognitive ability scores by boy and girl students of secondary schools

Summary	Boys	Girls	Total
n	200	200	400
Mean	86.52	92.43	89.47
SD	12.62	12.78	13.02

The above table represents the Mean and SD of Meta cognitive ability scores by boy and girl students of secondary schools. The total mean score of Meta cognitive ability of students of secondary school is 89.47±13.02. In which, the girl students (92.43±12.78) have higher Meta cognitive ability scores as compared to boy students (86.52±12.62). The mean scores are also presented in the following figure.

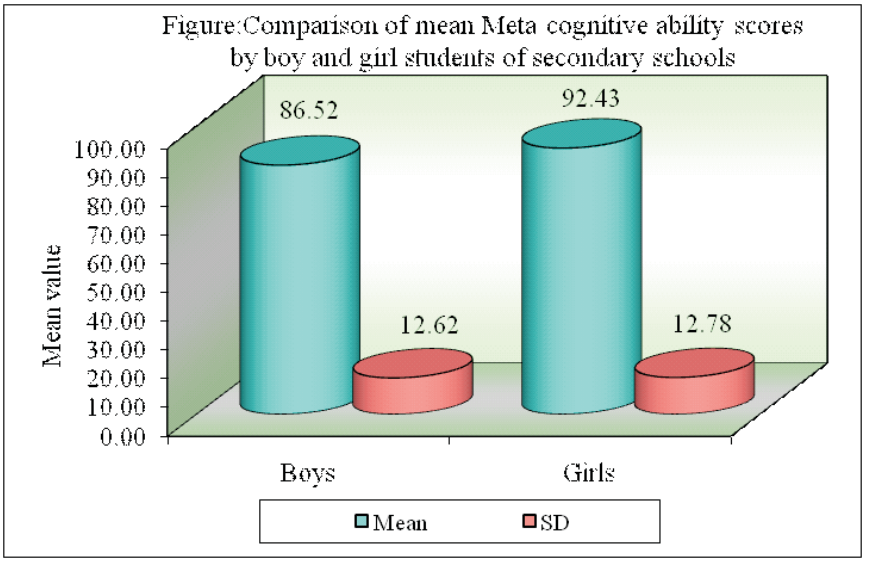
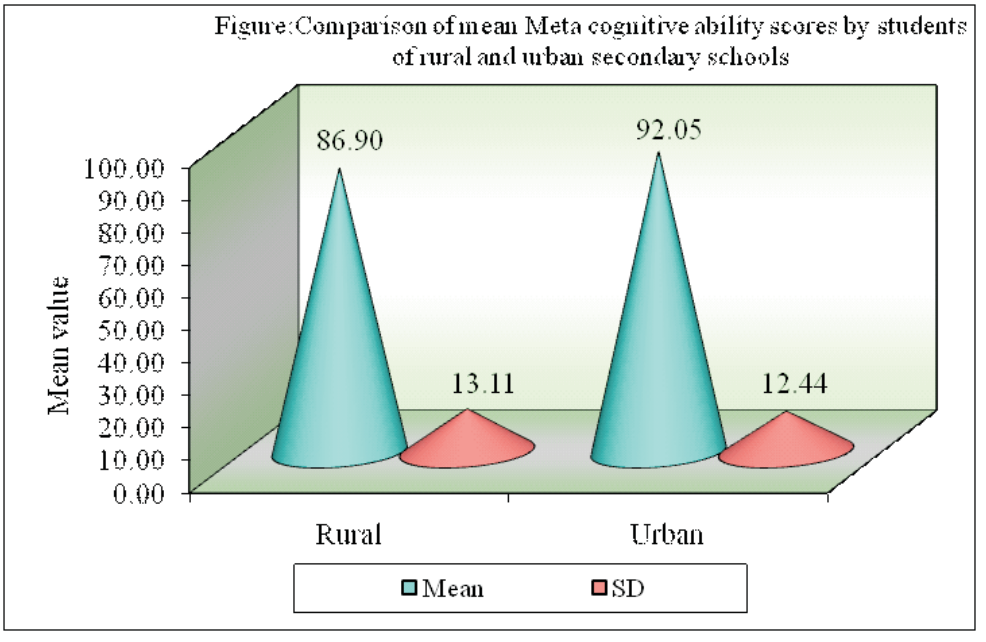


Table: Mean and SD of Meta cognitive ability scores by students of rural and urban secondary schools

Summary	Rural	Urban	Total
n	200	200	400
Mean	86.90	92.05	89.47
SD	13.11	12.44	13.02

The above table represents the Mean and SD of Meta cognitive ability scores by students of rural and urban secondary schools. The total mean score of Meta cognitive ability of students of secondary school is 89.47±13.02. In which, the students of urban secondary schools (92.05±12.44) have higher meta cognitive ability scores as compared to students of rural secondary schools (86.90±13.11). The mean scores are also presented in the following figure.



DIFFERENTIAL STATISTICS

In this section, we compared the different characteristics like gender (Male and Female), location (Rural and Urban), and mediums (Kannada and English) with respect to meta cognitive ability, self concept, achievement motivation and social status scores of students of secondary schools by applying independent t-test. Further, the interaction effects of self concept, achievement motivation and social status on Meta cognitive ability were calculated by applying the 2-way ANOVA followed Tukeys multiple posthoc procedures and presented in the following section.

1. Hypothesis:Boys and Girls of Xth standard students do not differ significantly with respect to Meta cognitive Ability scores.

To achieve this hypothesis, the independent t test was applied and the results are presented in the following table.

Table: Results of t test between boy and girl students of secondary schools with respect to Meta cognitive ability scores

Gender	Mean	SD	SE	t-value	P-value	Signi.
Boys	86.52	12.62	0.89	-4.6499	0.0001	<0.05, S
Girls	92.43	12.78	0.90			

The results of the above table clearly showed that, the boy and girl students of secondary schools differs significantly with respect to meta cognitive ability scores (t=-4.6499, p<0.05) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the girl students of secondary schools have significant higher meta cognitive ability as compared to boy students of secondary schools.

2.Hypothesis: Rural and Urban students of Xth standard do not differ significantly with respect to Meta cognitive Ability scores.

To achieve this hypothesis, the independent t test was applied and the results are presented in the following table

Table: Results of t test between students of rural and urban secondary schools with respect to meta cognitive ability scores

Location	Mean	SD	SE	t-value	P-value	Signi.
Rural	86.90	13.11	0.93	-4.0252	0.0001	<0.05, S
Urban	92.05	12.44	0.88			

The results of the above table clearly showed that, the students of rural and urban secondary schools differs significantly with respect to meta cognitive ability scores (t=-4.0252, p<0.05) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the students of urban secondary schools have significant higher meta cognitive ability as compared to students of rural secondary schools.

7.CONCLUSION:

The girl students of secondary schools have significant higher Meta cognitive ability as compared to boy students of secondary schools.The girl students of secondary schools have significant higher self-concept scores as compared to boy students of secondary schools.

The girl students have higher self-concept scores as compared to boy students of secondary schools. The students of urban secondary schools have significant higher Meta cognitive ability as compared to students of rural secondary schools. The students of urban secondary schools have significant higher self-concept scores as compared to students of rural secondary schools

The students of urban secondary schools have significant higher self-concept scores as compared to students of rural secondary schools.

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