

Problem Solving Ability among Hindu and Muslim College Students

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ABSTRACT

The purpose of this study was to compare the problem solving ability among Hindu and Muslim college students. A group of 120 adolescents (60 boys & 60 girls) recruited to participate in the study. The data were collected using problem solving ability test by Dubey. To test the hypothesis 't' test was calculated. Result showed that there was no significant difference between Hindu and Muslim college students in their problem solving ability. Result indicated that boys had better problem solving ability as compared to girls.

Keywords: *Problem Solving Ability, College, Students, Hindu and Muslim.*

Problem is a condition of conflict where the individual faces an obstruction on the way of achieving a goal. Heppner and Krouskopf (1987) define problem solving as the cognitive and effective behavioral processes an individual carries out in order to attain a harmony between the complex internal and external desires. The problem solving skill is acquired in all areas of the life. It is acquired firstly in the preschool period through the guidance and assistance of the family and the environment, and it continues throughout one's life after it is given a certain systematic at the school. The principle goal of education is to create people who are capable of doing new things, not simply of repeating what other generations have done people who are creative, inventive, and discoverers. The second goal is to form minds, which can be critical, can verify, and not accept everything they are offered. Problem solving is a process i.e., problem solving involves applying cognitive processes to cognitive representations in the problem solver's cognitive system. Problem solving is personal, that is, problem solving depends on the knowledge and skill of the problem solver. Problem solving is the framework within which creative thinking and reasoning take place. It is a process of removing obstacles that appear to interfere with the attainment of goals. One of the major responsibilities of education is to develop the ability of problem solving and creativity. The success, efficiency and happiness in life to a large extent depend upon these abilities. A child is not born on these abilities but has to develop to these abilities in course of his lifetime with the help of his parents, teachers and society at large.

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REVIEW OF LITERATURE

Hyde et al., (1990) conducted meta-analysis of 100 studies suggested that gender differences in mathematics performance were small but gender differences in mathematical problem solving with lower performance of women existed in high school and in college.

Tartre (1990) suggested that females with high Spatial Orientation (SO) skills were assumed more than high Spatial Orientation males to be able to integrate spatial and analytic or language skills to successful problem solution. Tartre also found that low Spatial Orientation males were found to be able to use the verbal hint effectively to help solving problems; but low Spatial Orientation females needed help more often and did not always use it successfully. It can be concluded from Tartre's study that the gender differences in strategy use during mathematical problems solving fall into two classes: (a) on one hand, gender difference within groups with high-spatial level skills arose through the ability to integrate many problem-solving strategies, with which females did better than males; (b) on the other hand, gender difference within groups with low-spatial level skill arose from the ability to use other skills to compensate, in which males outperformed females. Gallagher et al., (2000) suggested that males tended to be more flexible than females in applying solution strategies. Another study suggests by Kessel and Linn (1996) reported that females were more likely than males to adhere to classroom-learned procedures to solve problems, so they might be less likely to use shortcuts and estimation techniques for solving unfamiliar and complex problems quickly.

Ganandevan (2006) found out that the problem solving ability of higher secondary students is low. The male and female students and the students residing at rural and urban area differ significantly in their problem solving ability. Hoovinabhavi et al., (2004) studied on problem solving ability of college students and found that the girls of both science and arts faculty are better in their problem solving ability. Pandey and Manjula (2012) found the problem solving ability of matriculation students is low. The male and female students and the students residing at rural and urban area differ significantly in their problem solving ability. Sharma (2007) studied on problem solving ability and scientific attitude as determinant of academic achievement of higher secondary students and found out higher secondary students have shown average problem solving ability

Hypotheses

1. There will be no difference in problem solving ability among Hindu and Muslim college students.
2. The Boys will have higher level of problem solving ability comparison to Girls.

The Sample

Sample of the present study consisted of Hindu and Muslim respondents studying in class 12 of Ranchi city. The sample split of 120 students from adolescents 60 boys and 60 girls.

