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A STUDY ON PROBLEM-SOLVING ABILITY AMONG STUDENTS OF GOVERNMENT HIGHER SECONDARY SCHOOL OF AIZAWL CITY IN RELATION TO THEIR ACADEMIC ACHIEVEMENT

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Abstract: The aim of this research is to study the Problem-solving ability in relation to Academic Achievement among students of Government Higher Secondary School in Aizawl city. For this purpose, the samples were selected from different Government Higher Secondary School within Aizawl City. The sample consisted of 90 students out of which, 45 were male and 45 were female. Problem-solving Ability Test (PSAT) developed by L.N. Dubey was used as a tool for data collection. Simple percentage method and Pearson Product Moment method were used to analyze the data. The level of Problem-solving ability of Government Higher Secondary School students was very low. The level of Academic Achievement was found average. The findings of the study revealed no correlation between Problem-solving ability and Academic Achievement of Government Higher Secondary School students.

Index Terms - Problem-solving ability, Academic Achievement, Higher Secondary School

I. INTRODUCTION

Problem-solving is mostly the implementation of imaginative mindset and logical ideas in order to solve and comprehend a particular situation. Efficient problem solvers are equipped with the ability of foreseeing possible threats so as to ease the resultant effects of such threats. Problem-solving abilities are associated with a number of other skills. Academic Achievement is one of the most important aspects of a student entire school life. It shows the overall performance of how well the student has performed or how low the student has performed. Academic Achievement generally means that a performance outcome that an individual has accomplished specific goals through the different activities in school. School activities may be scholastic and co-scholastic areas.

II. RATIONALE OF THE STUDY

The kinds of achievements earned by the students differ to each other. Differences in their achievement are thought to be affected by the differences in the ability of an individual. Most of the adolescents in the study area access schooling at the Secondary and Higher Secondary level and these groups of students have different level of Academic Achievements in their school record. The differences in the level of Academic Achievement are thought to be affected by the differences in the ability of Problem-solving. It is necessary to study the relationship between Problem-solving ability and Academic Achievement of an individual.

From the above mentioned, we can clearly know that the needs of the study regarding students' Problem-solving ability and its relationship with the academic achievement is essential in the secondary level education. Furthermore, there were no such research conducted recently in the study area regarding the correlational study between Academic Achievement and Problem-solving ability among Higher Secondary students.

III. OBJECTIVES OF THE STUDY

The study is conducted keeping in view the following objectives:

- 3.1 To investigate the level of Problem-solving ability of Government Higher Secondary School Students in Aizawl City.
- 3.2 To find out the Academic Achievement of Government Higher Secondary School Students.
- 3.3 To find out the relationship between Problem-solving ability and Academic Achievement of Government Higher Secondary School students

IV. METHODOLOGY

- 4.1 **Research design:** Descriptive Survey method was employed by the investigator.
- 4.2 **Tools used:** Problem-solving Ability Test PSAT developed by L.N. Dubey.
- 4.3 **Population and sample:** The population includes all Class XII students from Government Schools in Aizawl City area. Ninety students from three Government Higher Secondary School were selected as the sample of the study.
- 4.4 **Mode of data collection:** The investigators asked the permission from the Principal of various Higher Secondary Schools by explaining the purpose of the study. After getting the permission, the investigator administered the test in group with sufficient environment.
- 4.5 **Procedure of data analysis:** The following statistical techniques are used by the investigator- Mean is used for describing the central tendency. Pearson Product Moment Correlation is used to find out the relationship between Problem-solving ability and Academic Achievement

V. ANALYSIS AND INTERPRETATION

5.1 To investigate the level of Problem-solving ability of Government Higher Secondary School Students in Aizawl City.

In order to find out the level of Problem-solving ability of Higher Secondary School students in Aizawl city the scores obtained from the scale are analyzed and interpreted in accordance with the norms provided in the manual of the scale and the finding are presented in the following table:

Table 1 : Level of Problem-solving ability of Higher Secondary School students

Sl.no	Level of Problem-solving Ability	No. of students	Percentage
1.	Very high Ability	0	0
2.	High Ability	0	0
3.	Average Ability	6	6.67
4.	Low Ability	4	4.44
5	Very low Ability	80	88.89

Analysis of the above table No. 1 shows that there are no students who score very high and high Problem-solving ability. Among 90 students, 6.67 % of the students have Average Ability of Problem-solving ability while 4.44 % of the students have low ability. Majority of the students comprising of 88.89 % have Very low ability of Problem-solving ability.

