

**ADJUSTMENT AMONG SECONDARY SCHOOL STUDENTS: A COMPARATIVE  
STUDY ON THE BASIS OF ACADEMIC ACHIEVEMENT AND GENDER**

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**Abstract**

*The purpose of the present study is to investigate the adjustment of secondary school students in relation to academic achievement and gender. Descriptive survey method was used. Academic Achievement and Gender were treated as independent variables whereas adjustment was treated as dependent variable. The sample comprised of 250 secondary school students from Bhiwani District. Random sampling technique was used to select the sample. Adjustment Inventory for school students (AISS) by Sinha and Singh (2013) [10] was used to assess the adjustment of the students. The data was analyzed statistically using ANOVA supplemented by t-test. The findings of the study revealed that academic achievement and gender has significant effect on the adjustment of the secondary school students. Significant interaction effect of academic achievement and gender on the adjustment of the secondary school students was also found. Thus, efforts should be made to help the students to improve their academic achievement, which will help them in improving their level of adjustment. Workshops and seminars should also be organised in all educational institution to guide the students about the various techniques of making adjustment.*

**Keywords:** *Academic Achievement, Gender and Adjustment.*

**INTRODUCTION**

Human beings are the supreme creation of the God endowed with the capacity of reasoning and thinking. By these virtues, he is able to make adequate adjustments with himself and his surroundings. Many times he has to resolve the conflicts between the strong desires or motives. He has to overcome them and adjust to the reality in a realistic way. The individuals who are able to adjust themselves to the changing circumstances in their environment can live in perfect harmony and lead a happy and well-adjusted life. Adjustment plays a pivotal role in the development of an individual. If a man is not well adjusted then his personality development is

hindered and he becomes maladjusted. As adjustment gives an individual strength and ability to bring desirable changes in the condition of his or her environment, so it can be considered as an important phenomenon of human life.

Adjustment means reaction to the demands and pressures of social environment imposed upon an individual. It starts at one's birth and goes on without stop till one's death. Adjustment refers to "psychological process of adapting to, coping with, and managing the problems, challenges and demands of everyday life" (Halonen and Santrock, 1997) [6]. Srivastava (1996) [14] stated that adjustment is a harmonious relationship with the environment in which most individual's needs are satisfied in socially acceptable ways. Adjustment is an important state of the person, which influences the relationships with others. The concept of adjustment refers to active and creative efforts to live effectively. This requires gaining skills through interaction with one's world acquiring a degree of control over one's daily life successfully meeting life's challenges, self-understanding and the ability to make accurate judgments about people and places (Newman and Newman, 1981) [8]. It is the adjustment which is responsible for the organization of behaviour to various life situations in the sphere of life. But, there is nothing like satisfactory or complete adjustment which can be achieved once and for all time. It is something that is constantly achieved and re-achieved by us (Mangal, 2006) [7]. The parents, the school and the peer group all play an important role in helping an individual to get adjusted. Previous researches have shown that adjustment of an individual depends upon gender, stress level, anxiety level, personality (introvert or extrovert), home environment etc. Academic achievement is also one important factor which has significant effect on the adjustment.

Surekha (2008) [11] found that the students of private schools are better adjusted than students of government schools. The students of private schools are better than students of government schools in academic achievement. There is a negative relationship between the students' adjustment & academic achievement. Adhiambo, Odwar and Mildred (2011) [1] found no significant differences between girls and boys in school adjustment. They also reported significant differences between high achievers and low achievers in dedication, absorption, engagement and school adjustment. Adjustment and academic achievement cause significant difference between male and female students. Government and private schools students and rural and urban school student do not cause difference between adjustment and academic

achievement. It was also found that there is a low positive relationship between adjustment and academic achievement (Yellaiah, 2012) [13]. No significant difference was found between male and female students in terms of total scores obtained on the adjustment scale (Ganai and Mir, 2013) [5]. Singh (2015) [9] revealed that there exists a significant positive relationship between adjustment and emotional intelligence and also between adjustment and mental health. Bhagat (2016) [4] showed that overall adjustments of girls are greater than boys. Girls are found emotionally and educationally more adjusted than their counterparts.

