

A STUDY ON THE PROBLEM SOLVING ABILITY AND ACADEMIC ACHIEVEMENT OF HIGHER SECONDARY SCHOOL STUDENTS IN CHENNAI DISTRICT

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Abstract

The present investigation was under taken for higher secondary school students studying in 11th Standard. Problem solving is a skill and a process. As a tool, it is helping you to solve a problem or achieve a goal. Survey method is applied in this study. Researcher has used simple random sampling technique and mean, S.D., *t* value and correlation were computed for gender and locality of the school of the students. The findings of the study are, there is no significant difference between boys and girls in respect of problem solving ability at higher secondary level students. There is no significant relationship between gender of academic achievement and problem solving ability at higher secondary level students.

Keywords: Problem Solving Ability, Academic Achievement, Higher Secondary Students.

INTRODUCTION

Problem solving is a skill and a process. As a tool, it is helping you to solve a problem or achieve a goal. As a skill, you can use it repeatedly throughout your life. And as a process, it has a number of steps. It is common for problems to arise when you are working towards a goal and encounter obstacles along the way. Students usually have many and varied goals. Both related to school and other areas of their lives, and it is likely that you will encounter barriers to your success at times. As these barriers are encountered, problem solving strategies can be used to help you overcome the obstacle and achieve your goal. With each use of problem solving strategies, these skills become more refined and integrated so that eventually their use becomes second nature.

STATEMENT OF THE PROBLEM

"A Study on the Problem Solving Ability and Academic Achievement of Higher Secondary School Students in Chennai District".

OBJECTIVES

1. To study the significant difference between Boys & Girls higher secondary school level students in problem solving ability.
2. To study the significant relationship between Gender of Academic Achievement and Problem Solving Ability at Higher Secondary level Students.

HYPOTHESIS

H₀₁: There is no significant difference between Boys and Girls in respect of Problem Solving

Ability at Higher Secondary level Students.

H₀₂: There is no significant relationship between Gender of Academic Achievement and Problem Solving Ability at Higher Secondary level Students.

LIMITATION

- ❖ This study includes only 11th std. students of Chennai District.
- ❖ The present study is for Tamil and English medium schools only.

SAMPLE

In this study, the students of std. XI of higher secondary school of Tamil Nadu of Chennai city are the population of the study. The sample in this study has been selected by the 'Simple Random Sample technique'. In sampling 150 higher secondary school students have taken.

RESEARCH TOOL

In this study, the standardized problem solving ability scale and developed by Investigator is used for this study. This test has been divided into three parts, i.e. intelligence, reasoning ability and mathematical ability. There are totally 20 statements in these three parts of the test. The reliability coefficient of this test is 0.78. Academic achievement test is marks obtained in XI class of state board, Aided and Matriculation for assessing the achievement of higher secondary level students.

DATA ANALYSIS METHOD

To analyze the score obtained on problem solving ability scale and academic achievement test, Mean, standard Deviation (SD) were found on the basis of the scores. t-test and correlation was applied to examine the effects of gender and locality of the school on problem solving ability score and academic achievement score.

TESTING OF HYPOTHESIS

H₀₁: There is no significant difference between Boys and Girls in respect of Problem Solving Ability at Higher Secondary level Students.

Table-1

Gender	N	Mean	S.D.	't' Value	Remarks
Boys	75	31.20	6.55	1.90	Not significant at 0.05 level
Girls	75	32.25	7.05		

From the table, it is found that the significant 't' value 1.90 which is less than the table value 1.96 at 0.05% level of significance. There is no significant difference between Boys and Girls in respect of Problem Solving Ability at Higher Secondary level Students.

H₀₂: There is no significant relationship between Gender of Academic Achievement and Problem Solving Ability at Higher Secondary level Students.

Table-2

Variables	N	'r' Value	Remarks Significance At 0.01 Level
Academic Achievement and Problem Solving Ability Boys	149	0.15	Significance at 0.01 Level
Academic Achievement and Problem Solving Ability Girls	200	0.16	Significance at 0.01 Level

From the above table shows the significant r-value Academic achievement and Problem Solving Ability boys score, 0.15, Academic Achievement and Problem Solving Ability girls score, 0.16,

which is the greater than the table value 0.16 at 0.01% level of significance. Hence, the null hypothesis "There is no significant relationship between Gender of Academic Achievement and Problem Solving Ability at Higher Secondary level Students" is not accepted.

FINDINGS

- ❖ There is no significant difference between Boys and Girls in respect of Problem Solving Ability at Higher Secondary level Students.
- ❖ There is a significant relationship between Gender of Academic Achievement and Problem Solving Ability at Higher Secondary level Students.

EDUCATIONAL IMPLICATION

The present study has marked out some problem solving ability varieties which were found associated positively or negatively with problem solving ability. They may, it is hoped he found to provide more practical and rational beat for teachers to spot out the students with high number of achievement and provide suitable pleasant surroundings which may help in developing this motivation in their students.

CONCLUSION

This research can give a wider and original field in the educational psychology. Instructional strategies which stress problem solving such as problem method, Projects and Brain storming can be promoted among students.

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