

Exploring the Relationship Between Locus of Control and Academic Achievement of Adolescent Students

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Abstract: Adolescence students suffer from a number of problems. These problems make them think and help them to take decisions. The decision of a person is controlled by the locus of control. Locus of control is the personality trait that affects the thinking as well as behavior and leads to the inner and outside life of students. Locus of control has two factors internal & external. Any one factor is better for being successful in life. A person with Internal locus of control believes that the things happening in his life are due to his own abilities, actions as well as lessons learned from his own mistakes. On the other hand, A person with an external locus of control feels that external factors like destiny, luck, blessings are more responsible for the events and circumstances that occur in his life. If we know students internal/external locus of control appropriately then we can change students locus of control to make them successful in their life. The academic achievements of the students are influenced to a great extent by their locus of control. In the present study, the researcher included variables Locus of Control and Academic Achievement. This research has studied the correlation between Locus of Control and Academic Achievement of adolescence students.

Keywords: Adolescence, Locus of Control, Emotional Intelligence, Adjustment and Academic Achievement

I. INTRODUCTION

Education plays an important role in adolescence students life. Education is the tool of social transformation. Education plays an important role in strengthening the health of the citizens to achieve cultural progress of the society. It is a process of human development which helps the students to develop personality. Also, education plays an important part in constructing the society at time to time. It gives right shape to the society. **Battle and Lewis 2002**¹ The development of any nation depends on the quality of education of its citizens. No society can achieve economic and cultural development without the development of abilities and skills of the citizens. **NPE 1986**² In psychology, the period between the ages of 10 to 19 is called Adolescence. In Adolescence, student undergoes physical and mental changes. In this period, students need to be given lessons of real change, challenges and development. Only then it will be possible to achieve holistic development of the personality of the students in the stage of Adolescence. The basic goal of education is related to the concept of personality of students.³

Alport G. W. 1937 has defined personality as follows.

"Personality is the dynamic organization of the body and mind processes that drive behavior and lead to the individual's characteristic adjustment to his environment."

Personality has many aspects. Among them Locus Of Control, Emotional Intelligence, Adjustment are important aspects. **Julian B. Rotter 1954** Adolescent students have a fickle mind. Many students may not be interested in all the subjects in the school curriculum in this stage. Some subjects are more or less interesting. Some students like school subjects very much. They are interested in school studies while some students are interested in extracurricular activities (like sports, music, drama etc.). A student tries his best in the field in which he has interest. Such students participates in that field with motivation and is more likely to achieve higher academic progress in the related field. Therefore, if the field of interest of a students is known in a scientific manner and the students are made aware about it, then students can be successful in life by taking further education in that field of his interest according to his personality tendency. After junior college education , students have to choose a specific branch. Today, various fields of education are available

after junior college education. The student has to choose one field of his choice. Education enable an individual to face day to day challenges. Education improves inborn skills of and individual as well as introduce and empower him with new skills. Education improve aptitude and abilities. Education gives a new outlook to an individual towards the competition, anxiety, difficulties in life etc. **Sharma, Thakur, Sharma & Malhotra 2011**

This shows the importance of Locus of Control. Therefore, in today's education system, efforts should be taken to increase the level of Locus of Control of students. In today's digital world, it is necessary to promote self-development by taking proper education and make the student independent.

This research is focused on following things-testing and measuring of locus of control of students of standard 11th, the study of correlation in locus of control of students of different groups, the study of correlation of locus of control and academic achievements and to enhance and improve the abilities related to locus of control of students. Hence the researcher decided to conduct a research on Locus of Control.

1.1 Importance of Research

This research is very important for the successful life of adolescent students. We find that college students suffer from many types of problems. For example, these students have to go through difficulties related to learning methods, study room (place), selection of faculties as well as subjects. These problems make them think. Students have to take good decisions according to their situations. Decisions are controlled by Locus of Control. Locus of Control is an important aspect of a human's personality, which influences a human's thinking, behavior, leadership and academic achievement, etc. Hence this research is useful to know the personality and life of students in junior colleges. Locus of Control has two components, Internal Locus of Control and External Locus of Control. Any one of these two types is useful for a person to achieve success in life. Decision making is based on Locus of Control.

