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# Emotional problem in relation to sex, locality medium instruction and mathematical achievement

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**Abstract**
The present study is conducted to assess emotional problems of students with reference to their sex, locality, medium of instruction and mathematical achievement on a sample of 280 students both male (140) and female (140) belonging in different locality by applying 't'-test. The data has been collected with the help Emotional Problem Area of Adjustment Inventory for School Students (Sinha and Singh, 1971). It is concluded that the male and female mathematical achievers differ in their emotional problems are found to be significant whereas the urban and rural mathematical achievers do not differ in their emotional problems are found to be non-significant, the Bengali and English medium mathematical achievers differ are found to be significant in their emotional problems as well as High and Low mathematical achievers differ are found to be significant in their emotional problems. However, the present study suggests that emotional problems of mathematical achievers should be enhanced for betterment of the global society as a whole.

**Keywords:** emotional problems, mathematical achievement

## Introduction
Emotion is a complex psychological phenomenon which occurs as animals or people live their lives. Emotions involve physiological arousal, appraisal of the situation, expressive behaviors, and conscious experience. Emotion is associated with feeling, mood, temperament, personality, disposition, and motivation" (Frijda 1992) [2].

## Emotional problem
Everyone feels sad, worried, or upset from time to time. But if these feelings last for a long time or begin to disrupt your life, treatment such as counseling or medicines can help get things back to normal. Without treatment, these problems may get worse. They can also cause other physical and emotional health problems or make them worse. An emotional problem is an emotional disability characterized by an inability to build or maintain satisfactory interpersonal relationships with peers and/or teachers. For preschool-age children, this would include other care providers.

## Mathematical Achievement
Academic achievement refers to a student's success in meeting short- or long-term goals in education. In the big picture, academic achievement means completing high school or earning a college degree. In a given semester, high academic achievement may mean a student is on the honor roll. Therefore, mathematics is also a subject like other academic subjects so, mathematical achievement means how much student can achieve in mathematics.

## Analysis of the problems
According to the "List of recognized schools in Tripura" Education Department, Govt. of Tripura, as on 31/08/2014 there are 586 secondary (High) schools and higher secondary 4638 schools. Observing the student's achievement, the second author observed that number of student faced problem in mathematics even they have fear in mathematic subject. The second investigator observed that after completing their 10th exam number of students chose other stream like arts because of fear in mathematics and number of students is chose mathematics for pressure of parents. Only few numbers of students are choosing mathematics in inside interest. It is nothing but it is a problem of emotion. So I feel that every student need to proper guidance along with counseling and find out their problems. After selecting the cause of fear every teachers and parents should be reducing their fear in mathematics subject and take care the students for their success in future life. Remembering the success complete life of the students the authors decide to carry out research their emotional problems and related to their mathematical achievement on Mohonpur subdivision in Tripura state.
On this background the problem may be stated as below
*"Emotional problem in relation to sex, locality medium instruction and mathematical achievement"*
Research questions may be raised as;

- Whether there is difference between Male and Female mathematical achievers with respect to their emotional problems?
- Whether there is difference between Urban and Rural mathematical achievers with respect to their emotional problems?
- Whether there is difference between Bengali and English mediums mathematical achievers with respect to their emotional problems?
- Whether there is difference between High and Low Mathematics Achievers at secondary Level with respect to their emotional problems?

## Objective of the study
For the purpose of investigation, the following are the objectives of the study

1. To study mathematics achievement of the students

2. To study adjustment problems of the students

**Basic assumption**

1. Adjustment Inventory for School Students (AISS) can measure emotional problems of secondary students
2. Annual marks of mathematics of secondary students can give information regarding mathematical achievement

**Hypotheses**

For achieving the above mentioned objectives the following null hypotheses have been formed for testing statistically;

1. There is no significant difference between Male and Female mathematical achievers in relation to their emotional problems.
2. There is no significant difference between Urban and Rural mathematical achievers in relation to their emotional problems.
3. There is no significant difference between Bengali and English mediums mathematical achievers in relation to their emotional problems.
4. There is no significant difference between High and Low Mathematics Achievers at secondary Level in relation to their emotional problems.

