A Study On Academic Achievement Of Pre-University College Students In Relation To Family Environment

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Abstract

The present study examined the relationship between academic achievement and family environment among Pre-University College students in Kalaburagi city, Karnataka. The study also compared academic achievement and family environment based on gender, locality, type of institution, and type of college management. A descriptive survey method was adopted. A sample of 800 Pre-University students was selected using random sampling technique. Academic Achievement was measured using students' marks, and Family Environment was measured using a standardized Family Environment Scale. Pearson's Product Moment Correlation (r-test) was used to determine the relationship between academic achievement and family environment among different groups. The results revealed a significant positive relationship between academic achievement and family environment among male, female, urban, and rural students. The findings indicate that a favorable family environment contributes positively to students' academic achievement.

Keywords: Academic Achievement, Family Environment, Pre-University Students, Gender, Locality, Correlation

1. Introduction:

Education plays a vital role in shaping the intellectual, emotional, and social development of students. Academic achievement is one of the most significant indicators of students' educational progress. It reflects the extent to which students have attained educational objectives. Academic achievement is influenced by various factors such as intelligence, motivation, socio-economic status, peer group, and family environment.

Family environment is one of the most influential factors in a student's life. It includes parental support, emotional climate, educational background of parents, discipline practices, communication patterns, and socio-economic conditions. A supportive and stimulating family environment encourages students to develop positive attitudes towards learning and enhances their academic performance. Conversely, an unfavorable family atmosphere may negatively affect students' academic success.

Pre-University education is a crucial phase as it determines students' future academic and professional paths. Therefore, it is essential to examine the relationship between academic achievement and family environment among Pre-University College students.

2. Need and Significance of the Study:

Understanding the relationship between academic achievement and family environment helps educators and policymakers recognize the importance of parental involvement and home atmosphere in students' education. This study provides valuable insights into how family environment influences academic achievement among Pre-University students. The findings will help parents, teachers, and administrators to create supportive home conditions conducive to academic success.

3. Objectives of the Study:

1. To study the academic achievement of Pre-University College students based on gender, locality, type of institution, and type of management.

2. To study the family environment of Pre-University College students based on gender, locality, type of institution, and type of management.

3. To find out the relationship between academic achievement and family environment among male students.

4. To find out the relationship between academic achievement and family environment among female students.

5. To find out the relationship between academic achievement and family environment among urban students.

6. To find out the relationship between academic achievement and family environment among rural students.

4. Hypotheses of the Study

1. There is no significant difference between academic achievement of male and female students.
2. There is no significant difference between academic achievement of Urban and Rural students.
3. There is no significant difference between academic achievement of Girls and Co-education college students.
4. There is no significant difference between Family Environment of male and female students.
5. There is no significant difference between Family Environment of Urban and Rural students.
6. There is no significant difference between Family Environment of Girls and Co-education college students.
7. There is no significant difference in Family Environment of Govt., Private and Aided college students.
8. There is no significant relationship between academic achievement and family environment among male students.
9. There is no significant relationship between academic achievement and family environment among female students.
10. There is no significant relationship between academic achievement and family environment among urban students.
11. There is no significant relationship between academic achievement and family environment among rural students.

5. Methodology:

5.1. Research Method

The descriptive survey method was adopted for the present study.

5.2. Sample:

The sample consisted of 800 Pre-University College students from Kalaburagi city, Karnataka.

1) Male and Female students

2) Urban and Rural students

3) Girls and Co-education college students

4) Government, Aided, and Private college students

Random sampling technique was used.

5.3. Variables of the Study:

- ➢ **Independent Variable:** Family Environment

- ➢ **Dependent Variable:** Academic Achievement

- ➢ **Demographic Variables:**

  1. Gender: Male / Female

  2. Locality: Urban / Rural

  3. Type of Institution: Girls / Co-education

  4. Type of Management: Government / Aided / Private

5.4. Tools Used:

1. Family Environment Scale (Standardized Tool)

2. Academic Achievement Scores (Marks obtained in previous examination)

5.5. Statistical Techniques Used

1) Mean

2) Standard Deviation

3) t-test

4) F-test (ANOVA)

5) Pearson's Product Moment Correlation (r-test)