The present study has a importance in the field of education. It is an effort to bring into light the important factors like Locus of Control, Emotional Intelligence and Adjustment which play an important role in the academic achievement of the students. This study will bring into light that how and up to what extent academic achievement of the students is influenced by Locus of Control, Emotional Intelligence, Adjustment. The present study will bring into light some personal variables of students which educational authorities need to address in order to improve the quality of education.

Various studies have been conducted on academic achievement with relation to various variables. The present study, predict that academic achievement has an important value in attracting the attention of parents, teachers, educationist, and higher educational authorities. Extensive efforts are being made to improve the academic achievement of the students in the world. So researcher decided to conduct study the academic achievement from the point of view of Locus of Control.

1.2 Objectives of the Research Problem

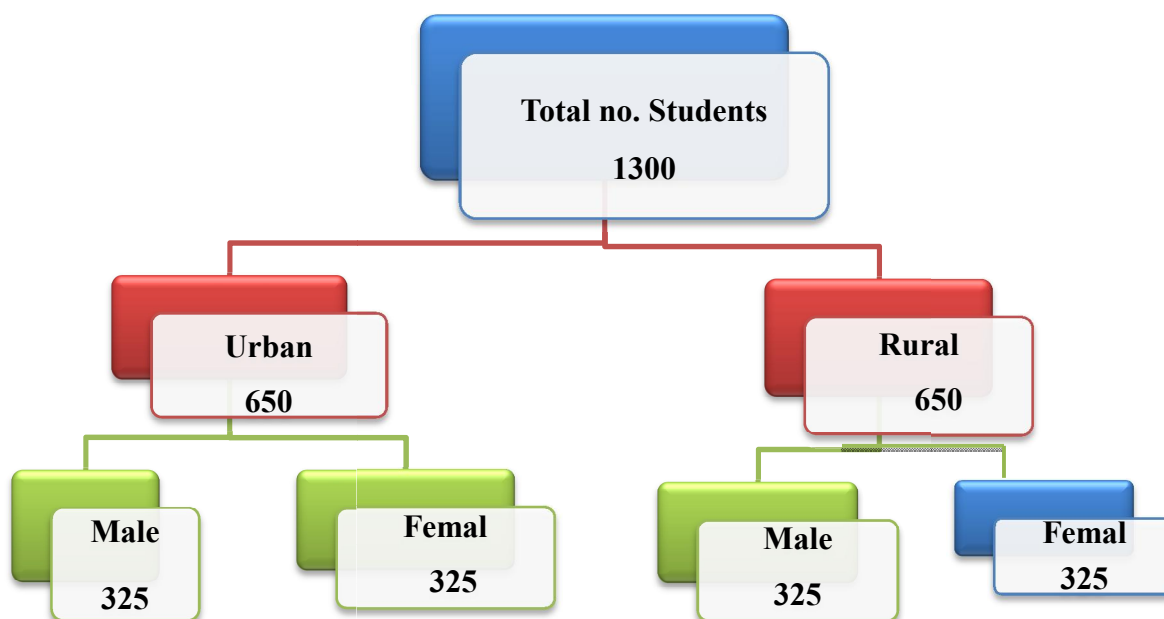
1. To compare the Locus of Control of the students studying in standard 11th science of junior colleges in urban and rural areas.
2. To compare the Academic Achievement of the students studying in standard 11th science of junior colleges in urban and rural areas.
3. To compare the Locus of Control between male and female students studying in standard 11th science in urban junior colleges.
4. To compare the Locus of Control between male and female students studying in standard 11th science in rural junior colleges.
5. To investigate the correlation between Locus of Control and Academic Achievement of male and female students studying in standard 11th science in urban junior colleges.
6. To investigate the correlation between Locus of Control and Academic Achievement of male and female students studying in standard 11th science in rural junior colleges.

