



RESEARCH ARTICLE

Problem Solving Skill of Senior Secondary School Students in Relation to Commitment

Anupama

Ankur Sr. Sec. School, Panjab University, Chandigarh (UT)

Email id: anupamarohitbhandari@gmail.com

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ABSTRACT

This study examines the problem solving skill of senior secondary school students in relation to commitment. The sample of the study was comprised of 100 eleventh class students (50 boys and 50 girls) studying in government and private schools of Chandigarh. Descriptive survey method was employed to collect the data. The major findings of the study revealed significant difference in both problem solving skill and commitment of students studying in government and private schools in favour of students studying in private school. Further, the problem solving skill of students with high level of commitment was significantly higher than their counterparts.

Key Words: Problem Solving Skill, Psychological Hardiness, Commitment

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INTRODUCTION

In today's world life is full of problems and to solve them is a herculean task which requires a certain degree of thinking and reasoning. More complex is the problem, higher the level of the thinking required. The term problem solving skill refers to the framework or pattern within which creative thinking and reasoning take place. It is the ability to think and reason on given levels of complexity. People who have learned effective problem solving techniques are able to solve problems at higher levels of complexity. Some individuals are able to solve problems sooner than other. That indicates that there are levels of problem solving ability - ranging from average ability to highest ability depending upon the difficulty level of the problem.

Commitment is one of the major factors affecting gross psychological hardiness which represents a tendency to involve oneself in whatever one is doing or encounters. In gross psychological hardiness variable, there exist two more sub variables, viz. control and challenge. Control is described as a "Tendency to feel and act as if one is influential in the face of the varied contingencies of life". Challenge is described as a "Belief that changes rather than stability is normal in life and that the anticipation of changes is interesting incentives to growth rather than threats to security." Hardiness operates as a stress buffer as well as has direct influence on health, so hardiness, is usually conceptualized as a cognitive personality variable consisting of a sense of commitment, control and challenge (Westman, 1990).

Kobasa (1979) defined hardiness as a personality trait having the components of commitment, challenge, and control and is found to be associated with strong resistance to negative feelings induced by adverse circumstances. Jagpreet (2010) conducted a study to find the influence of gender and school climate on psychological hardiness among Indian adolescents. The results of the study revealed that the significant main effects of gender and school climate are dependent on each other to explain control, challenge and psychological hardiness among adolescents

Voutsina (2012) investigated the process of change in 5-6-year-old children's successful problem-solving approaches when tackling a multiple-step task in elementary arithmetic. A total of 10 cases were investigated, to illustrate the qualitative changes that children introduced to their successful problem-solving approaches. These changes indicated children's acquisition of increasing control over the procedural and conceptual knowledge that supports their strategies and, ultimately, their own learning. The research primarily indicated points of diversion between the theory and the observations of children's problem solving activity.

OBJECTIVES

1. To compare the problem solving skill of senior secondary school students studying in government and private schools.
2. To compare the commitment of senior secondary school students studying in government and private schools.
3. To compare the problem solving skill of senior secondary school students with regard to gender.
4. To compare the commitment of senior secondary school students with regard to gender.
5. To compare the problem solving skill of senior secondary school students in relation to commitment.

HYPOTHESES

1. There will be no significant difference in the problem solving skill of senior secondary school students studying in government and private schools.
2. There will be no significant difference in the commitment of senior secondary school students studying in Government and Private schools.
3. There will be no significant difference in the problem solving skill of senior secondary school students with regard to gender.
4. There will be no significant difference in the commitment of senior secondary school students with regard to gender.
5. There will be no significant difference in the problem solving skill of senior secondary school students in relation to commitment.

DESIGN OF THE STUDY

In the present study, descriptive survey method was employed to collect the data. Descriptive research studies are designed to obtain pertinent and precise information concerning the current status of the phenomena and whenever possible to draw valid general conclusions from the facts discovered.

SAMPLE

Stratified random sampling technique was employed in the present study. The sample was comprised of 100 students of class 11th of two senior secondary schools of Chandigarh. Out of these, 50 students were selected randomly from each government and private schools. Further 25 male and 25 female students were taken from each type of school i.e. government and private.

TOOLS EMPLOYED

The present study employed the following tools for the purpose of data collection:-

1. Scale of Problem Solving Skill developed and standardized by Barkman, S. and Machtmes, K. (2002).
2. Scale of Psychological Hardiness by K.M. Nowack, (1990) for calculating commitment score.

STATISTICAL TECHNIQUES USED

The obtained data was analysed by employing t-test. Graphical representation was done wherever necessary.

RESULTS

Table 1: Mean Differentials in problem solving skill and commitment of senior secondary students studying in government and private schools

Variable	Mean		S.D		t-value	Level of Significance
	Govt. School	Pvt. School	Govt. School	Pvt. School		
Problem Solving Skill	76.66	82.98	15.41	11.41	2.33	0.05
Commitment	29.35	33.96	11.00	9.15	2.21	0.05

Table 1 shows that mean differential with regard to problem solving skill of senior secondary students studying in government and private schools is statistically significant at .05 level ($t = 2.33$). This indicates that the senior secondary students studying in private school ($M_2 = 82.98$) are more in problem solving skill as compared to senior secondary students studying in government school ($M_1 = 76.66$). Further, commitment level of students studying in government and private senior secondary schools is also statistically significant at 0.05 level ($t = 2.21$). This indicates that senior secondary students studying in private school ($M_2 = 33.96$) is more committed towards their work as compared to senior secondary students studying in government school ($M_1 = 29.35$).