Although a number of empirical studies have been conducted to study the influence of various demographic factors on the adjustment, yet a very few studies have been conducted to explore the adjustment of secondary school students in relation to academic achievement and gender. No study is there to study the interaction effect of academic achievement and gender on the academic achievement of secondary school students. This fact encourages and led the investigator to make an attempt to study the adjustment of secondary school students in relation to academic achievement and gender.

### **VARIABLES USED**

- **Dependent Variable:** Adjustment
- **Independent Variables:** (a) Academic Achievement [High, Average and Low]; (b) Gender [Male & Female]

### **OBJECTIVES OF THE STUDY**

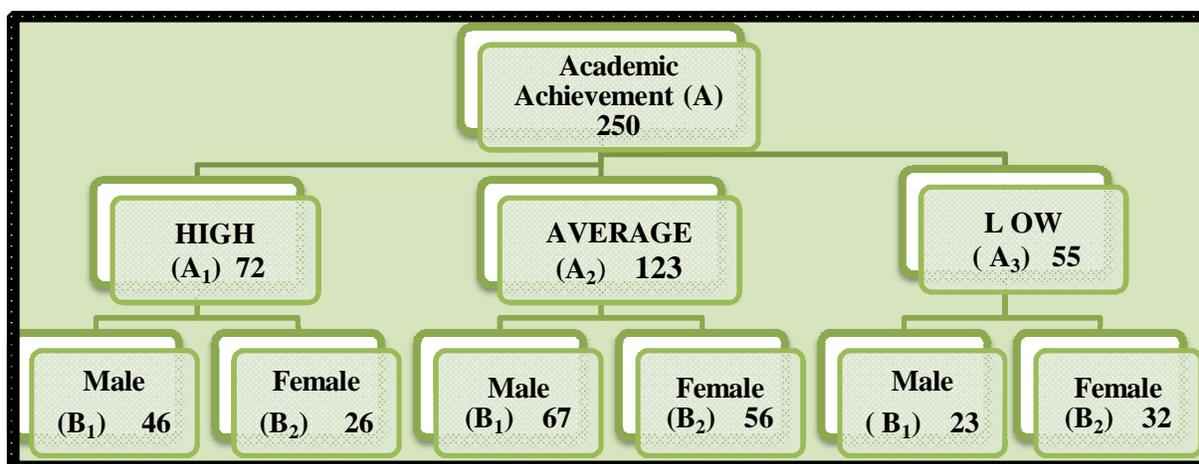
1. To study the main effect of (a) academic achievement [High, Average & Low] and (b) gender [Male & Female] on adjustment among secondary school students.
2. To find out the interaction effect of academic achievement and gender on adjustment among secondary school students.

### **HYPOTHESIS OF THE STUDY**

1. There exists no significant main effect of (a) academic achievement [High, Average & Low] and (b) gender [Male & Female] on adjustment among secondary school students.
2. There exists no significant interaction effect of academic achievement and gender on adjustment among secondary school students.

## DESIGN OF THE STUDY

In the present study, descriptive survey method was used. Stratified random sampling technique was used to select the sample of 250 secondary school students studying in the schools of Bhiwani. The sample was further stratified on the basis of academic achievement i.e. high academic achievement (72), average academic achievement (123) and low academic achievement (55) and also on the basis of Gender i.e. Male (136) & Female (114). For academic achievement students were classified as high, average and low on the basis of  $M \pm 1\sigma_M$ . The schematic layout of factorial design used in the study for the independent variables i.e. academic achievement and gender along with the break up details has been presented below:



## TOOL USED

The Adjustment Inventory for School Students (AISS) developed by Sinha & Singh (2013) [10] having 60 items with 20 items in each of the three areas of adjustment: emotional, social and educational was used. Responses are taken in 'yes' and 'no' for each item. The split half reliability is 0.95, the test retest reliability is 0.93 and the K-R formula-20 reliability is 0.94. For each response indicative of adjustment '0' is given otherwise '1' is given. The inventory was validated by correlating inventory scores with ratings by hostel superintendent and for this product moment coefficient of correlation was found to be 0.51. High scores on AISS indicate poor levels of adjustment while low scores indicate good adjustment.

