

## **FACTORS OF ACADEMIC CHEATING AMONG SECONDARY SCHOOL STUDENTS: HOME ENVIRONMENT & GENDER**

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### **ABSTRACT**

The purpose of the present study is to investigate the academic cheating among secondary school students in relation to home environment and gender. Academic cheating was treated as dependent variable whereas home environment and gender were treated as independent variables. Descriptive survey method was used. A sample of 600 secondary school students was taken by using multi-stage random sampling technique. Academic cheating scale by Kalia and Deep (2011) and home environment Inventory by Mishra (2012) were used to collect the data. The obtained data was analyzed using Two Way ANOVA with 3×2 factorial design. Levene's Test of Homogeneity of Variance was also applied to test the assumption of homogeneity of variance for ANOVA. Main effect of home environment reported to have a significant effect on academic cheating of secondary school students. Gender found to have no significant effect on academic cheating scores of secondary school students. Also no significant double interaction effect of home environment and gender found had no significant effect on the academic cheating of the secondary school students.

**Keywords:** Academic cheating, Home environment and Gender

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## INTRODUCTION

Academic dishonesty is a growing concern amongst students for better grades (Bushweller, 1999). It occurs in elementary school, middle school, high school and even in college. Research in this area have shown that one-third of elementary students are engaged in cheating and the rate dramatically increases when they entry into the higher classes and in high school reaches its peak (Cizek, 1999). Home is the first and important place for the child's holistic growth and development. It gives not only the genetic surrounding in term of social relationship and cultural patterns but the genetic transmission of basic capabilities for the development of the child. However, education like in school, at home must also aspire gain the desired objectives in principles with productive way of observing and making self analysis. The significance of the home ambience is something that has been accepted as necessary to a student earning and development. Parents are masters on their own children and every child require to be treated as an individual.

## VARIABLES USED

**Dependent Variable:** Academic Cheating

**Independent Variables:** Home environment and Gender

## OBJECTIVES OF THE STUDY

1. To study the main effect of home environment (C) and gender (B) on academic cheating among secondary school students.
2. To find out the interaction effect of home environment and gender on academic cheating among secondary school students.

## HYPOTHESES OF THE STUDY

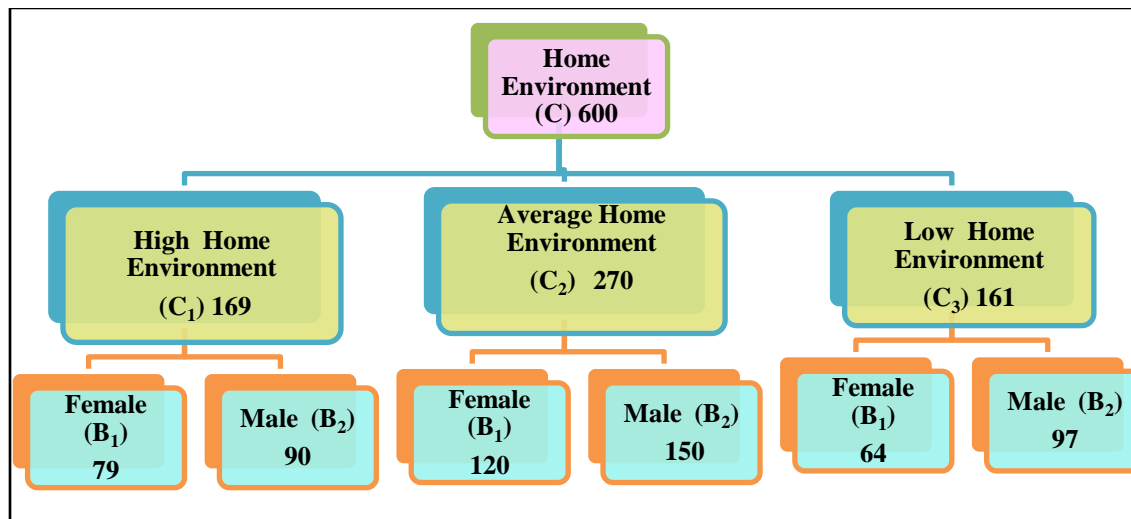
**H<sub>01</sub>** There exists no significant main effect of home environment (C) on academic cheating among secondary school students.