1.3 Hypothesis

1. There is no significant difference in the Locus of Control of students studying in standard 11th science between urban and rural junior colleges.
2. There is no significant difference in the Academic Achievement of students studying in standard 11th science between urban and rural junior colleges.
3. There is no significant difference in Locus of Control between male and female students studying in standard 11th science in urban junior colleges.
4. There is no significant difference in Locus of Control between male and female students studying in standard 11th science in rural junior colleges.
5. There is no significant difference in Locus of Control and Academic Achievement between male and female students studying in standard 11th science in urban junior colleges.
6. There is no significant difference in Locus of Control and Academic Achievement between male and female students studying in standard 11th science in rural junior colleges.

1.4 Methods of Sampling

The convenience random sampling method has been adopted in this research. In sample, 1300 students have been included studying in science stream of standard 11th in the session 2021-22 in junior colleges of chandrapur district Maharashtra.



1.5 Survey Method

In the present research, it was necessary to measure the locus of control of junior college science students to understand their current locus of control. Therefore, the present locus of control of science students of class 11th in junior colleges was measured with the help of a standardized test. Sanjay Vohra's Lievenson's locus of control Test was used to collect the data in the present research.

1.6 Analysis Tools

The following statistical technique will be used to analyze the presented numerical information. 1. Mean 2. Standard deviation 3. 't' test 4. ANOVA

II. INTERPRETATION / CONCLUSION

Hypothesis 1 :-

There is no significant difference in the locus of control of students studying in standard 11th science between urban and rural junior colleges

Table 1: Table showing the significant difference in the locus of control of students from urban and rural areas

Area	No. of Students (N)	Degree of Freedom df	Mean M	Standard Deviation SD	't' Value	Significance level
Urban	650	1298	75.65	11.69	0.90	Not significant
Rural	650		75.67	10.33		

No. of Group = 2 No. of Students (N) = 1300 Degree of Freedom df = 1300 – 2 = 1298

't' value on 0.01 level = 2.3

on 0.05 level = 1.64

Interpretation:

From Table No. 1, the mean of locus of control of junior college urban students is 75.65 and the mean of locus of control of rural students is 75.67.

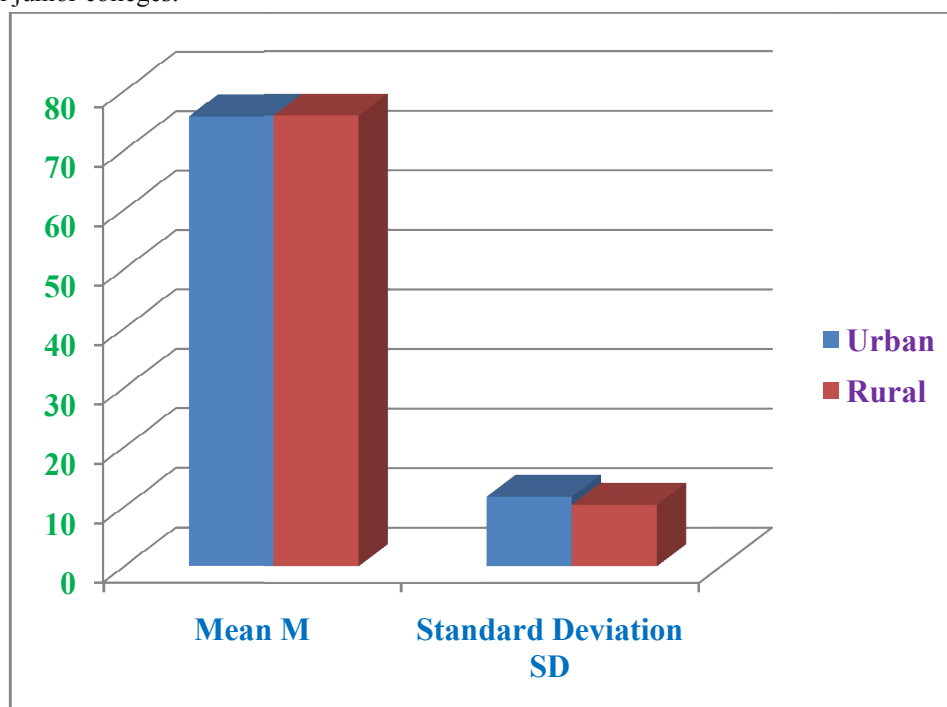
From this, the mean of locus of control of junior college urban students is lower than the mean of locus of control of rural students (75.67 - 75.65 = 0.02). For the Degree of Freedom 648, to be significant, the 't' value must be 2.3 or greater at the 0.01 level and 1.64 or greater at the 0.05 level. The 't' value for the presented hypothesis is 0.90. It means, the 't' value is less than the tabular value. So the Hypothesis has to be accepted.