## STATISTICAL TECHNIQUES USED

The data was analysed using descriptive as well as inferential statistics. Means and SDs were used on the adjustment scores of secondary school students under study. Analysis of Variance

(ANOVA) with 3×2 factorial design was computed using SPSS version 20 to study the main and interactional effects of independent variables (Academic achievement and Gender) on dependent variable (Adjustment). To test the assumption of homogeneity of variance for ANOVA, Levene's Test of homogeneity was employed. Wherever F-value was found significant, t-test was employed for further investigation.

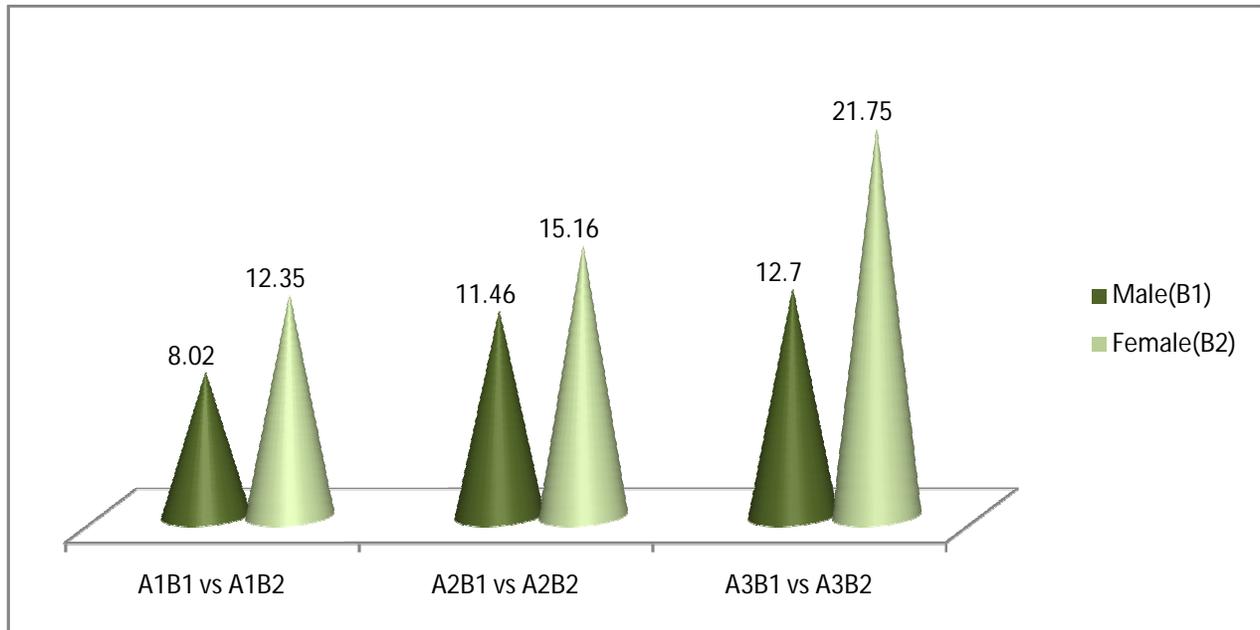
### DATA ANALYSIS AND DISCUSSION

The present paper explores the main and interaction effect of academic achievement and gender on the adjustment of secondary school students. In order to study the main and interaction effects, data was subjected to analysis of variance of (3×2) factorial study with a randomized group design. In this section, the first independent variable i.e. academic achievement coded as (A) varied into three group high (A<sub>1</sub>), average (A<sub>2</sub>) and low (A<sub>3</sub>). The second independent variable i.e. Gender coded as (B) varied at two levels Male (B<sub>1</sub>) and Female (B<sub>2</sub>). Mean adjustment scores of secondary school students in relation to academic achievement and gender has been presented in Table-1 and also graphically in Fig.1. The summary of ANOVA (3×2) has also been presented in Table-2, which is analysed in terms of main effect & interaction effect.