Table 2: Mean Differentials problem solving skill and commitment of senior secondary male and female students

Variable	Mean		S.D		t-value	Level of Significance
	Male	Female	Male	Female		
Problem Solving Skill	80.00	79.64	13.56	14.28	0.12	Not Significant
Commitment	32.21	30.28	7.75	9.41	0.34	Not Significant

Entries made in table 2 shows no significant difference in both problem solving skill ($t = 0.12$) and commitment ($t = 0.34$) of senior secondary male and female students as t-values were not found to be statistically significant. This indicates that problem solving skill and level of commitment of senior secondary male and female students are almost equal.

Table 3: Mean differences in problem solving skill of senior secondary students with regards to commitment

Group	Mean	S.D	t-value	Level of Significance
High Level of Commitment	73.91	8.14	3.72	0.01
Low Level of Commitment	59.25	11.06		

From the results in table 3, it is clear that t-value with regard to problem solving skill in relation to high and low score of commitment found statistically significant at .01 level ($t = 3.72$). This indicates that there is significant difference in the problem solving skill of students with high level of commitment ($M_1 = 73.91$) and low level of commitment ($M_2 = 59.25$) students in favour of students with high level of commitment.

DISCUSSION

The study revealed that there is a difference in the level of problem solving skill of students with regard to their commitment level. This study suggests that students should be exposed to more practical based activities and challenging tasks which pose them to an increased ability to solve problems. The study also suggests that the students should be provided with learning experience based on the project method with pre-determined objectives to be achieved, the curriculum also to be activity centred which helps them to deal with challenges in a positive way, consequently making them more committed. Study conducted by Bhandari (2011) supported this result by showing positive relationship between commitment as a component of psychological hardiness and life skills. Gender differences do not significantly affect the commitment level. Study conducted by Hannah and Morrissey (1986) supported this result by showing significant relationship of sex, age, religion, grade and happiness with hardiness. Appropriate curricular activities should be introduced in schools by educational administrators and planners to enhance the level of commitment level in order to decrease the stress among students.

REFERENCES

1. Bhandari R. (2011): Effect of awareness training model on life skills and personal values of secondary school students in relation to their psychological hardiness. Unpublished doctoral thesis, Panjab University, Chandigarh.
2. Barkman S. and Machtmes K. (2002): Scale of problem solving skill. Youth life skills evaluation project at Penn State. Retrieved from <http://www.human.servicersearch.com/youthlifefskillsevaluation>

3. Collins C.B. (1991): Hardiness in adolescence an enquiry into stress resistance, Dissertation Abstracts International, 52(9): 5008-B
4. Crowley B.J. and Bert J.H. (2003): Psychological hardiness and adjustment to life events in adulthood, Journal of Adult Education, 10(4): 237-248
5. Gates, Saul, Nimon and Robin K. (1973): Definition of problem solving. Retrieved from www linkinghub.elsevier.co
6. Honnah T.E. and Morrissey C. (1986): Correlate of psychological hardiness in Canadian adolescent, Journal of Social Psychology, 127(4): 339-344.
7. Hystad S.W. and Jarle E. (2011): Effects of psychological hardiness, job demands and job control on sickness absence, Journal of Occupational Health Psychology. 16 (3): 265-278
8. Kobasa S.C. (1979): Stressful life events, personality and health: An enquiry into hardiness, Journal of Personality and Social Psychology, 37: 1-11.
9. Kobasa S.C. (1984): Personality and social resources in stress resistance. Journal of Personality and Social Psychology, 45(4): 839-850.
10. Kaur J. (2010): Influence of gender and school climate on psychological hardiness among Indian adolescents. Unpublished M.Ed. dissertation, Punjabi University, Patiala.
11. Maddi S.R. (2004): Hardiness: An operationalization of existential courage, Journal of Humanistic Psychology. 44 (3): 279-298.
12. McCaulley M. (1987): Factors affecting problem solving activities. Retrieved from <http://www.brighthubpm.com/resource management>
13. Nowack K.M. (1990): Initial development and validation of psychological hardiness scale. American Journal of Health Promotion, 4 (3): 173-180.
14. Sheard M. (2009): Hardiness commitment, gender, and age differentiate university academic performance, British Journal of Educational Psychology, 79(1): 189-204.
15. Valerie S.J. (1995): Hardiness, appraisal and coping styles in freshman university students, Dissertation Abstracts International, 57(1): 712:B
16. Voutsina C. (2012): A micro-developmental approach to studying young children's problem solving behavior in addition, Journal of Mathematical Behaviour, 31(3): 366-381.

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