



A STUDY OF ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS, STUDYING THROUGH REGULAR & OPEN MODE IN RELATION TO LEARNING ENGAGEMENT

Vijay Kumar Tyagi

Researcher, Teacher Education Department, D.A.V (P.G) College, Muzaffarnagar, U.P

Dr. Surendra Pal

Professor, Teacher Education Department, D. A. V (P.G) College, Muzaffarnagar, U.P

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Abstract

Academic achievement is the indication of the entire educational growth & development of cognitive, affective & psychomotor domains of the students' personality. The present study has been carried out to know the relation between the academic achievement & learning engagement of the secondary students studying through regular and open mode. The researcher tried his best to know the relation of different dimensions of learning engagement with the academic achievement of the secondary students. The descriptive survey method was followed to carry out this research. The sample of 500 students studying in 10th class of CBSE and National open schools was selected through random sampling method. In order to access the learning engagement, the investigator constructed his self made learning engagement scale. The marks obtained by the students in 10th class were considered as the academic achievement of the students. Mean, SD, t test and correlation were applied for data analysis. The findings of this research reveals that there is positive moderate relation between the academic achievement & learning engagement of the secondary students studying through regular as well as open mode. Through this study, it was also revealed that there is significance difference between the academic achievement and learning engagement of the secondary students studying through regular and open mode.



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KEY WORDS: Academic Achievement, Learning Engagement, Open education, Regular education

INTRODUCTION

The aim of education is to do the whole round development of the cognitive, affective & psychomotor domains of the personality of a human being. Various modes of education help at different stages & different degrees in achieving the above mentioned aim. These modes of education can be categorized in three categories like regular or formal mode of education, informal mode of education & distance or non-formal mode of education. Lot of activities are performed in regular & open education mode to enhance the academic achievement of the students. In the present era, academic achievement is the center point of discussion among educators because it has become the criterion for selection in many fields of life.

SIGNIFICANCE OF THE STUDY

Education either regular or open, is generally concerned with the medium to improve students' academic achievement. Large numbers of researches like **Holliday, 1981; Okoye, 2008** support the above stated statement. Academic achievement may be specified as performance, knowledge or skill gained after teaching & training in subjects of study often decided by marks assigned by the teacher (**Dictionary of Education, 2003**). There are several factors like interest, aptitude, motivation, environment & learning experiences that have an impact on academic achievement of the students. Despite these, the learning engagement of the students also affects academic achievement. Learning engagement plays a dominant role in students' academic performance & construction of concepts. As till now, no study has been carried out to assess academic achievement in relation to learning engagement of secondary students studying through regular and open mode.

Keeping this thing in mind, the investigator tried to study academic achievement of secondary students studying through regular & open mode in relation to learning engagement.

STATEMENT OF THE PROBLEM

The present research plans to study the academic achievement of secondary students studying through regular and open mode in relation to learning engagement.

So the study is “**A STUDY OF ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS, STUDYING THROUGH REGULAR & OPEN MODE IN RELATION TO LEARNING ENGAGEMENT.**”

OBJECTIVES OF THE STUDY

1. To analyse the academic achievement of secondary school students studying through regular & open mode.
2. To analyse the learning engagement of secondary school students studying through regular & open mode.
3. To study the relationship between the learning engagement & academic achievement ability of secondary school students studying through regular mode.
4. To study the relationship between the learning engagement & academic achievement of secondary school students studying through open mode.
5. To study the difference between the learning engagement of secondary students studying through regular & open mode.

HYPOTHESIS OF THE STUDY

Ho1- Secondary students studying through regular and open mode possess moderate magnitude of academic achievement.

Ho2- Secondary students studying through regular and open mode possess moderate magnitude of learning engagement.

Ho3- There exists a significant relationship between learning engagement & academic achievement of secondary school students studying through regular mode.

Ho4- There exists a significant relationship between learning engagement & academic achievement of secondary school students studying through open mode.

Ho5- There exists a significant difference between the learning engagement of secondary school students studying through regular & open mode.

DELIMITATION OF THE STUDY

1. The study is delimited to the Muzaffarnagar district of Uttar Pradesh.
2. The present study is delimited to the secondary students of regular and open education of Muzaffarnagar district.
3. The present study is delimited to 500 sample size.

OPERATIONAL DEFINITION OF TERMS

REGULAR EDUCATION: Regular education is that education where the student has to attend classes in regular mode.

OPEN EDUCATION: Open education is that education that is designed for the participation of a large number of geographically dispersed students.

LEARNING ENGAGEMENT: Learning engagement is students' willingness, need, desire, motivation & success in the learning process.

CHAPTER-II: Review of Related Literature

Review of related literature is one of the essential aspects of research activity to avoid duplicity. So, the researcher studied many research studies related to his topic.

Studies in India & Abroad:

Selim Gunuc (2014) conducted a study on the relationship between student engagement & their academic achievement & revealed that cognitive, emotional & behavioural engagement has a strong relationship with academic achievement. Cognitive engagement is quite important especially for the students' academic achievement.