**Table: 1**

**Means and S.D's for Mean Adjustment Scores of Secondary School Students with respect to Academic Achievement & Gender**

Groups	Locality	N	Mean	S.D.
<b>High Academic Achievement (A<sub>1</sub>)</b>	<b>Male(B<sub>1</sub>)</b>	46	8.02	1.437
	<b>Female(B<sub>2</sub>)</b>	26	12.35	20.97
<b>Average Academic Achievement (A<sub>2</sub>)</b>	<b>Male(B<sub>1</sub>)</b>	67	11.46	1.223
	<b>Female(B<sub>2</sub>)</b>	56	15.16	1.886
<b>Low Academic Achievement (A<sub>3</sub>)</b>	<b>Male(B<sub>1</sub>)</b>	23	12.70	1.460
	<b>Female(B<sub>2</sub>)</b>	32	21.75	2.896



**Fig.1: Mean Adjustment Scores of School Students with respect to Academic Achievement & Gender**

**Table: 2**

**Summary of Two-way ANOVA for Mean Adjustment Scores of Secondary School Students with respect to Academic Achievement and Gender**

Sources of Variation	df	Sum of Squares (SS)	Mean Sum of Squares (MSS)	F-ratio
Academic Achievement (A)	2	1468.808	73.404	222.895**
Gender (B)	1	1738.801	1738.801	527.733**
Academic Achievement x Gender (AxB)	2	279.075	139.537	42.350**
Between Cells	5	4818.900	.....	
Within Cells	244	908.943	3.295	
Total	249			

\*\* Significant at 0.01 level

\* Significant at 0.05 level

NS= Not Significant

**Main Effect**

**Academic Achievement (A)**

It is evident from Table-2 that F-ratio for the effect of academic achievement on adjustment of secondary school students is 222.895 which is significant at 0.01 level leading to the inference that academic achievement is one of the main influential factors in determining adjustment.

Therefore, the null hypothesis  $H_{01}$  (a), “There exists no significant effect of academic achievement on adjustment among secondary school students” is **rejected**. It means that the students having better academic achievement showed much better adjustment. This result is supported by the result of Akhtar and Alam (2016) [2] who also found that that high achievement and low achievement groups differed significantly in overall adjustment. In order to investigate further, the t-test has been further employed to find out the significance of difference in mean adjustment scores for different groups and has been given in Table 3.

**Table: 3**  
**‘t’-values for the Mean Adjustment Scores of Secondary School Students with respect to Academic Achievement**

Academic Achievement		N		Mean		S.D.		t-values
HIGH	AVERAGE	72	123	9.58	13.15	2.689	2.415	9.39**
AVERAGE	LOW	123	55	13.15	17.96	2.415	5.099	6.68**
LOW	HIGH	55	72	17.96	9.58	5.099	2.689	11.03**

\*\* Significant at 0.01 level

\*Significant at 0.05 level

NS- Not Significant

Table-3 illustrates that t-value 9.39 for the mean adjustment scores of secondary school students belonging to high and low academic achievement groups is significant at 0.01 level. In terms of mean, it was found that mean adjustment scores of students with average academic achievement are higher than mean adjustment scores of students with high academic achievement. High adjustment score indicates poor level of adjustment and low scores indicate good adjustment. It shows that students with high academic achievement have good adjustment as compared to students with average academic achievement. It is also clear that t-value 6.68 for the mean adjustment scores of secondary school students belonging to average and low academic achievement groups is significant at 0.01 level. Mean adjustment scores of students with lower academic achievement are higher than mean adjustment scores of students with average academic achievement. It shows that students with average academic achievement are better adjusted as compared to students with low academic achievement. Table- 3 also depicts that t-value (11.03) for the mean adjustment scores of secondary school students belonging to low and high academic achievement group is significant at 0.01 level. In the context of mean scores, it was found that the mean adjustment scores of secondary school students with lower academic achievement is higher than secondary students with higher academic achievement. It shows that

students with higher academic achievement are better adjusted as compared to their counterparts. The reason for the difference between the level of adjustment of secondary school students with high, average and low academic achievement can be that level of academic achievement helps in developing confidence in students, which is pre-requisite for the better adjustment.