Conclusion

From the above observation, it is concluded that there is no significant difference in the locus of control of junior college students from urban and rural areas.

Graph No. : 1

Graph showing the mean and standard deviation of **Locus of Control** of students studying in standard 11th science in urban and rural junior colleges.



Hypothesis 2:

There is no significant difference in the Academic Achievement of students studying in standard 11th science branch between urban and rural junior colleges.

Table 2: Table showing the significance of the difference in Academic Achievement of students from urban and rural areas

Area	No. of Students (N)	Degree of Freedom df	Mean M	Standard Deviation SD	't' Value	Significance level
Urban	650	1298	74.17	10.41	9.91	Significant
Rural	650		68.45	10.34		

No. of Group = 2

No. of Students (N) = 1300 Degree of Freedom df = 1300 – 2 = 1298

't' value on 0.01 level = 2.3

on 0.05 level = 1.64

Interpretation

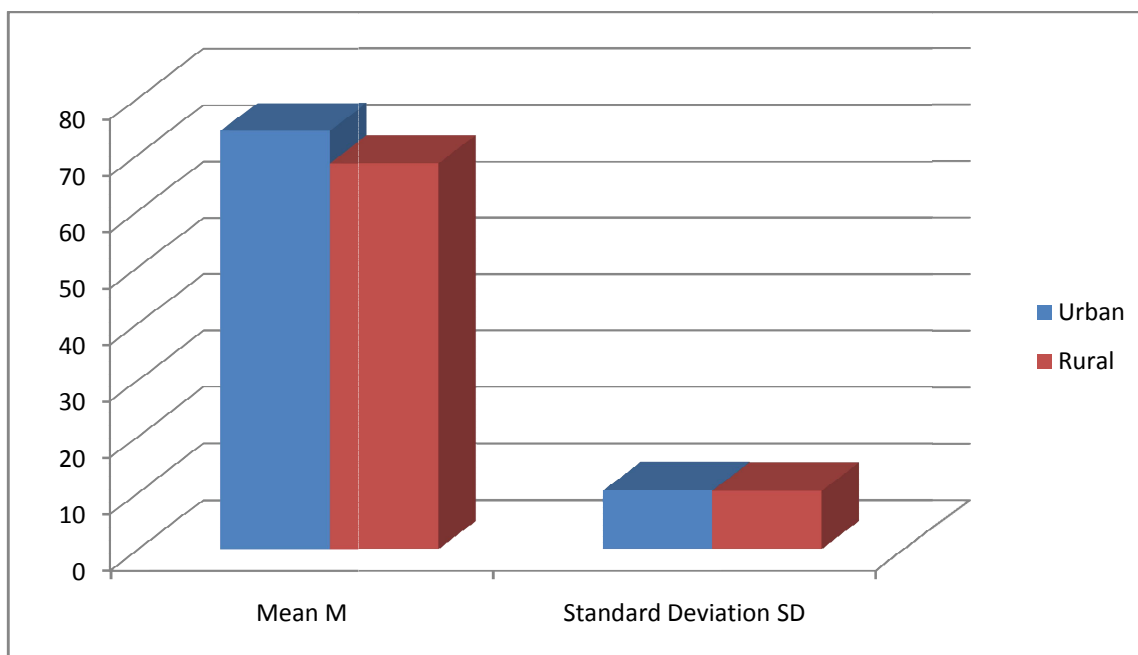
From Table No. 2, the mean of Academic Achievement of junior college urban students is 74.17 and the mean of Academic Achievement of rural students is 68.45.

From this, the mean of Academic Achievement of junior college urban students is greater than the mean of Academic Achievement of rural students ($74.17 - 68.45 = 5.72$). For the Degree of Freedom 648, to be significant, the 't' value must be 2.3 or greater at the 0.01 level, and 1.64 or greater at the 0.05 level. The 't' value for the presented hypothesis is 9.91. It means, the 't' value is more than the tabular value. So the Hypothesis has to be abandoned.