Tools

Problem Solving Ability Test This test was developed by Dubey. This Scale consists of 20 problems. Each problem has four alternatives answers. Out of these four answers only one is correct. One mark is for right answer and zero mark for wrong answer. The maximum score will be 20 and minimum will be zero. This is a standardized test. The reliability coefficient of the test is 0.78 and validity of the test is 0.682

Problem Solving Ability among Hindu and Muslim College Students

Procedure

The problem solving ability test was administered to both groups with instructions to complete all questions honestly and not to discuss the questions with fellow students. Scoring was done according to the respective scoring keys. In order to fulfill the hypotheses of the study the score obtained were analyzed with mean, SD's and t value.

Statistical Analysis

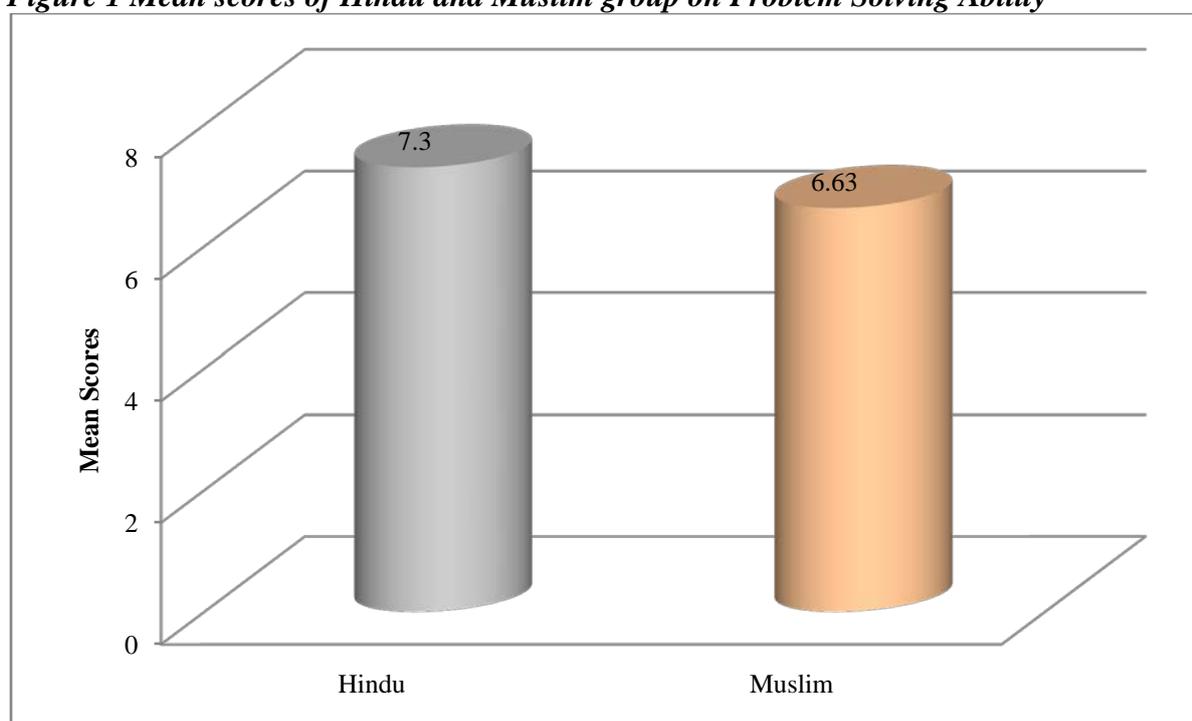
Data is by analyzed using statistical techniques like mean, SD and t-ratio. Bar diagrams graphs were drawn to make the results transparent.