**Operational Definitions**

Operationally Emotional Adjustment may be defined as, "The score obtained by secondary school students on adjustment inventory in the area of emotional problem for school students"

"Operationally mathematical achievement may be defined as the score obtained in mathematics by School students in the annual examination"

**Limitation of the study**

Keeping in view the limitation of time resources, and energy, the investigation has been delimited both qualitatively and quantitatively as under only 280 students both boys and girls studying at secondary level in recognized secondary schools in Mohonpur subdivision of west Tripura district in the state of Tripura. The study has been limited to the students of English and Bengali Medium Schools. This study has been limited to $9^{th}$ and $10^{th}$ Class students. The study has been limited in urban and rural areas of Mohonpur subdivision

**Needs and Significance of the problems**

It is quite clear that less study has been conducted so far to study the Emotional problems in relation to sex, locality medium instruction and mathematical achievement. With reference to their learning disabilities and guidance needs in the state of Tripura. This problem needs immediate attention for the benefit of both the learners and teachers. The number of students facing such problems may be in high numbers in various schools located both in rural and urban areas. This study will help in quantifying the extent of such problems of these children and providing assistance accordingly. Remedial steps can then be taken to help such children depending on their specific problems. At present, they are simply labeled as poor and only ignored. Teachers find it useless to waste their time on such students who may not be academically strong. Such students may have other special talents and faculties requiring due attention which otherwise are going waste due to lack of awareness among the teachers. Such students can be made to explore their talents if proper guidance is provided in time to them. This study is targeted towards these children so that new methodologies can be developed keeping in mind their specific needs which are hitherto missing in the state of Himachal Pradesh. The researcher has selected this problem after thorough understanding its gravity and effective results.

**Methodology**

The sample of the present study consists of 280 students both male (140) and female (140) belonging in different locality of Mohanpur Subdivision in West Tripura District by Stratified Random Sampling Technique. The data has been collected with the help of Emotional Problem Area of Adjustment Inventory for School Students (Sinha and Singh, 1971) [5] by applying Descriptive Survey Method and statistical technique 't'-test has been used. The test has been administered and scored as direction given in the manuals.

**Organization of Data**

Data has been analyze to find out Emotional Problems of Boys and Girls, Urban and Rural, Bengali and English Medium Students and High and Low Mathematics Achievers

**MA1**=Mathematics high achiever, **MA2**=Mathematics low achiever, **B1**=Boys,
**B2**=Girls, **U1**=Rural students, **U2**=Urban students, **M1**=Bengali medium, **M2**=English medium

**Analysis and Interpretation of Data**

Data has been analyzed to find out differences between boys and girls, urban and rural, Bengali and English mediums of instruction and high and low mathematics academic achievers.

**Table 1:** Means, Standard Deviations(SD), t-Values, Degrees of freedom(DF) and level of Significance of emotional Problems of Boys and Girls, Urban and Rural, Bengali and English Medium Students and High and Low, Mathematical Achievers.

| Emotional Adjustment Problem | N | Mean | S.D | df | t- Value | Level of Significance |
|---|---|---|---|---|---|---|
| MA1 | 140 | 7.49 | 4.23 | 278 | 8.65 | 0.01 |
| MA2 | 140 | 3.85 | 2.70 | | | |
| B1 | 140 | 6.7 | 4.05 | 278 | 4.60 | 0.01 |
| B2 | 140 | 4.62 | 3.64 | | | |
| U1 | 140 | 5.82 | 4.23 | 278 | 0.62 | Non significant |
| U2 | 140 | 5.51 | 3.73 | | | |
| M1 | 140 | 6.45 | 4.56 | 278 | 3.35 | 0.01 |
| M2 | 140 | 4.88 | 3.13 | | | |