**H<sub>02</sub>** There exists no significant main effect of gender (B) on academic cheating among secondary school students.

**H<sub>03</sub>** There exists no significant interaction effect of home environment and gender on academic cheating among secondary school students.

**DESIGN AND METHODOLOGY:** In the present study, descriptive survey method was used. The 3×2 factorial randomized group design was used to analyze the data. All the independent variables i.e. home environment (High, Average and Low) and gender (Male & Female) were varied at the two levels which have been shown below in the schematic design.

**SAMPLE:** A sample of 600 secondary school students was selected by using multi-stage stratified random sampling technique on the basis of home environment and gender. Distribution of sample has been depicted below:



**Fig. 1 3x2 Factorial Designs for Effect of Home Environment and Gender on academic cheating**

**TOOL USED:** Academic cheating scale by Kalia and Deep (2011) was used to assess the academic cheating among students and Home Environment Inventory by Mishra (2012) was used.

**STATISTICAL TECHNIQUES USED:** The data was analyzed by using descriptive as well as inferential statistics. The Two-Way Analysis of Variance (ANOVA) with 3×2 Factorial Design was computed using SPSS 20 version to study the main effect and interaction effects of the independent variables i.e. home environment and gender on academic cheating among students.

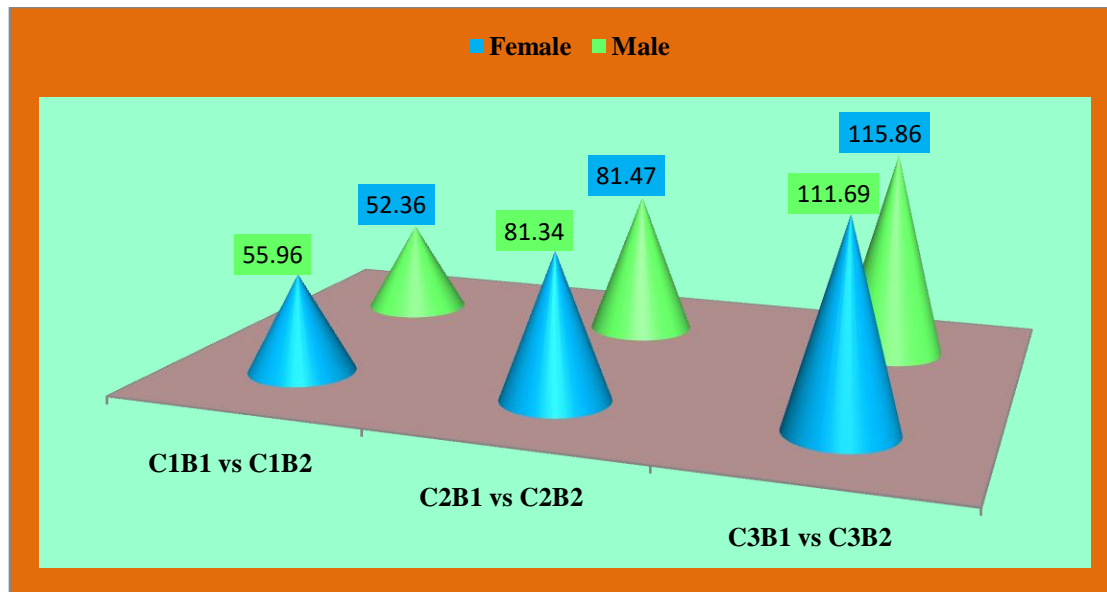
Levene's Test of Homogeneity of Variance was used to test the assumption of homogeneity of variance before applying Two-Way ANOVA. Wherever F-value was found significant, 't'-test was employed for further investigation.

**DATA ANALYSIS AND DISCUSSION:** The objectives of the present study was to find out the main and interaction effects of home environment and gender on academic cheating among secondary school students, data were subjected to analysis of variance (ANOVA) of a (3x2) factorial study with a randomized group design. The independent variable such as Home environment coded as (C) and further categorized as High home environment ( $C_1$ ), Average home environment ( $C_2$ ), Low home environment ( $C_3$ ); gender coded as (B) and divided into two categorized – Female ( $B_1$ ) and Male ( $B_2$ ). The means and SDs of different sub-samples have also been given in the table 1 and Fig. 2. The summary of ANOVA (3x2) has also been further shown in the table 2, which is analyzed in terms of main and interaction effects of independent variable i.e home environment and gender on academic cheating among secondary school students.