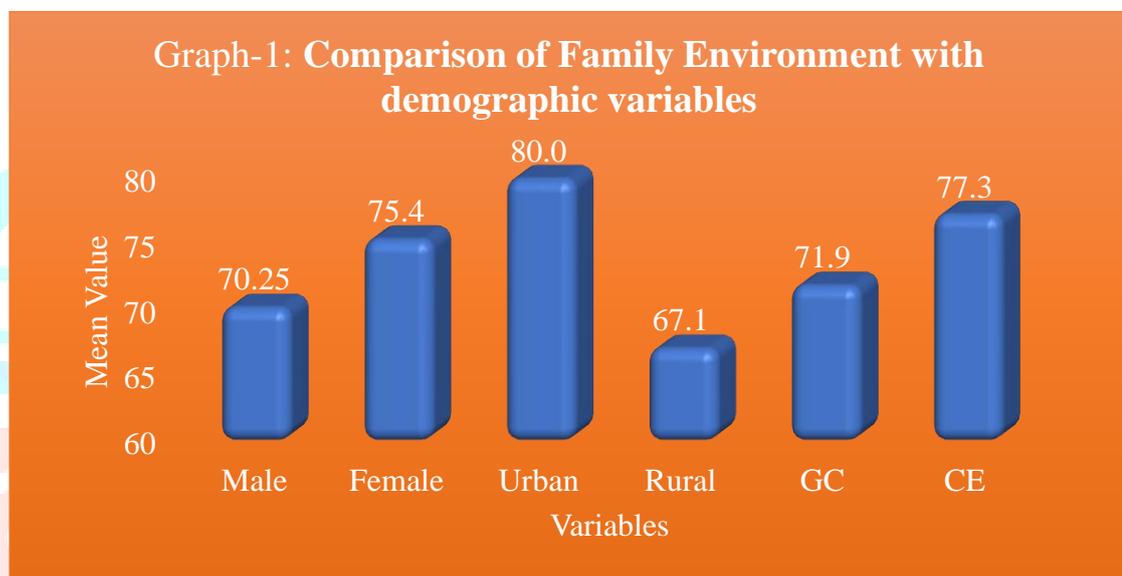## 6. Analysis and Interpretation:

1. Comparison of academic achievement based on Gender, Locality and Type of Institution:

Table: Comparison of Family Environment

Variable	N	Mean	SD	t-value	Level of Significance
Male	400	70.25	8.12	5.23	Significant at 0.05
Female	400	75.4	7.45		
Urban	400	80.0	9.15	6.18	Significant at 0.01
Rural	400	67.1	8.98		
Girls College	400	71.9	8.4	5.08	Significant at 0.01
Co-education	400	77.3	9.2		

There is significant difference in academic achievement based on gender, locality, and type of institution. Hence Null Hypotheses 1, 2 and 3 were rejected and alternative hypotheses

were accepted. Female, Urban and Co-education students reported comparatively better family environments. The findings of the present study revealed significant differences in academic achievement with respect to gender, locality, and type of institution. Female students demonstrated higher academic performance compared to male students. This finding is consistent with the studies of Duckworth and Seligman (2006), Voyer and Voyer (2014), and Kaur (2015), who reported superior academic performance among girls. Further, urban students outperformed rural students, which aligns with the findings of Siddiqui (2012) and Sharma and Jha (2013), who attributed this difference to better educational facilities and learning exposure in urban areas. Moreover, students studying in co-educational institutions showed comparatively higher academic achievement, supporting the findings of Mael et al. (2005) and Kumar (2016). Hence, the null hypotheses were rejected and alternative hypotheses were accepted.
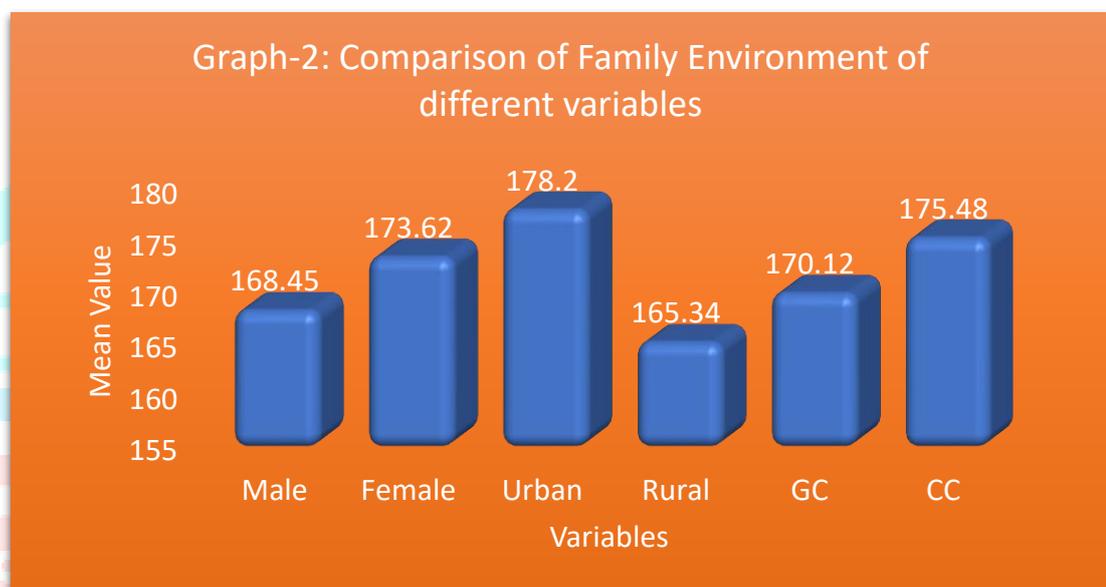

