

**A STUDY OF PROBLEM-SOLVING ABILITY IN GOVERNMENT AND PRIVATE  
SCHOOLS OF CHANDIGARH**

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**ABSTRACT**

*The aim of the study was to investigate the problem-solving ability of the government and private school students and to find out the statistical difference if any among them. Data were collected from stratified randomly selected 200 students from two government schools and two private schools of Chandigarh. The standardized tool used to conduct the research was the Problem-Solving Ability test by L. N. Dubey (2010). Findings of the research showed that private schools have better problem-solving ability than government schools. Study also revealed that girls are less capable in solving problems as compare to boys.*

**Key Words: Problem Solving Ability, Type of school, Boys and Girls.**

**INTRODUCTION**

Problem solving is the process of deleting those difficulties that target to destroy the attainment of the goals made by an individual to succeed in life. Hard problems require effective attempts of solution, until the victorious solution is end up at problems. It is a substructure within which a person polishes its creative mind to learn to delete those complications that cause depression, stress, and anxiety and prepare an individual to handle them to stride. Pollack (1997) clarified that “problem solving sometimes involves repeated routine exercise to achieve fluency with specific technique and subsequently solving problem that are problematic”. Dubey (1997) defined that “problemsolving is the framework or pattern within which creative thinking and reasoning takes place. It is the ability to think and reason on given level of complexity”.

**PHASES OF PROBLEM SOLVING**

- (a) Confrontation of the Problem: it is initiated by the felt need or trouble in surroundings which sounds for an answer. The meeting with the trouble may be due to two reasons, someone else has created that problem for an individual or the individual himself has called that trouble.

- (b) Search for Solution: an individual starts analysing the situation, tries to identify the difficulty. Some hypotheses are formulated that guides an individual to find out tentative solution for problem. Various primary and secondary sources help to delete that trouble to attain goals.
- (c) Solution of the problem: it is that point when final solution of the trouble occurs in a flash of innovation, yet the continuation of trials, though not suddenly successful, must have cover the way for it.
- (d) Verification: Testing of hypotheses is search for the difficulty. The elaboration of detail, as for instances, in case of new design, pattern requires for new machinery to find out another effective solution. Final testing may lead to introduction of few replacements in original device.

Facts and concepts are practical for publishing a problem, strategies, ideas, sequence of thoughts are required for an effective solution. Procedures are required for formulating of hypotheses and plan. Self-realisation and strong belief are also important for the process of adopting right kind of mindset.

So, problem solving ability requires a correct order that includes identifying the problem, defining the problem, forming of strategy, organizing information, allocating of resources, monitoring progress, evaluating the results, facts, concepts, strategies, procedures and beliefs.

### **OBJECTIVES OF THE STUDY**

1. Understand the problem-solving ability of the school students.
2. To investigate the difference in the problem-solving ability of the government and private school students.
3. To find out the difference in problem solving ability of the boys and girls studying in government and private schools.

### **HYPOTHESES OF THE STUDY**

The following null hypotheses were tested in this descriptive study:

1. No significant difference exists in the problem-solving ability of the government and private school students.
2. No significant difference exists in the problem-solving ability of the boys and girls studying in government and private schools.

### **RATIONALE OF THE STUDY**

A problem in environment calls for a solution and identifying that problem is not always as simple as it sounds. Sometimes people mistakenly identify wrong source of a trouble that leads them to useless attempts. After matriculation exams, students are worried about their future because many options are available in front of them and they have to choose very wisely. Proper forming of strategy and organising information for appropriate solution is required. Many resources like money, time, and knowledge are required for avoiding failure to solve the problem. At this stage, problem solving ability of the student monitor their progress that helps to evaluate their success. Many studies,(Kaur (2014), Lahon (2015), Talukdar (2017), Rashmitha and Jasmine (2018), Rasool (2018), Maheta (2019)), revealed that private schools have better school environment and they outshine in academics than government schools. So, it can be assumed that Private schools and Government schools have different approach of solving problems. The different manner of problem solving followed by private and government schools may be due to resources they received or may be due to their other ability differences. To explore this, the present study was planned to find the difference in problem solving ability of the students with regards to type of school i.e. private school v/s government school.

#### **SAMPLE OF THE STUDY**

Stratified random sampling technique was used by the researcher for recruiting the sample. The sample included 200 students (100 boys and 100 girls) of IX class studying in 2 government schools and 2 private schools. Each school comprises 50 students (25 boys and 25 girls).

#### **DESIGN AND STATISTICAL METHODS USED FOR THE STUDY**

Descriptive research method was adopted to gather the data from the sample. For outcome of the study, parametric statistical methods were practiced. An inferential statistic i.e. t-test was applied to draw out the statistically significant difference between the means of two independent groups and descriptive statistics were implemented to extract mean and std. deviation values.

#### **TOOLS EMPLOYED**

Problem Solving Ability Test by L.N. Dubey (1971), National Psychological Corporation was employed for collecting the data. This test consists of 20 multiple choice questions with the duration of 40 minutes to complete. The value of reliability of the test derived from split half method was -.782 and with rational equivalence method was -.768. The coefficient of

validity was -.682 and -.852 that was calculated by correlating the scores with Group Intelligence Test (R.K. Tondon, 1968) and Test of reasoning Ability.