**Table 1**

**Mean's and SDs of sub-samples of 3x2 design for Home Environment and Gender of Students with respect to Academic Cheating**

Home Environment	Gender (B)	N	Mean	SD
High ( $C_1$ )	Female ( $B_1$ )	79	55.96	46.474
	Male ( $B_2$ )	90	52.36	41.368
Average ( $C_2$ )	Female ( $B_1$ )	120	81.34	42.840
	Male ( $B_2$ )	150	81.47	39.992
Low ( $C_3$ )	Female ( $B_1$ )	64	111.69	43.120
	Male ( $B_2$ )	97	115.86	39.723



**Fig. 2 Mean Scores of Sub Sample of 3x2 Design For Academic Cheating of Secondary School students with respect to Home Environment and Gender**

**Table 2**

**Summary of Two way ANOVA (3x2 Factorial Design) for Academic Cheating of Secondary School Students with respect to Home Environment and Gender**

Sources of variance	df	Sum of Squares (SS)	Mean sum of squares (MSS)	F-ratios
<b>Main Effect</b>				
<b>C (Home Environment)</b>	<b>2</b>	<b>286221.60</b>	<b>143110.80</b>	<b>81.262**</b>
<b>B (Gender)</b>	<b>1</b>	<b>7.430</b>	<b>7.430</b>	<b>.004 (NS)</b>
<b>Double Interaction Effect</b>				
<b>C x B Interaction</b>	<b>2</b>	<b>1216.124</b>	<b>608.062</b>	<b>0.345 (NS)</b>
<b>Between Cells</b>	<b>5</b>	<b>300182.376</b>	<b>60036.475</b>	<b>.....</b>
<b>With in cells</b>	<b>594</b>	<b>1046099.623</b>	<b>1761.110</b>	<b>.....</b>
<b>Total</b>	<b>599</b>	<b>1346281.998</b>	<b>.....</b>	<b>.....</b>

\* Significant at 0.05 level    \*\* Significant at 0.01 level    NS = Not Significant

#### 4.2.3 Main effects of Home Environment and Gender on Academic Cheating of Secondary School Students

### Home Environment (C)

From the table 2, it is seen that F- ratio (81.26) for main effects of Home Environment on academic cheating of secondary school students is significant at 0.01 level leading to the inference that home environment has a significant effect on academic cheating . Therefore, the null hypothesis  $H_{01}$  , “**There exist no significant effect of home environment on academic cheating of secondary school students**” is rejected. The present result is in tune with the results of Kant and Malik (2016) who found that ‘home environment had a significant main effect on academic cheating’. For further exploration, t-test was applied to find out the significant difference between mean scores of academic cheating of different group for home environment. The results have been shown in the table 3.