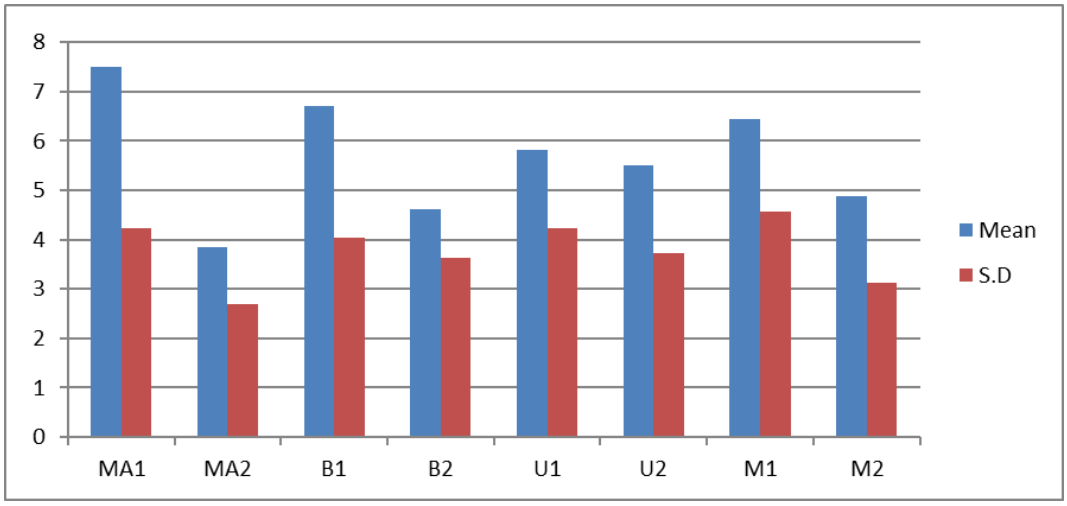


**Fig 1:** Graph showing Means, and Standard Deviations of Educational Adjustment Problems of, Boys and Girls, Rural and Urban and Bengali and English Mediums Schools Students and High and Low Mathematical Achievers.

Table-1 pointed out high and low mathematical achievers seem to differentiate their emotional problems. However, emotional problems of high mathematical achievers (M=3.85, SD=2.70) and as compared to their low mathematical achievers (M=7.49, SD=4.23) counterparts. The t-value testing the significance of this mean difference is reached at 8.65 which is higher than the table value of 't' at 0.01 level of significance. Therefore, the null hypothesis that "there is no significant difference between high and low mathematical achievers in their emotional problems" is rejected.

Table-1 pointed out boys and girls mathematical achievers seems to differentiate their emotional problems. However, emotional problems of boys (M=6.7, SD=4.05) and as compared to their girls (M=4.62, SD=3.64) counterparts. The t-value testing the significance of this mean difference is reached at 8.65 which is higher than the table value of't' at 0.01 level of significance. Therefore, the null hypothesis that "there is no significant difference between high and low mathematical achievers in their emotional problems" is rejected.

Table-1 showed that urban and rural students do no exhibit significant statistical difference (t=0.62) in their emotional problems. However, emotional problems of urban students (M=5.51, SD=3.73) has greater emotional problems than their rural (M=5.82, SD=4.23) counterparts. The t-value testing the significance of this mean difference is arrived at 0.62 which is much lower than the table value of 't' at 0.05 level of significance. Therefore, the null hypothesis that "there is no significant difference between urban and rural students in their emotional problems" is accepted.

Table.1 pointed out Bengali medium and English medium mathematical achiever seems to differentiate their emotional problems. However, emotional problems of Bengali medium (M=6.45, SD=4.56) and as compared to their English medium (M=4.88, SD=3.13) counterparts. The t-value testing the significance of this mean difference is reached at 8.65 which is higher than the table value of 't' at 0.01 level of significance. Therefore, the null hypothesis that "there is no significant difference between high and low academic achievers in their emotional problems" is rejected.

