

A Study on Problem-solving Ability among Higher Secondary School Students in Aizawl City in Relation to Locale and Type of School Management

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Abstract:

This study was conducted to study the problem-solving abilities among higher secondary school students in Aizawl city. The sample consists of 160 students from six different Higher Secondary Schools in Aizawl city in which three schools are Government schools and the other three are Private schools. Problem-solving ability test (PSAT) developed by L.N.Dubey was used as a tool for data collection. The findings of the study revealed that there was no significant difference between urban and rural higher secondary school students in their problem-solving abilities; and there was no significant difference between arts and commerce higher secondary school students.

Keywords: Problem-solving ability, higher secondary students, Aizawl city, locale, type of school management, stream of study.

INTRODUCTION

Problem solving involves the application of principles and facts to explain and solve new phenomena or predict consequences from known conditions. Problem-solving ability is the process of finding solutions to difficult or complex issues. Bala and Shaafiu (2016) stated that problem-solving ability can be developed in students to help them effectively deal with problems that they faced daily. The ability involves critical thinking skills, analytical skills, creative thinking ability and logical reasoning of the student towards a problem that is presented in current situation or within their daily life. When children are presented to problems in classrooms, it is crucial that they are able to identify or define the problem, to determine the cause of it, to select the alternatives for the solution and implement it. Besides school environment, problem-solving abilities become a part of daily life both as individuals and organizations. This problem solving ability enables the students to believe in their ability to think mathematically. It fosters the child's mind to organize their time intelligently, prioritize, plan and execute strategies that are helpful for the problem solving. It enhances students to develop better social and situational awareness too.

RATIONALE

Problem Solving ability is the ability of the students to analyse and to solve the problems. It is the ability of the students to adjust themselves in every situation and it helps the students to know what is the problem and how to solve it. Thus, to find out the level of Problem Solving ability of the students is very important that the Problem Solving ability helps the students in their thinking skills to approach various problems in their life and in their studies. Gender is the burning issue in today's world. There is a big competition between male and female in education, job, and other professions. So, to make the comparison between male and female in Problem Solving ability will be very interesting.

OBJECTIVES

1. To study the relationship between urban and rural students of higher secondary school on the level of problem-solving ability.
2. To study the relationship between the Government and Private higher secondary school students on the level of problem-solving ability.

NULL HYPOTHESES

1. There is no significant difference between the Problem Solving ability of urban and rural students of higher secondary school in Aizawl city.
2. There is no significant difference between the Problem Solving ability of government and private higher secondary school students in Aizawl city.

RESEARCH METHODOLOGY

Method of Study: Descriptive survey method was adopted to study the level of Problem- Solving ability of higher secondary school students in Aizawl city.

Population and Sample: The population of the study comprise of all the class XI students from higher secondary schools in Aizawl city. The sample of the study consisted of 160 students of Class XI from six higher secondary schools in Aizawl city.

Tools: The investigator used the Problem-Solving Ability Test (PSAT) designed by L.N. Dubey.

Data Analysis: The collected data were analysed using statistical techniques like mean, percentage and standard deviation. For the comparison of the variables, t-test was used.

ANALYSIS AND INTERPRETATION

1. Comparison between urban and rural students of higher secondary school in their problem - solving ability.

To compare the Problem-Solving ability of urban and rural students, the mean and standard deviation were calculated and the mean differences were tested by using the t test. The details are given in the table below:

Table 4.4.1. Comparison of Problem-Solving ability of urban and rural students

School	N	Mean	SD	t-value	Level of Significant
Urban	107	7.95	2.79	0.98	Not Significant at 0.05 level
Rural	53	7.51	2.74		

The above table shows the result for the comparison between urban and rural students of higher secondary schools in their level of Problem Solving ability. The table shows that the calculated t-value 0.98 is smaller than the critical value at 0.05 level of confidence.

Therefore, the null hypothesis no. 1, “there is no significant difference between the Problem Solving ability of urban and rural students in Aizawl city” is accepted. This finding shows that urban and rural students of higher secondary school do not significantly different in their Problem Solving ability.

2. Comparison between the Government and Private higher secondary school students on the level of Problem -Solving ability.

To compare the Problem-Solving ability of Government and Private higher secondary school students, the mean and standard deviation were calculated and the mean differences were tested by using the t test. The details are given in the table below:

Table 4.3.1. Comparison of Problem-Solving ability of government and private students

School	N	Mean	SD	t-value	Level of Significant
Government	37	6.97	2.42	2.32	Significant at 0.05 level
Private	123	8.06	2.83		

The above table shows the result for the comparison between government and private students of higher secondary schools in their level of Problem-Solving ability. The table shows that the calculated t-value 2.32 is higher than the critical value at 0.05 level of confidence.

Therefore, the null hypothesis no. 2, “there is no significant difference between the Problem-solving ability of government and private higher secondary school students in Aizawl city” is rejected. This finding shows that Problem-Solving ability level of government and private higher secondary school students are significantly different.

FINDINGS

1. There is no significant difference between the Problem-Solving ability of urban and rural students in Aizawl city. Thus, urban and rural students do not differed significantly in their Problem Solving ability.
2. There is significant difference between the Problem-Solving ability of government and private higher secondary school students in Aizawl city. Therefore, Government and private school students are differed significantly in their Problem-Solving ability.

CONCLUSION

From the study conducted, it can be concluded that the students of urban and rural in Aizawl city was found to have no significant difference in their problem-solving abilities. However, a significant

difference was found among the problem-solving abilities of the students belonging to private and government higher secondary schools, where findings revealed that the students belonging to government and private schools have differed significantly in their problem-solving abilities. The problem-solving ability is very important for the students to improve in their studies and in their life. Thus, we may need to upgrade our teaching methods to enhance the understanding level of the students; so that the students can have better problem-solving ability.

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