**Table 3**

**‘t’ – values for the mean score of Academic Cheating of Secondary School Students with respect to Home Environment**

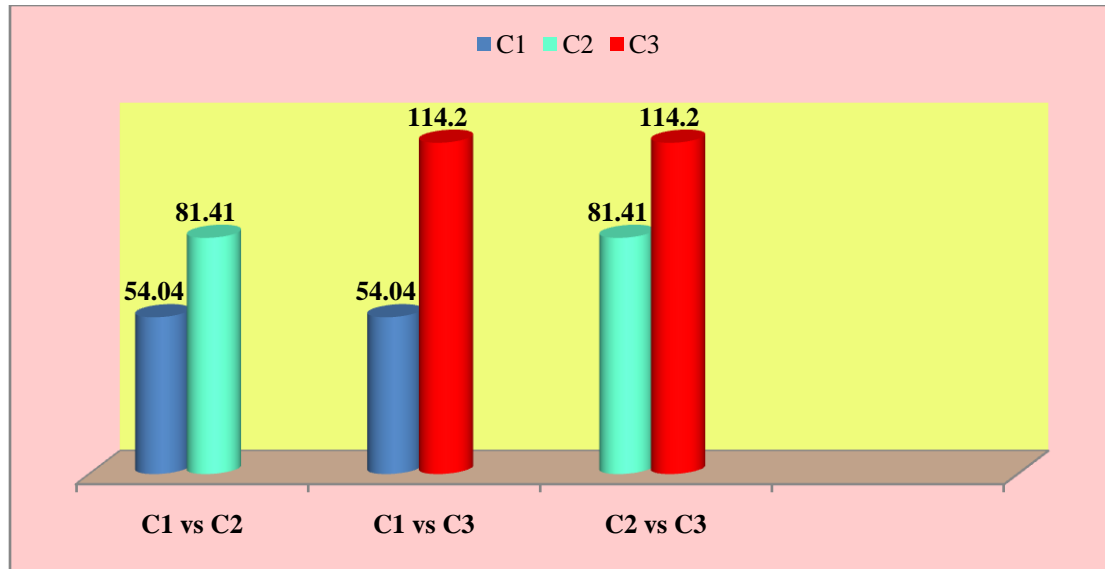
Home Environment	N		Mean		SD		t-value
HHE(C <sub>1</sub> ) vs AHE(C <sub>2</sub> )	169	270	54.04	81.41	43.73	41.20	6.61**
HHE (C <sub>1</sub> ) vs LHE(C <sub>3</sub> )	169	161	54.04	114.20	43.73	41.02	12.87**
AHE(C <sub>2</sub> ) vs LHE (C <sub>3</sub> )	270	161	81.41	114.20	41.20	41.02	8.00**

**\*\* Significant at 0.01 level**

**HHE : High Home Environment AHE : Average Home Environment**

**LHE : Low Home Environment**

Table-3 presents that t-values for all the groups such as C<sub>1</sub>vs C<sub>2</sub> ; C<sub>1</sub>vs C<sub>3</sub> and C<sub>2</sub>vs C<sub>3</sub> respectively have been found significant at 0.01 level leading to the inference that these groups differ significantly with respect to academic cheating among students. The mean scores of main effect corresponding to home environment on academic cheating have been depicted in Fig. 3.



