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MATHEMATICS ANXIETY OF TELUGU AND ENGLISH MEDIUM SENIOR SECONDARY STUDENTS STUDYING AT GOVERNMENT AND PRIVATE COLLEGES

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ABSTRACT:

India is well-known for its' unity in diversity' all over the world. That is different language speaking people at different regions belong to India, and they are united by brotherhood. Students pursue their education in any language of their choice. Since Mathematics is an abstract subject

student have anxiety to solve the problems. Mathematics anxiety and medium of instruction are key factors to study the subject mathematics. This article explores the mathematics anxiety of Telugu and English medium senior secondary students studying at government and private colleges of Chittoor district, Andhra Pradesh.

KEYWORDS: Mathematics Anxiety, Senior Secondary Students.

INTRODUCTION:-

Everybody requires the knowledge of basic Mathematics for managing their daily routine. The subject itself has own significance right from all levels of education that is primary level to high school stage made compulsory as they require the basic skills which would ensure a safe survival and management. Also, there is a great controversy that many were forcibly directed towards this subject after secondary school stage. They are overburdened with the study of

this tough subject. Everybody is not able enough to learn it successfully, so references are made to low pass percentages in this subject in examination. At the senior secondary level vast dimensions of this subject introduced to them at a time, many new concepts are overloaded the students causing some anxiety about this subject. Mathematics anxiety is the feeling that the people show when they are exposed to the mathematical calculations. Buckley & Ribordy (1982) have provided conceptual clarity on anxiety which is caused due to maths subject. In this situation there is a fear of maths which is caused when working with numbers or analyzing or giving interpretations in both academic

and professional situations which students encounter. Perina (2002) had said that mathematical anxiety could led to depression and affect student working memory.

OBJECTIVES OF THE STUDY

- To study the mathematics anxiety of senior secondary school students with reference to medium of instruction.
- To study the mathematics anxiety of senior secondary school students with respect to government and private colleges.

HYPOTHESES

1. There would be no significant difference between Telegu and English medium senior

secondary students on their mathematics anxiety.

- There would be no significant difference between senior secondary students studying at government and private colleges on their mathematics anxiety.

METHOD AND SAMPLE

Descriptive survey method and stratified random sampling technique has been used in this study. All the senior secondary students in Chittoor district of Andhra Pradesh comprised the population of this study. 800 senior secondary students in the district of Chittoor, Andhra Pradesh was considered for the study. 400 students from government colleges and 400 students from private colleges were randomly selected.

DESCRIPTION OF THE TOOL

The researcher developed a tool to study the mathematics anxiety of senior secondary students. After item analysis, 58 (41 positive and 17 negative) statements were selected. The validity and reliability were estimated by applying split half method and they was found sufficient for the study. The questionnaire was prepared in both Telegu and English medium. The scale was constructed by making use of Likert's methods of summation to get a five-point judgment on each item. Against each statement, five alternative responses, namely, "Strongly Agree" (SA), "Agree" (A), "Undecided" (U), "Disagree" (D) and "Strongly Disagree" (SD) were given. Weightage of 5, 4, 3, 2, and 1 were given for positive statements and the weightage of 1, 2, 3, 4, and 5 were given for negative statements. A schedule was attached to the questionnaire so as to collect the personal details of the students.

DATA ANALYSIS

Chi-square test and correlation were used for analyzing the data. The students were categorized as students having high, moderate, low levels of anxiety.

Table 1: Classification of Mathematics Anxiety Levels

S.No.	Norm	Level
1	Mean+½SD and above	High
2	Mean-½SD to Mean+½SD	Moderate
3	Below to Mean-½SD	Low

Table 2: Mathematics Anxiety and Medium of Instruction

Mathematics Anxiety	Medium of Instruction	Levels			Chi-square	df	p-value
		High	Moderate	Low			
	Telugu	121 30.2%	157 39.2%	122 30.5%	0.219@	2	0.896
	English	115 28.8%	161 40.2%	124 31.0%			

@Not Significant

Table-2 shows that the chi-square value is 0.219 with 2 degrees of freedom which is not significant at 0.05 level. This indicates that there is no significant difference between medium of instruction and mathematics anxiety of senior secondary students.

Table 3: Mathematics Anxiety and Type of College

Mathematics Anxiety	Type of College	Levels			Chi-Square	df	p-value
		High	Moderate	Low			
Mathematics Anxiety	Government	114 28.5%	157 39.2%	129 32.2%	0.907@	2	0.635
	Private	122 30.5%	161 40.2%	117 29.2%			

@Not Significant

From Table-3, the chi-square value is 0907 with 2 degrees of freedom which is not significant at 0.05 level. This shows that there is no significant difference between type of college and mathematics anxiety of senior secondary students.

CONCLUSION

The researcher has conducted the present study on 800 senior secondary students who were studying at different Government and Private Junior colleges of Chittoor district, Andhra Pradesh to know whether there is any significant differences between medium of instruction, type of college and Mathematics Anxiety of students. The researcher has found that there was no significant difference between them. It is found that Telugu medium students are high anxious than English medium students. The students have to face the competitive exams like IITJEE, EAMCET etc. in English medium only they found difficulty in noting the technical words in English medium and fails to write the exam properly lack of understanding pulls down the telugu medium students from the competition. Also, students studying at private colleges are more anxious than government college students. Private management treat the students only as their rank scoring machines and they fail to create the pleasant atmosphere to the students encouraging unhealthy environment by comparison. Also, the odd timings of study hours increasing the mathematics anxiety among them. Many are sufferers in this regard. As the government colleges follow the norms of the board, it is considering the psychological conditions of the students and they are not over loaded.

REFERENCES

1. Buckley, P. A., & Ribordy, S. C. (1982). Mathematics anxiety and the effects of evaluative instructions on math performance. Paper presented at the Midwestern Psychological Association, Minneapolis, MN.
2. Buxton, L. (1981). Do you panic about maths? Coping with maths anxiety. London: Heinemann Educational Books.
3. Hsiu-Zu H. (2000). The affective and cognitive dimensions of math anxiety: A cross-national study. Journal for Research in Mathematics Education, 31(3), 362-380.
4. Perina, K. (2002). The sum of all fears. Psychology Today, 35(6), 19.
5. Jackson, C. D., & Leffingwell, R. J. (1999). The role of instructors in creating math anxiety in students from kindergarten through college. Mathematics Teacher, 92(7), 583-587
6. Walt, H. M. G., Pekrun, R. Goetz, T., & Frenzel, A.C. (2010). Development of Mathematics Interest in adolescence: Influences of Gender, Family and school context, Journal of Research on Adolescence, 20(2), 507-537.