5.2. To find out the Academic Achievement of Government Higher Secondary School Students.

The levels of Academic Achievement of the students were measured from their marks recorded from the final examination result of the previous class. Values of mark were separated to different levels. The score of each student were counted and tabulated to the corresponding levels of Academic Achievement.

Table No. 2 : Academic Achievement of Higher Secondary School Students

S/No	Academic Achievement Level	Score Range	No. of Students	Percentage (%)
1	Distinction	75 and above	2	2.22
2	First Division	60 – 75	29	32.22
3	Second Division	50 – 60	39	43.33
4	Third Division	33-50	20	22.23
5	Fail	33 and below	0	0

From the above table no 2, it was found that the largest group of students comprising of 43.33% of the total sample passed in Second Division. There are 20 students who passed in Third Division and 29 students in First Division. There were only two students who passed in Distinction getting more than 75% marks in their examination.

5.3 Relationship between Problem-solving ability and Academic Achievement of Government Higher Secondary School students within Aizawl City.

To find out the relationship between Problem-solving ability and Academic Achievement of Government Higher Secondary School students, the scores of Problem-solving ability and Academic Achievement of each student were analyzed using Pearson Product Moment Correlation.

Table No. 3 : Relationship between Problem-solving Ability and Academic Achievement of the Students

Variables	N	Correlation
Problem-solving Ability	90	0.09
Academic Achievement	90	

The correlational test result from the above table no. 3 shows co relational coefficient is 0.09. The correlation value falls under negligible correlation which means relationship between the Problem-solving ability and Academic Achievement of Government Higher Secondary School students of Aizawl City, is found to be very low almost zero.

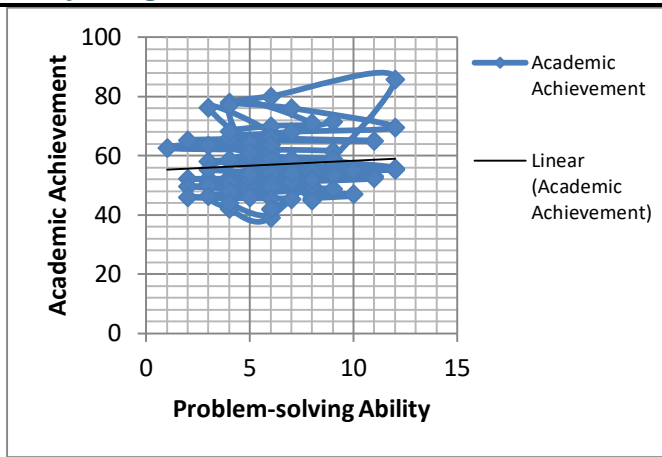


Figure 1 : Scattered diagram on Problem-solving ability and Academic Achievement

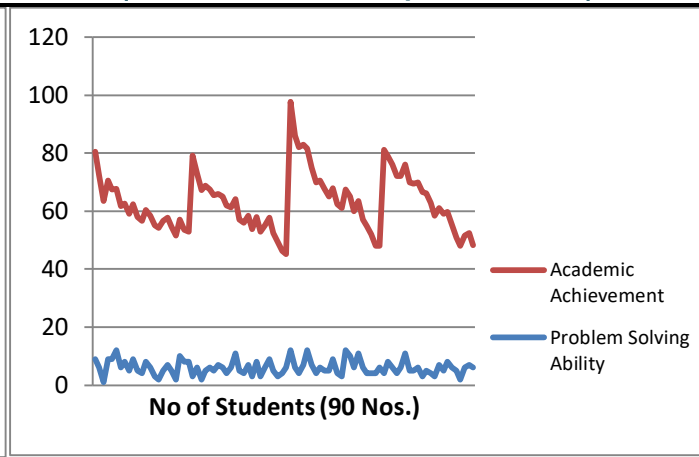


Figure 2 : Line graph showing the correlation of Problem-solving ability and Academic Achievement