Conclusion

From the above observation, it is concluded that there is significant difference in the Academic Achievement of junior college students from urban and rural areas, i.e., the Academic Achievement of junior college students of urban and rural areas is not equal.

Graph 2: Graph showing the mean and standard deviation of Academic Achievement of students studying in standard 11th science in urban and rural junior colleges.



Hypothesis 3:

There is no significant difference in locus of control between male and female students studying in standard 11th science in urban junior colleges.

Table 3: Graph showing the mean and standard deviation of locus of control between male and female students of students studying in standard 11th science in urban junior colleges

Area	No. of Students (N)	Degree of Freedom df	Mean M	Standard Deviation SD	't' Value	Significance level
Urban	Male	325	77.08	12.13	3.09	Significant
	Female	325	74.25	11.09		

No. of Group = 2 No. of Students (N) = 650 Degree of Freedom df = 650 – 2 = 648

't' value on 0.01 level = 2.57

on 0.05 level = 1.96

Interpretation

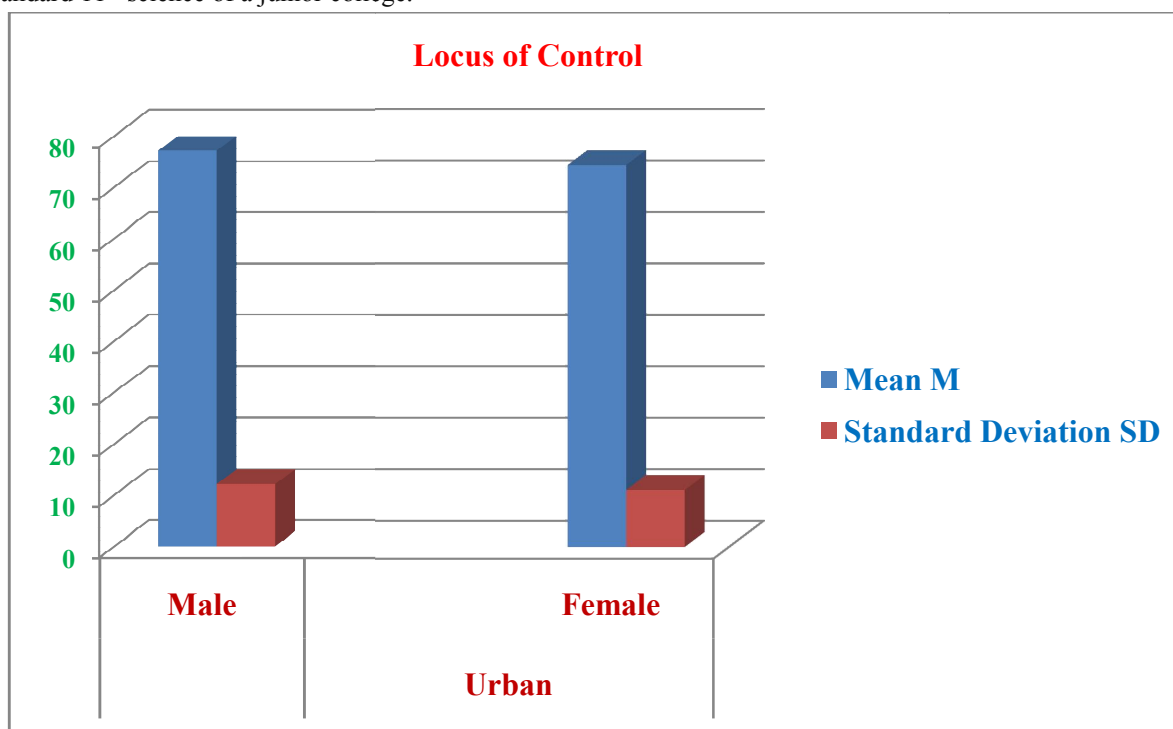
From Table No. 3, the mean of Locus of Control of urban junior college male students is 77.08 and the mean of Locus of Control of urban female students is 74.25. From this, the mean of Locus of Control of junior college urban male students is higher than the mean of Locus of Control of urban female students (77.08 - 74.25 = 2.83).

