IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 2, November 2023

A Study of Effect of Self- Concept and Problem Solving Ability on Academic Achievement of Higher Secondary School Students of Indore

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Abstract: Education is one of the important transformation and effective input for nation building. One of the main purpose of the Education is to develop the students through providing proper conditions for them so to reach the highest levels of Academic Achievement . The purpose of the study is to investigate the effect of Self-concept and Problem Solving Ability on Academic Achievement of Higher Secondary School Students. The objective of the study was to study the effect of Self- Concept, Problem Solving Ability and their interaction on Academic Achievement of students. Hypothesis was "There is no significant effect of Self-Concept, Problem Solving Ability and their interaction on Academic Achievement of students". The students of class XI and XII standard studying in higher secondary schools of Indore District constitute the population of the study. The sample consists of 104 students of Class XI and standard from 2 different C.B.S.E. higher secondary schools of Indore District. The Self-Concept Rating Scale developed by R. Saraswat and The Problem Solving Ability Test (PSAT) developed by L. N. Dubey were used as a tool for data collection for the study. The marks obtained in the previous examination were considered as academic achievement of the selected students. Data was analyzed with the help of TWO WAY ANOVA. The finding of the study reveals that the Academic Achievement of Higher Secondary School Students was not effected with the interaction of Self-Concept and Problem Solving Ability of male and female students. The researcher found that students with high Problem Solving Ability were found to be superior to students with low Problem Solving Ability. The Academic Achievement of students with high and low Self-Concept to be on the same extent. The Academic Achievement of Higher Secondary School Students was not effected with the interaction of Self-Concept.

Keywords: Self-Concept, Problem Solving Ability, Academic Achievement, Higher Secondary School Students.

REFERENCES

- [1]. Kour Harleem (2003)." A Study Of Self Concept And Academic Achievment In Relation To Sex And Caste "Unpublished M.Ed Dissertation, Department Of Education, University Of Jammu.
- [2]. Kour, Avinash (2005). "A Study Of Difference in Self Concept among High and Low Achievers" Unpublished
- [3]. Kumari (2013). A Study Of Study Habits And Academic Achievment Of Students Belonging To Upper And Lower Levels Of Intelligence, Unpublished M.Ed Dissertation, Department Of Education Central University of Jammu, J& K.
- [4]. Kumari, Archana (2013). "A Study on Self Concept and Academic Achievment of Secondary School Students, Journal of Sociological Research Vol.4, No2 (2013).
- [5]. Anil Kumar Agnihotri (2015) Problem Solving Ability among Senior Secondary School Students of Himachal Pradesh International Journal of Multidisciplinary Research and Development 2(2): 511-517.
- [6]. Aydin, Bunyamin (2019) A Study on the Relationship between Seventh-Grade Students' SelfRegulation Skills and Their Problem-Solving Achievements Journal of Educational Issues, v5 n1 p71-86.

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DOI: 10.48175/IJARSCT-13856



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International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