**Gender (B)**

It can further be inferred from the Table-2 that F-ratio for the effect of gender on adjustment is 527.733 which is significant at 0.01 level. It indicates that gender also plays significant role in determining academic achievement of secondary school students. This finding is in agreement with the findings of Basu (2012) [3] who also found that male and female students differ significantly on adjustment. In order to investigate further, the t-value was computed and has been given in Table 4:

**Table: 4**  
**t-value for the Mean Adjustment Scores of Male and Female Secondary School Students**

Group	N	Mean	S.D.	't'- value
Male	136	10.51	2.267	13.32**
Female	114	16.37	4.201	

\*\* Significant at 0.01 level

\*Significant at 0.05 level

NS - Not Significant

It can be inferred from Table-4 that t-value 13.32 for the mean adjustment scores of male and female secondary school students is significant at 0.01 level. In the context of mean scores, it is found that the mean adjustment scores of female secondary school students (16.37) are higher than male secondary school students (10.51). The present finding is in agreement with the findings of Vandana (2013) [12] who also revealed that female students have good adjustment level as compared to the male students.

**Interaction Effects of Academic Achievement (A) and Gender (B) on Adjustment of School Students (A×B)**

It can further be seen from Table-2, that F-ratio for the interaction effect of academic achievement and gender on adjustment of secondary school students is 42.350, which is significant at 0.01 level leading to inference that the interaction of academic achievement and gender plays a considerable role in determining adjustment of the secondary school students. The t-test was further employed to find out the significance of difference in mean adjustment scores for different group. The results for the same have been presented in the Table 5.

**Table: 5**  
**‘t’- values for Mean Adjustment Scores of Secondary School Students for different groups of Academic Achievement (A) and Gender (B)**

Sr. No.	Group		N		Mean		S.D.		‘t’ values
	I	II	I	II	I	II	I	II	
1	A <sub>1</sub> B <sub>1</sub>	A <sub>2</sub> B <sub>1</sub>	46	67	8.02	11.46	1.437	1.223	14.04**
2	A <sub>1</sub> B <sub>2</sub>	A <sub>2</sub> B <sub>2</sub>	26	56	12.35	15.16	2.097	1.886	5.81**
3	A <sub>1</sub> B <sub>1</sub>	A <sub>2</sub> B <sub>2</sub>	46	56	8.02	15.16	1.437	1.886	22.31**
4	A <sub>2</sub> B <sub>1</sub>	A <sub>1</sub> B <sub>2</sub>	67	26	11.46	12.35	1.223	2.097	2.04*
5	A <sub>1</sub> B <sub>1</sub>	A <sub>1</sub> B <sub>2</sub>	46	26	8.02	12.35	1.437	2.097	9.41**
6	A <sub>2</sub> B <sub>1</sub>	A <sub>2</sub> B <sub>2</sub>	67	56	11.46	15.16	1.223	1.886	13.21**
7	A <sub>2</sub> B <sub>1</sub>	A <sub>3</sub> B <sub>1</sub>	67	23	11.46	12.70	1.223	1.460	3.76**
8	A <sub>2</sub> B <sub>2</sub>	A <sub>3</sub> B <sub>2</sub>	56	32	15.16	21.75	1.886	2.896	10.98**
9	A <sub>3</sub> B <sub>1</sub>	A <sub>3</sub> B <sub>2</sub>	23	32	12.70	21.75	1.460	2.896	15.34**
10	A <sub>2</sub> B <sub>1</sub>	A <sub>3</sub> B <sub>2</sub>	67	32	11.46	21.75	1.223	2.896	16.6**
11	A <sub>2</sub> B <sub>2</sub>	A <sub>3</sub> B <sub>1</sub>	56	23	15.16	12.70	1.886	1.460	7.7**
12	A <sub>1</sub> B <sub>1</sub>	A <sub>3</sub> B <sub>1</sub>	46	23	8.02	12.70	1.437	1.460	13.0**
13	A <sub>1</sub> B <sub>2</sub>	A <sub>3</sub> B <sub>2</sub>	26	32	12.35	21.75	2.097	2.896	14.24**
14	A <sub>1</sub> B <sub>1</sub>	A <sub>3</sub> B <sub>2</sub>	46	32	8.02	21.75	1.437	2.896	24.96**
15	A <sub>1</sub> B <sub>2</sub>	A <sub>3</sub> B <sub>1</sub>	26	23	12.35	12.70	2.097	1.460	0.69(NS)