For the degree of freedom 648, to be significant the 't' value must be 2.57 or greater at the 0.01 level,. The 't' value for the presented hypothesis is 3.09. This means that the value of 't' is greater than the tabular value. So the hypothesis has to be abandoned.

Conclusion

From the above observation, it is concluded that there is a significant difference in the Locus of control of urban male students and urban female students of junior college. That is, the Locus of control of male students and female students of urban junior colleges is not equal.

Graph 3: Graph showing the mean and standard deviation of the Locus of Control of male and female urban students in standard 11th science of a junior college.



Hypothesis 4:

There is no significant difference in locus of control between male and female students studying in standard 11th science in rural junior colleges.

Table 4

Area	No. of Students (N)	Degree of Freedom df	Mean M	Standard Deviation SD	't' Value	Significance level
Rural	Male	325	75.74	11.02	1.13	Not Significant
	Female	325	76.66	10.92		

No of Group = 2

No. of Students (N) = 650

Degree of Freedom df = 650 – 2 = 648

't' value on 0.01 level = 2.57 & on 0.05 level = 1.96

Interpretation

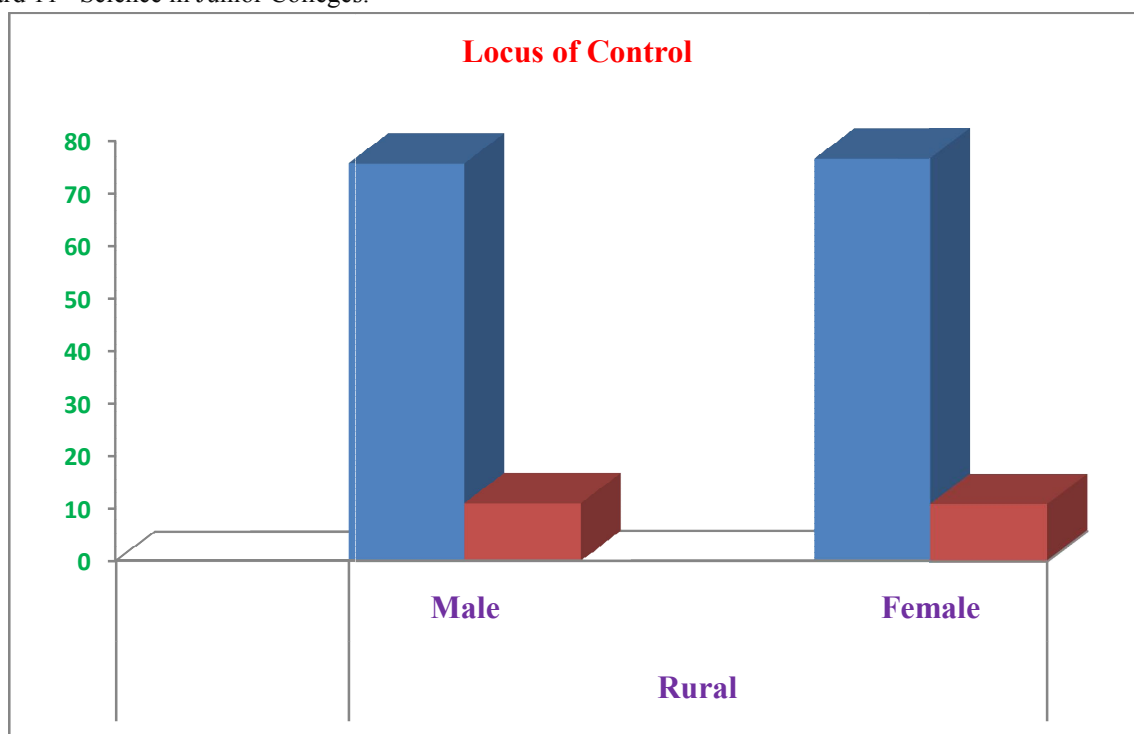
From Table No. 4, the mean of Locus of Control of rural male students is 75.74 and the mean of Locus of Control of rural female students is 76.66 of junior colleges. From this, the mean of Locus of Control of rural male students is lower than the mean of Locus of Control of rural female students ($76.66 - 75.74 = 0.92$).