VI. MAJOR FINDINGS OF THE STUDY

- 6.1 Average score on Problem-solving ability test is 6 which lie on the level of Very Low Ability according to the interpretation given by L.N. Dubey. Most of the students, 80 out of 90 students were under the level of very low ability of Problem-solving ability. There are no students in the level of very high and high ability. Therefore, students of Government Higher Secondary School in Aizawl City were not good in Problem-solving ability.
- 6.2 Average score on Academic Achievement is 56.99 which is second division. The level of Academic Achievement of Government Higher Secondary School students in Aizawl City is average.
- 6.3 There is no relationship between Problem-solving ability and Academic Achievement among higher secondary students of Government school.

VII. DISCUSSION AND CONCLUSION:

The study revealed that the level of Problem-solving ability is low among Government Higher Secondary School students in Aizawl city. There can be many reasons and factors which influence this result. This could be because of the practice of rote memorization rather than comprehension. According to the investigation of Academic Achievement, the result is average. Most of the students in Government school students comes from middle class family and also from rural area. Lack of supervision in their home education may be the reason of not scoring higher academic record. Individual difference can be seen in the Problem-solving ability test as well as Academic Achievement. Here, the result also provides us clear data that there is a difference in ability of Problem-solving and Academic Achievement among Government Higher Secondary School students. It can also be discussed that the implementation of Integrated Evaluation Scheme (IES) in Mizoram Board at secondary level results in variation of the academic performance of the students since it measured both scholastics and co-scholastic areas in a cumulative method.

Problem-solving and Academic Achievement is an important aspect in learning. Problem-solving ability is the skills and ability to perform thinking and reasoning process in a certain complex situation where Academic Achievement shows the overall performance of how well the students performed or how low the student has performed. In this study, it was found that the level of Problem-solving ability of Higher Secondary School student is very low whereas level Academic Achievement is found to be average. In addition to these, there is no relationship between Problem-solving ability and Academic Achievement among students of Govt. Higher Secondary Schools.

REFERENCES

- Behra, B. (2009). Problem-solving skills in mathematics learning. *Edutracks*, 8(7), 34.
- Das, S.K., Halder U.K., & Mishra, B. (2014). A study on academic anxiety and Academic Achievement on secondary level school students. *Indian Streams Research Journal*, 4 (6),1-5.
- Dandagal, S.N., & Yariswami, M.C. (2017). A study of intelligence in relation to Academic Achievement of secondary school students. *International Journal of Advanced Research in Education and Technology*, 4(3), 7-10.
- Dev, M. (2016). Factor affecting the Academic Achievement: A study of elementary school students of NCR Delhi. *Journal of education and Practice*, 7 (4), 70-74.
- Dubey, L.N. (2015). *Manual for Problem-solving Ability Test-D (English Version)*. Agra, India: National Psychological Corporation.
- Kumari, J. (2016). A study on Problem-solving ability of senior secondary school students. *Edutracks*, 15(7), 21-23.
- Mangal, S.K. (2010). *Advanced educational psychology*. (2nd ed.). Delhi, India: PHI learning.
- Manohara, J.L., & Ramganes, E. (2009). Creative Problem-solving ability of standard XI students, *Edutracks*, 9(4), 29-31.
- Singh, P., & Gopalkrishnan, V.S. (2017). Effect of gender on Problem-solving skills through integrated teaching program. *Edutracks*, 17, 37-40. Doi:10.21474/IJAR01/5842.