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- [7]. Adeniji, S. M., & Salman, M. F. (2016). Effects of computer animation package on senior school students' performance in geometry in Ilorin, Nigeria. The Journal of the Mathematical Association of Nigeria, 41(1), 265-271.
- [8]. Adesoji, F. A. (2008). Managing students' attitude towards science through problem-solving instructional strategy. Anthropologist, 10(1), 21-24. https://doi.org/10.1080/09720073.2008.11891024
- [9]. Amadi, J. C., & Charles-Ogan, G. (2015). Effects of learning trajectories in mathematics on secondary school students' understanding of algebraic equations in Rivers State, Nigeria. The Journal of the Mathematical Association of Nigeria, 40(1), 272-282.
- [10]. Anboucarassy, B. (2015). Problem-solving ability of higher secondary students in relation to their learning style. International Journal of Applied Research, 1(7), 127-131.
- [11]. Angga, H. (2014). Mathametics self-concept and anxiety with different achievement in calculus problemsolving. In Proceedings of the International Conference on Research Implementation and Education of Mathematics and Sciences (pp. 18-20).
- [12]. Anwar, E. (2018). Problem-solving ability of secondary school students in relation to their attitude towards mathematics. Indian Journal of Research, 4(10), 67-68.
- [13]. Anwer, M., Iqbal, H. M., & Harrison, C. (2012). Students' attitude towards science: A case of Pakistan. Pakistan Journal of Social and Clinicalsychology, 10(1), 3-9.
- [14]. Arslan, C., Yavuz, G., & Deringol-Karatas, Y. (2014). Attitudes of elementary school students towards solving mathematics problems. Procedia-Social and Behavioral Sciences, 152, 557-562. https://doi.org/ 10.1016/j.sbspro.2014.09.243
- [15]. Awang, Z. (2014). A handbook on structural equation modelling. RCH Publication. Bala, M. P., & Shaafiu, M. K. Q. (2016).
- [16]. Academic achievement of secondary school students in relation to their problem-solving ability and examination anxiety. The International Journal of Indian Psychology, 3(4), 138-154. https://doi.org/10.25215/0304.170
- [17]. Beyazsacli, M. (2016). Relationship between problem-solving skills and academic achievement. Anthropologist, 25(3), 288-293. https://doi.org/10.1080/09720073.2016.11892118
- [18]. Bodgan, R. C., & Biklen, S. K. (2003). Qualitative research for education: An introduction to theories and methods Pearson.
- [19]. Breckler, S. J., & Wiggins, E. C. (1989). Affect versus evaluation in the structure of attitudes. Journal of Experimental Social Psychology, 25, 253-271. https://doi.org/10.1016/0022-1031(89)90022-X
- [20]. Chin, W. W. (1998). The partial least squares approach for structural equation modeling. In G. A. Marcoulides (Ed.), Modern methods for business research (pp. 295-336).
- [21]. Lawrence Erlbaum Associates Publishers. Creswell, J. W. (2012). Educational research: Planning and evaluating quantitative and qualitative research.
- [22]. Edwards Brothers Inc. Creswell, J. W. (2013). Research design. SAGE.
- [23]. Creswell, J. W., & Plano-Clark, V. L. (2011). Designing and conducting mixed methods research. SAGE. Duatepe, A., & Cilesiz, S. (1999).
- [24]. Dubey, L. N. (2008). Manual for problem-solving ability test. Agra, National Psychological Corporation.
- [25]. Effandi, Z., & Normah, Y. (2009). Attitude and problem-solving skills in algebra among Malaysian matriculation college students. European Journal of Social Science, 8(2), 232-245.
- [26]. Elliott, B., Oty, K., McArthur, J. & Clark, B. (2001). The effect of an interdisciplinary algebra/science course on students' problemsolving skills, critical thinking skills and attitudes towards mathematics. International Journal of Mathematical Education in Science and Technology, 32(6), 811-816. https://doi.org/10.1080/ 00207390110053784
- [27]. Geertje, I., Patrick, O., & Hilde, C. (2010). Teacher-child interaction: Relations with children's self-concept in second grade. Infant and Child Development, 19(4), 385-405.

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International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

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Volume 3, Issue 2, November 2023

- [28]. Gefen, D., Straub, D.W., & Boudreau, M.C. (2000). Structural equation modelling and regression: Guidelines for research practice. Communication of the Association for Information Systems, 4(7), 2-77. https://doi.org/10.17705/1CAIS.00407
- [29]. Graziano, A. M., & Raulin, M. L. (2000). Research method: A process of inquiry. Allyn and Bacon.
- [30]. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing Theory and Practice, 19(2), 139-151. https://doi.org/10.2753/MTP1069-6679190202
- [31]. Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modelling (PLS-SEM). European Business Review, 26, 106-121. https://doi.org/10.1108/ EBR-10-2013-0128