For the degree of independence 648, to be significant the 't' value must be 2.58 or greater at the 0.01 level. The 't' value obtained for the presented hypothesis is 1.13. This means that the value of 't' is less than the tabular value. So the hypothesis has to be accepted.

Conclusion:

From the above observation, it is concluded that there is no significant difference in the Locus of Control of rural male and female students of junior colleges. That is, the Locus of Control of rural male students and female students of junior colleges is near about same.

Graph 4: Graph showing the mean and standard deviation of the Locus of Control of rural male and female students of standard 11th Science in Junior Colleges.



Hypothesis 5:

There is no significant difference in Locus of Control and Academic Achievement between male and female students studying in standard 11th science in urban junior colleges.

Table 5: Table showing the significance of correlation between Locus of Control and Academic Achievement of urban male and female students

Sr. No.	Variable	No. of Students (N)	Correlation coefficient value (r)	Significance level 0.05 & 0.01
1	Locus of Control and academic achievement of urban male students	325	r = 0.35	Significant
2	Locus of Control and academic achievement of urban female students	325	r = 0.15	Significant

No. of Group = 2

No. of Students (N) = 325 Degree of Freedom df = 325 – 2 = 323

Table value on 0.01 level = 0.14 on 0.05 level = 0.11

Interpretation 1

According to the correlation coefficient table, the value of 'r' to be significant should be 0.14 or more at the 0.01 level and 0.11 or more at the 0.05 level, for degree of freedom 325.

From Table No. 5, the 'r' value of Locus of Control and Academic Achievement of urban male students is found to be 0.35 which is significant at both levels. Therefore, the presented hypothesis has to be abandoned.

This shows that there is a positive and high correlation between Locus of Control and Academic Achievement of urban male students and

this correlation is significant. Students who have high Locus of Control also have more positive Academic Achievement, on the contrary, students who have low Locus of Control also have low Academic Achievement of urban male students.

Conclusion 1

A significant correlation is found between Locus of Control and Academic Achievement of male students studying in standard 11th science in urban junior colleges.

Interpretation 2

The 'r' value of Locus of Control and academic achievement of urban female students was found to be 0.15 which is significant at both levels. Therefore, the presented hypothesis has to be abandoned.

This shows that there is a positive and high correlation between Locus of Control and Academic Achievement of urban female students and this correlation is significant. Students who have high Locus of Control also have more positive Academic Achievement, on the contrary, students who have low Locus of Control also have low Academic Achievement of urban female students.

Conclusion 2

A significant correlation is found between Locus of Control and academic achievement of female students studying in standard 11th science in urban junior colleges.

Hypothesis 6:

There is no significant difference in locus of control and academic achievement between male and female students studying in standard 11th science in rural junior colleges.

Table 6: Table showing the significance of correlation between Locus of Control and academic achievement of rural male and female students

Sr. No.	Variable	No. of Students (N)	Correlation coefficient value (r)	Significance level 0.05 and 0.01
1	Locus of Control and academic achievement of rural male students	325	r = 0.21	Significant
2	Locus of Control and academic achievement of rural female students	325	r = 0.15	Significant

No. of Group = 2

No. of Students (N) = 325 Degree of Freedom df = 325 – 2 = 323

Table value on 0.01 level = 0.14 on 0.05 level = 0.11

Interpretation 1 :

The 'r' value of Locus of Control and academic achievement Rural male students' was found to be 0.21 which is significant at both levels. Therefore, the proposed hypothesis has to be abandoned.

This shows that there is a positive correlation between Locus of Control and academic achievement of rural male students and this correlation is significant.

Students who have high Locus of Control also have more positive academic achievement, on the contrary, students who have low Locus of Control also have low academic achievement of rural male students.

Conclusion 1 :-

A significant correlation is found between Locus of Control and academic achievement of male students studying standard 11th science in rural junior colleges.

Interpretation 2 :-

The 'r' value of Locus of Control and academic achievement of rural female students was found to be 0.15 which is significant at both levels. Therefore, the proposed hypothesis has to be abandoned.