RESULT AND DISCUSSION

Table -1 Comparison between Hindu and Muslim group on Problem Solving Ability

Group	N	Mean	SD	t Value	P Value
Hindu	60	7.3	2.78	1.37	Not Significant
Muslim	60	6.63	2.55		

Figure 1 Mean scores of Hindu and Muslim group on Problem Solving Ability



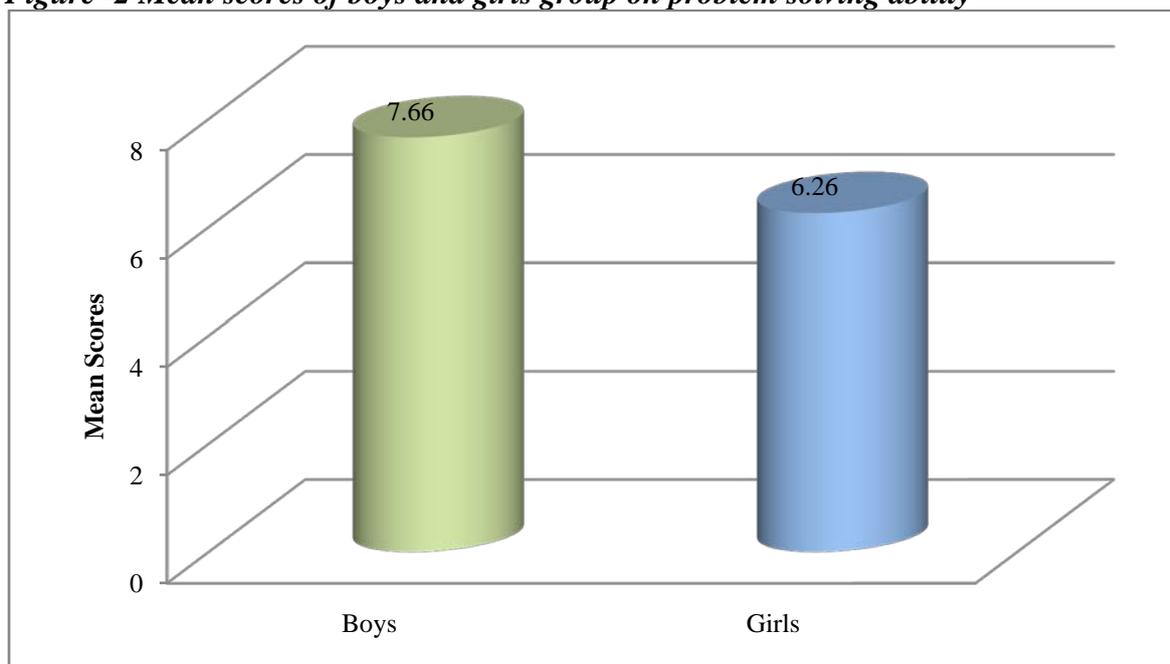
Above table showed the mean comparisons of Hindu and Christian groups on problem solving ability. Mean scores of Hindu and Christian groups were (7.3 and 6.63 respectively). “t” indicated that the problem solving ability perceived by the Hindu and Christian groups were that of a same level. Hence, the hypothesis “There will be no difference in problem solving ability among Hindu and Christian school going adolescence” was proved.

Table -2 Comparison between boys and girls group on problem solving ability

Group	N	Mean	SD	t Value	P Value
Boys	60	7.66	2.71	2.95	0.01
Girls	60	6.26	2.48		

Problem Solving Ability among Hindu and Muslim College Students

Figure -2 Mean scores of boys and girls group on problem solving ability



It was evident from the above table that there was significant difference between boys and girls group in their problem solving ability. The t value for the mean score was 2.95, which was significant at 0.01 level. It points out that that the boys had high problem solving ability than their girls counterpart. Thus, the hypothesis “The boys will have higher level of problem solving ability comparison to girls” was proved.

CONCLUSION

1. Hindu and Muslim college students showed almost similar level of problem solving ability
2. Boys exhibited better problem solving ability as compared to girls.

Limitation

1. The size of the sample is very small.
2. The sample for the study has been drawn from Ranchi only.
3. The study constituted only Hindu and Muslim students only.

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Problem Solving Ability among Hindu and Muslim College Students

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Conflict of Interest

The authors carefully declare this paper to bear not conflict of interests

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