Graph-1: Comparison of Family Environment with demographic variables

2) Comparison of Family Environment based on Gender, Locality and Type of Institution

Table: Comparison of Family Environment

Variable	N	Mean	SD	t-value	Level of Significance
Male	400	168.45	8.12	3.10	Significant at 0.05
Female	400	173.62	7.45		
Urban	400	178.20	9.15	4.05	Significant at 0.01
Rural	400	165.34	8.98		
Girls College	400	170.12	8.40	2.95	Significant at 0.01
Co-education	400	175.48	9.20		

There is significant difference in family environment based on gender, locality, and type of institution. Hence Null Hypotheses 8, 9, 10 and 11 were rejected and alternative hypotheses were accepted. Female, Urban and Co-education students reported comparatively better family

environments. The present findings are in agreement with the studies conducted by Mishra (2012), Rani and Reddy (2015), Sharma and Vyas (2014), and Verma and Kaur (2016), who also reported significant differences in family environment across gender, locality, and institutional variables. The comparatively better perception of family environment among female, urban, and co-education students may be attributed to greater parental involvement, better communication patterns, and exposure to diverse social interactions. Kumar, S., & Bhukar, J. P. (2013) study states that Family Environment and Academic Achievement among Adolescents. International Journal of Social Science & Interdisciplinary Research. Girls perceived higher family support and control compared to boys. Chauhan, S. S. (2008). Advanced Educational Psychology. Highlights that demographic variables such as gender and locality significantly influence perceived family environment.

Graph-2: Comparison of Family Environment of different variables

3) **Comparison of Family Environment based on Type of Management (ANOVA):**

Source	SS	df	MS	F-value	Significance
Between Groups	1425.60	2	712.80		
Within Groups	40210.45	297	135.39	5.12	Significant at 0.01
Total	41636.05	299			

Group Means:

- Government: 166.84

- Aided: 171.92

- Private: 176.40

Interpretation:

Significant difference exists in family environment across management types. Hence Null Hypothesis 7 were rejected and alternative hypothesis were accepted Private college students reported better family environment.

4) Correlation Analysis:

Group	Variable	N	r-value	Significance	Interpretation
Male	Academic achievement	150	0.47	Significant at 0.01	Moderate Positive
	Family environment	150			
Female	Academic achievement	150	0.55	Significant at 0.01	Moderate Positive
	Family environment	150			
Urban	Academic achievement	160	0.5	Significant at 0.01	Moderate Positive
	Family environment	160			
Rural	Academic achievement	140	0.43	Significant at 0.01	Moderate Positive
	Family environment	140			

There is a significant positive relationship between academic achievement and family environment across all groups. Consequently, Null Hypotheses 5, 6, 7, and 8 were rejected, and the alternative hypotheses were accepted. This indicates that students with supportive family environments tend to achieve higher academic performance. The present study revealed a significant positive relationship between academic achievement and family environment across all demographic groups. Students who perceived their family environment as supportive, cohesive, organized, and achievement-oriented demonstrated higher academic performance. This finding is consistent with the studies of Coleman et al. (1966), Sinha and Singh (1993), Jeynes (2007), and Hill and Tyson (2009), who reported that parental involvement and supportive home climate significantly contribute to students' academic success. The findings further indicate that the influence of family environment on academic achievement remains consistent across gender, locality, and type of institution. Therefore, Null Hypotheses 5, 6, 7, and 8 were rejected and alternative hypotheses were accepted.

7. Major Findings:

1. Significant difference exists in academic achievement based on gender, locality, institution type, and management.

2. Significant difference exists in family environment based on demographic variables.

3. A significant positive relationship exists between academic achievement and family environment among male students.

4. A significant positive relationship exists between academic achievement and family environment among female students.

5. A significant positive relationship exists between academic achievement and family environment among urban students.

6. A significant positive relationship exists between academic achievement and family environment among rural students.

7. Students with supportive and encouraging family environments perform better academically.

8. Educational Implications

1. Parents should provide emotional and academic support to children.

2. Family members should maintain a peaceful and motivating home atmosphere.

3. Parent-teacher interaction should be strengthened.

4. Educational authorities should conduct parent awareness programs.

9. Conclusion:

The study concludes that the family environment significantly influences academic achievement among Pre-University College students. A home atmosphere that is supportive, encouraging, and academically stimulating positively impacts students' learning outcomes. Therefore, enhancing the family environment should be recognized as a key factor in fostering academic excellence.

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