**STATISTICAL HYPOTHESES TESTING**

**A) Testing of hypothesis -1**

H01: No statistically significant difference exists in the problem-solving ability of the government and private school students.

**Table-1 showing statistical difference between Government and Private schools on the variable Problem-Solving Ability**

Variable	Type of school	N	Mean	Std. Deviation	t-value (df=198)
Problem Solving Ability	Govt.	100	12.36	2.11	2.54*
	Private	100	13.12	1.89	

**Note: \* significant at .05 level**

**Results and Discussions**

Entries made in table -1 show that the mean scores of Government and Private schools on the variable problem solving ability are respectively 12.36 and 13.12 with standard deviation 2.11 and 1.89. The mean scores clearly indicate that private school students have better problem-solving ability in comparison to government school students. It may be due to reasons that private schools charge high fees and provide better resources to their students; private schools have better school environment, tools, every individual has great access to the resources which helps them to attain their goals. In contrast government schools charge very less fees or free education, so sometimes concerned authority unable to provide proper resources to their students. Another reason is that teachers and students also face some kind of political interference that actually hinders the progress of the students and they fail to polish their actual skill. The calculated t- value between the mean score of government and private school students for the variable problem-solving ability is 2.54\* at 198 degree of freedom which is significant at .05 level.

The received results are in agreement with other studies conducted by Kaur, 2014; Lahon, 2015; Talukdar, 2017; Rashmitha and Jasmine, 2018; Rasool, 2018; Maheta, 2019. These

studies showed that private schools have better psychological construct to handle problems and achieving goals as compared to government schools.

Hence, Hypothesis H01: “There is no statistical significance difference in the problem-solving ability of the government and private school students” stands rejected.

**A) Testing of hypothesis - 2**

H02: “There is no statistical significance difference in the problem-solving ability of boys and girls studying in government and private schools”.

**Table-2 showing statistical difference between boys and girls studying in government and private schools on the variable Problem-Solving Ability**

Variable	Gender	N	Mean	Std. Deviation	t-value (df=198)
Problem Solving Ability	Boys	100	13.06	2.05	2.24*
	Girls	100	12.41	1.88	

**Note: \* significant at .05 level**

**Results and Discussions**

Entries made in table -1 show that the mean scores of Government and Private schools on the variable problem solving ability are respectively 13.06 and 12.41 with standard deviation 2.05 and 1.88. The mean scores clearly indicate that boys have better problem-solving ability against girl students. Many reasons occurred because people hold prejudices, stereotyped thinking, and discrimination practices. Gender socialdistance is accepted beliefs about two sexes, for example numerical, mechanical abilities are stronger in boys, whereas artistic skill, aesthetic skills are more outstanding in girls. So, problem solving ability is not determined by biological factors but some other factors might be responsible for polishing skills among girls. Home environment and social environment are major factors for influencing the problem-solving capacity. Major consideration is that gender has an important role in playing different roles. Society delimits the skills of the girls due to various unexplained point that actually lock the capabilities of the girls as compare to boys. The calculated t- value between the mean score of boys and girls in government and private schools for the variable problem-solving ability is 2.24\* at 198 degree of freedom which is significant at .05 level.

The results are in agreement with other studies conducted by Battista, 1990; Gallagher and Delisi's, 1994; Fennema et al., 1998; Gallagher et al, 2000, Astur, Purton, Zaniewski, Cimadevilla and Markus(2016), Mefoh, Nwoke, Chukwuorji and Chijioke(2017). These studies showed that boys tended to use more abstract strategies and be more flexible in implementing strategies on extension problems than school girls. In contrast Cakir (2017), Sebastian (2017) and Jakhar (2019) indicated no significant difference in problem solving ability among boys and girls.

Hence, Hypothesis H02: "There is no statistical significance difference in the problem-solving ability of boys and girls studying in government and private schools".

### **Educational Implications and Conclusion**

The important implication of the study is high demand of private schools instead of government schools. Demand leads to destruction of middle-class talents. Government schools have less resource and due to which they are unable to polish the talents of their students. So proper resources should be available in government schools like, libraries, Laboratories, vocational subjects' rooms, play grounds, scholarship provisions, organisation of trips and competitions. Government schools also try to avoid different groups on the basis of their abilities and tell students that they are average, above average or excellent. Students already receive very understandable message from these kinds of groupings that diminish their power to solve problems. Government schools should create mastery-oriented classrooms first and teach accordingly. These mastery-oriented classes will perk up students' performance to face different situations, change their psychology and help them to remove anxiety, stress experiences.

This study also guides that teachers and society must break stereotyped thinking on the basis of demographic differences and motivate girls to perform equal in each activity so that they can improve their problem-solving ability. Educators should understand that innate ability doesn't always a hurdle for good problem-solving ability but sometimes reinforced by differential treatment by teachers and hold high prejudices threats.

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