\*\* Significant at 0.01 level

\*Significant at 0.05 level

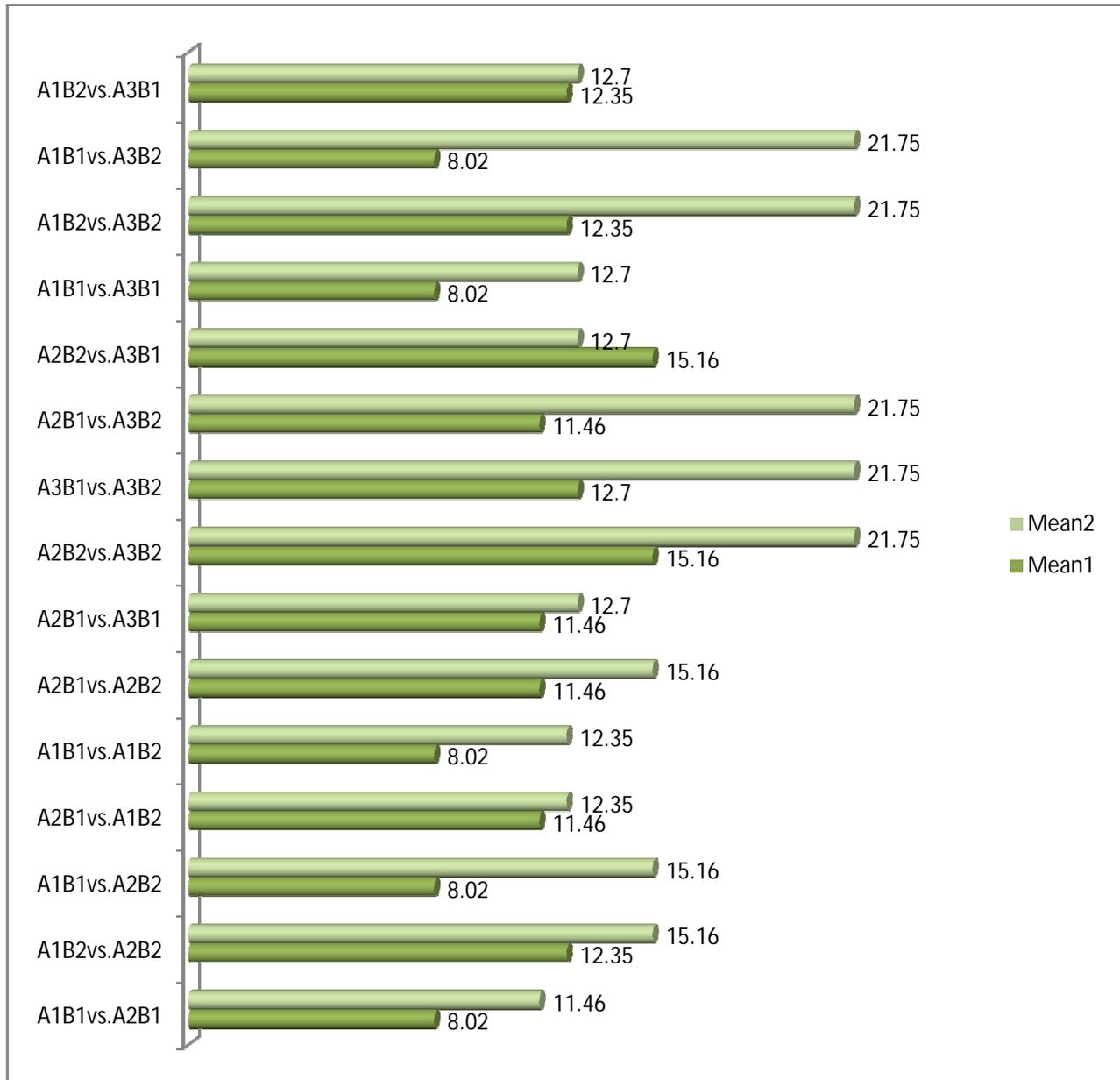
NS- Not Significant

A<sub>1</sub>= High AAC; A<sub>2</sub>=Average AAC; A<sub>3</sub> = Low AAC;

B<sub>1</sub>= Male & B<sub>2</sub>= Female

From a close perusal of the Table-5, it is evident that t-values 14.04, 5.81, 22.31, 9.41, 13.21, 3.76, 10.98, 15.34, 16.6, 7.7, 13.0, 14.24 and 24.96 for the groups (A<sub>1</sub>B<sub>1</sub> vs A<sub>2</sub>B<sub>1</sub>), (A<sub>1</sub>B<sub>2</sub> vs A<sub>2</sub>B<sub>2</sub>), (A<sub>1</sub>B<sub>1</sub>vsA<sub>2</sub>B<sub>2</sub>), (A<sub>1</sub>B<sub>1</sub>vsA<sub>1</sub>B<sub>2</sub>), (A<sub>2</sub>B<sub>1</sub>vsA<sub>2</sub>B<sub>2</sub>), (A<sub>2</sub>B<sub>1</sub>vsA<sub>3</sub>B<sub>1</sub>), (A<sub>2</sub>B<sub>2</sub>vsA<sub>3</sub>B<sub>2</sub>), (A<sub>3</sub>B<sub>1</sub>vsA<sub>3</sub>B<sub>2</sub>), (A<sub>2</sub>B<sub>1</sub>vsA<sub>3</sub>B<sub>2</sub>), (A<sub>2</sub>B<sub>2</sub>vsA<sub>3</sub>B<sub>1</sub>), (A<sub>1</sub>B<sub>1</sub>vsA<sub>3</sub>B<sub>1</sub>), (A<sub>1</sub>B<sub>2</sub>vsA<sub>3</sub>B<sub>2</sub>) and (A<sub>1</sub>B<sub>1</sub>vsA<sub>3</sub>B<sub>2</sub>) respectively were found significant at 0.01 level. Further, it is clear from the table-5 that t-value 2.04 for the group (A<sub>2</sub>B<sub>1</sub>vs.A<sub>1</sub>B<sub>2</sub>) is significant at 0.05 level. Table also reveals that t-value 0.69 for the group (A<sub>1</sub>B<sub>2</sub>vs.A<sub>3</sub>B<sub>1</sub>) is not significant at 0.01 level. The mean achievement scores of secondary school

students for different groups of academic achievement and gender have also been presented below in the Fig.2:



**Fig.2: Mean Adjustment Scores of Secondary School Students for different groups of Academic Achievement (A) × Gender (B)**

### EDUCATIONAL IMPLICATIONS

Adjustment plays a vital role in the development of the child. The secondary school students are at a very precarious stage of their lives wherein they are still in the process of exploring their

place and role in the society. It is at this stage of their lives that they are most in need of their adjustment abilities. The finding of the present study indicates that there exist significant differences between the adjustments of secondary school students on the basis of academic achievement. Thus, efforts should be made to help them to improve the academic achievement, which will help them in improving the level of adjustment. It was found that female secondary school students are less adjusted than their counterparts. Female are found to be more emotional. They should be given more opportunities and atmosphere to share their emotions and desires freely, so that they are able to solve their problems and get better adjusted. Proper Guidance and counseling services pertaining to how to get well-adjusted should be provided to them. Moreover, workshops and seminars should be organised in all educational institutions to guide the students about the various techniques of making adjustment. The parents should also help their child to adjust according to the changing needs of the society.

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