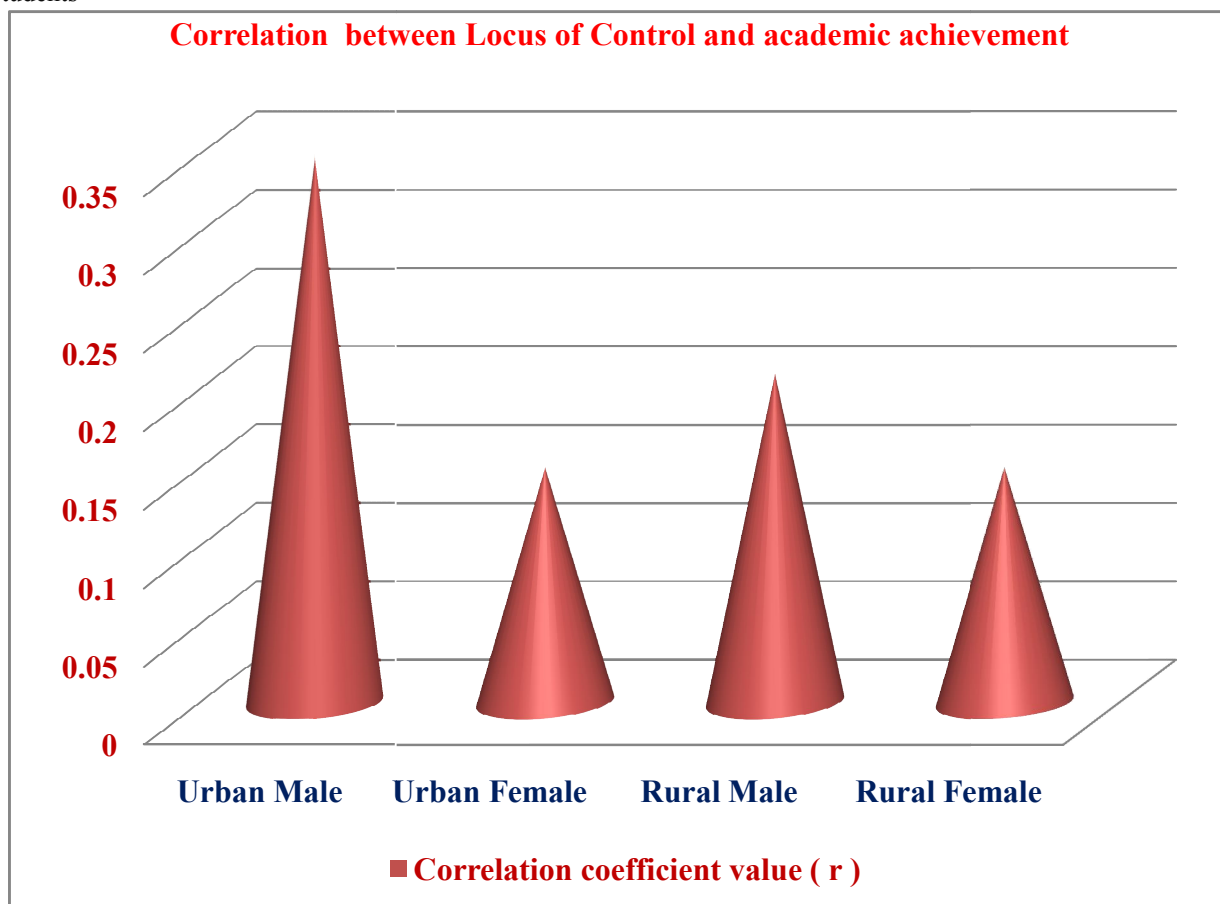
This shows that there is a positive correlation between Locus of Control and academic achievement of rural female students and this correlation is significant.

Students who have high Locus of Control also have more positive academic achievement, on the contrary, students who have low Locus of Control also have low academic achievement of rural female students.

Conclusion 2 :

A significant correlation is found between Locus of Control and academic achievement of female students studying in standard 11th science in rural junior colleges.

Graph 5: Graph showing the correlation between Locus of Control and academic achievement of male and female students



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