**Discussions of Results**

An analysis of the results pertaining to hypotheses $H_{01}$, $H_{03}$, $H_{04}$ indicate the values of t-ratios is (4.60), (3.35),(8.62) respectively which are significant at the level of 0.01. This means that high and low mathematical achievers male and girls, and medium of instruction significantly differ with respect to their emotional. Further the $H_{02}$ hypothesis indicate the values of t-ratios (0.62)which is not significant .So the $H_{02}$, There is no significant difference between rural and urban mathematical achievers in relation to their emotional problem hypothesis has been accepted. This findings are supporting the view of with respect to Muni and Pavigrahi (1997) stated that that girls were better adjusted in the all the areas of adjustment pattern than boys. Thakkar (2003) studied academic achievement, adjustment and study habits of rural and urban students and found that there was no significant relationship in academic achievement and study habits for rural and urban students. Bala (2014) High achievers are superior on school adjustment in comparison to low achievers, whereas, low achievers have more adjustment problems on school adjustment scale. Low achievers have more adjustment problems on health and emotional area in comparison to high achievers.

**Major Findings**

1. High and low Mathematics achievers differ emotionally. High mathematics achievers are more adjusted emotionally than low Mathematics achievers.
2. Girl's Mathematical achievers are more emotionally adjusted than boys mathematical achievers Boys and Girls mathematics achievers differ significantly in their emotional adjustment.
3. Based on location of the schools there is no significant deference between rural and urban schools mathematics achievers in the field of emotional adjustment.
4. Based on medium instruction of the schools English Schools mathematics achievers are more adjusted than Bengali medium Schools mathematics achievers in the field of emotional adjustment.

## Conclusion

1. High and low Mathematics achievers differ significantly in their emotional adjustment.
2. Boys and Girls Mathematics achievers differ significantly in their emotional adjustment. Girl's Mathematical achievers are more emotionally adjusted than Mathematical achievers.
3. Based on location of the schools there is no significant deference between rural and urban schools Mathematics achievers in the field of emotional adjustment.
4. Based on medium instruction of the schools English Schools Mathematics achievers are more adjusted than Bengali medium Schools Mathematics achievers in the field of emotional adjustment.

## Educational Implications

Educational implications of present study are given on the basis of conclusions drawn as follows

1. Both parents and teachers should help boys and girls to be rational fixing their level of aspirations.

2. To promote social justice and equity, it is suggested that boys and girls should be treated equally at home as well as school by providing them equal opportunity in all the matters pertaining to their physical, educational and emotional development etc. This will create equal participation of boys and girls in discussing the major issues related to home as well as society that they could become the acceptable and dignified members of the society.

3. To utilize the capacities, capabilities and potentialities of the girl child, it is necessary to change the attitude of parents as well as teachers by training and educating them about each psychological aspect of female child.

## Suggestion for further study

The study of adjustment is very wide field of research by keeping in view the experience of thorough and systematic research. The following suggestions are presented for further study:

1. This study can also be undertaken for the other subdivision, since it is confined to the Mohanpur (Tripura) only.
2. A study of the adjustment problems of college and university students can be conducted.
3. The study can be conducted on the basis of comparison of adjustment problems of scheduled caste and non-scheduled caste students.
4. A study of the adjustment problems may be conducted on maladjusted students.
5. This study can also be undertaken for the adjustment of professional and nonprofessional students.
6. A comparative study can be conducted on adjustment problems of teachers and students.
7. A comparative study can be conducted on adjustment problems of tribal and non-tribal students.
8. An investigation may be conducted on adjustment problems of boys and girls of different age group in relation to their economic status.

## References


1. Bala R. Values and Adjustment Problems of High Achievers and Low Achievers. International Journal of Educational Planning & Administration. 2014; 4(2):113-118.
2. Frijda. *The laws of emotions.*1992.
3. Muni AK, Pavigrahi B. Effect of maternal employment on school going children's adjustment problems, J Comm. Guid. Res. 1997; 14(3):209-216.
4. Pathak RD. Sex difference among school children in the area of adjustment Psych. Studies. 1970; 15:120-122.
5. Sinha KP, Singh RP. Adjustment inventory for school students. National Psychological Corporation. 1971.