**Fig. 3 Mean scores for Main Effect of Home Environment on Academic Cheating of Secondary School Students**

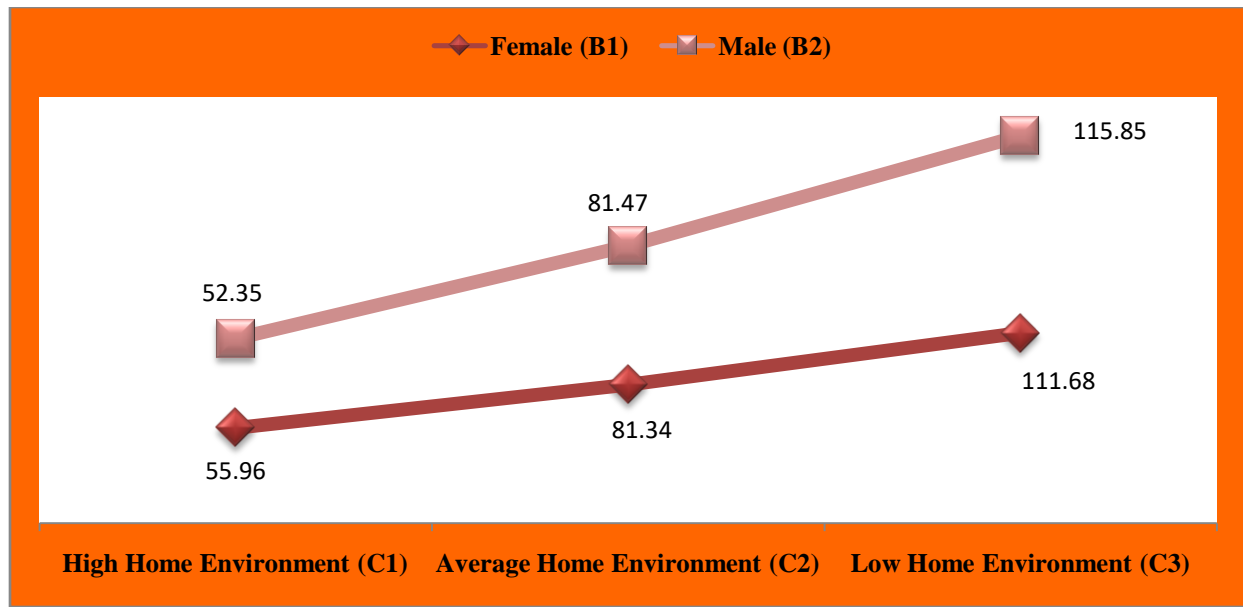
#### **Gender (B)**

It is apparent from the table 2 the F-ratio (.004) is not significant at 0.01 level for main effect of gender on academic cheating. This means that gender has no significant independent effect upon academic cheating. Therefore, the null hypothesis  $H_{02}$ , “**There exists no significant effect of gender on academic cheating of secondary school students**” is retained.

#### **4.2.4 Double Interaction Effects of Home environment and Gender on Academic Cheating of Secondary School Students**

##### **Home Environment x Gender (B)**

It is palpable from the table 2 that F-ratio (0.345) for the interaction between home environment and gender is which is not significant. Therefore, null hypothesis  $H_{03}$ , “**There exists no significant interaction effect of home environment and gender on academic cheating of secondary school students**” is retained. It is concluded that there is no significant interaction effect of home environment and gender on academic cheating. The line graph 4 shows that there is no significant interaction effect of home environment and gender on academic cheating of secondary school students.



**Fig. 4 Interaction Effect of Home Environment (C) x Gender (B) on Academic Cheating of Secondary School Students**

The means  $M_{11} = 55.96$ ,  $M_{21} = 81.34$  and  $M_{31} = 111.68$  are marked to plot the line  $B_1$ . Similarly, the means  $M_{12} = 52.35$ ,  $M_{22} = 81.47$  and  $M_{32} = 115.85$  are marked for plotting the line  $B_2$ . An interaction effect is generally represented by the set of parallel lines. From the graphs, it is clear that the lines are parallel. Thus, the line graph represents that there is no significant interaction effect of the two variables (home environment and gender) on the academic cheating of secondary school students.

## FINDINGS OF THE STUDY

- Home Environment was reported to have a significant effect on academic cheating of secondary school students.
- Gender was found to have no significant effect on academic cheating scores of secondary school students.
- No significant double interaction effect of home environment and gender was found on the academic cheating of the secondary school students.

## CONCLUSION

There are many reasons for engaging in academically dishonest behavior. A numbers of studies have identified some of the reasons why students choose to engage in academic cheating. Home



environment was found to be significantly related with academic cheating. Negative atmosphere of the home can contribute to the rise of Academic Cheating. So, the child should provide such an atmosphere at home that the child grows so perfectly who turns out to be a responsible and mature individual who can handle situations with maturity without getting involved in anti-social activities like Academic Cheating. Parents at home should understand the kind of changes a child is going through and the kind of pressures he/she face in his/her every day activities. They should try to avoid the factors that can cause stress and pressure in the child.

## REFERENCES

- **Bushweller, K. (1999).** Student cheating: a morality moratorium? *The American School Board Journal*, 18(6), 24-32.
- **Cizek, G. J. (1999).** Cheating on tests: How to do it, detect it, and prevent it. Mahwah, NJ: Erlbaum, 10(1), 14-18.
- **Kalia, A.K. and Deep, K. (2011).** Manual for Academic Cheating Scale. Agra: National Psychological Corporation.
- **Kaur, J. (2010).** Gender differences in perceptions of home environment of adolescents. *Journal of community guidance and research*, 27(3), 337-340.
- **Kaur, J, Rana, J. S. and Kaur, R. (2009).** Home environment and academic achievement as correlates of self concept among adolescents. *Journal of studies in home communication science*, 3(1), 13-17.
- **Malik, U. and Kant, R. (2016).** Academic Cheating among senior secondary students in relation to their Peer-Pressure. *International Journal of Informative & Futuristic Research*, 3(11), 4113-4122.
- **Misra, K.S. (2012).** Manual for Home environment inventory. Agra: National Psychological Corporation.