Anbalika Dogra (2016) conducted a study on the association between students' learning engagement & their achievement in psychology to examine the correlation of engagement in learning & achievement in psychology & found a significant relationship between achievement & engagement of students.

Maroco, Maorco & Fredricks (2016) revealed that engagement significantly increased academic achievement.

Heng (2014) reported that student engagement added significant value to their achievement.

Ali-Agili, Z. G. & Bin Mamat. M. (2012). The factors influence students' achievement in mathematics; A case for Libyans' students, World applied sciences journal 17(9), 1224-1230

CHAPTER-III: Design of the Study

Method: Descriptive survey method has been followed for the present study.

Population: The population of the present study consists all the secondary students of Muzaffarnagar district studying through regular and open mode.

Sample: The present study is delimited to **500 sample** size of secondary regular and open education students of **CBSE board** and **National Institute Of Open Schooling** of Muzaffarnagar district where 250 students(125 boys+125 girls) are from CBSE board & 250 students(125 boys +125 girls) are from National Open Schools of Muzaffarnagar district respectively.

Tools: The following tools have been used for the study.

(1) To measure the learning engagement of secondary students, a learning engagement tool has been constructed by the researcher.

CHAPTER-IV: Collection of Data

Most of the data collection was done through research tools. First of all, this data was systematized, classified and tabulated to serve the purpose of doing systematic research. Frequencies were converted into percentage and data were analysed and synthesized. Statistical techniques like mean, standard deviation, chi test, t test and correlation were applied on the data to conclude the result.

Mean scores were used to know the magnitude of achievement, problem solving ability and learning engagement of the secondary students. Standard deviation was used to know the deviation of scores from mean in the distribution of scores. Chi test was used to know the normal distribution of the collected scores as per NPC and to make norms as per requirement. 't' test was used to know the difference between the mean scores of two variables. Correlation was used to know the relation between two variables.

CHAPTER-V: Analysis & Interpretation of Data

Objective 1: To analyse the academic achievement of secondary school students studying through regular & open mode.

Ho1- Secondary students studying through regular and open mode possess a moderate magnitude of academic achievement.

(a) Academic Achievement of the Secondary Students Studying through Regular Mode: It is evident that the mean value of academic achievement of the regular mode students is **321.34** and standard deviation is **51.9**. The obtained mean value was found to be higher than the mean value of total sample **310.06** and higher than the theoretical mean value **250** of the test. Furthermore, as the obtained mean value is higher than the mean value of total sample and the theoretical mean, it can be shown that secondary students studying through regular mode have a high level of academic achievement.

(b) Academic Achievement of the Secondary Students Studying Through Open Mode: It is evident that the mean value of academic achievement of the open mode students is **298.78** and standard deviation is **52.8**. The obtained mean value was found to be lower than the mean value of total sample **310.06** and higher than the theoretical mean value **250** of the test. Furthermore, as the obtained mean value is lower than the mean value of the total

sample and higher than the theoretical mean, it can be shown that secondary students studying through open mode have low level of academic achievement.

Objective2: To analyse the learning engagement of secondary school students studying through regular & open mode.

Ho2- Secondary students studying through regular and open mode possess a moderate magnitude of learning engagement.

(a) Learning Engagement of the Secondary Students Studying Through Regular

Mode: It is evident that the mean value of learning engagement of the regular mode students is **106.78** and standard deviation is **16.3**. The obtained mean value was found to be higher than the mean value of total sample **103.3** and higher than the theoretical mean value 75 of the test. Furthermore, as the obtained mean value is higher than the mean value of the total sample and the theoretical mean, it can be shown that secondary students studying through regular mode have a high level of learning engagement.

(b) Learning Engagement of the Secondary Students Studying Through Open Mode:

It is evident that the mean value of learning engagement of the open mode students is **99.34** and standard deviation is **16.4**. The obtained mean value was found to be lower than the mean value of total sample **103.3** and higher than the theoretical mean value 75 of the test. Furthermore, as the obtained mean value is lower than the mean value of the total sample and higher than the theoretical mean, it can be shown that secondary students studying through regular mode have a low level of learning engagement.

Objectives3: To study the relationship between the learning engagement & academic achievement of secondary school students studying through regular mode.

Ho3- There exists a significant relationship between learning engagement & academic achievement of secondary school students studying through regular mode.

Table – 1: Correlation between the Learning Engagement & Academic Achievement of Secondary Students Studying through Regular Mode

Variables	df	Mean	S.D	'r'
Academic Achievement	248	321.34	52.33	0.66
Learning Engagement	248	106.78	18.59	

**significant at 0.05 & 0.01 levels*

It can be inferred from the above table that the correlation between academic achievement and learning engagement is .66 for $df = 248$. It means there is moderate positive correlation between these two variables. It implies that learning engagement of secondary students studying through regular mode affects the academic achievement positively and significantly. Statistically, it implies that academic achievement varies similarly to learning engagement. High learning engagement may result into high academic achievement and vice versa. This study also matches with the research done by **A. Dogra & S. Dutt (2016), Maria J Casuso - Holgado (2013) & S. Gunnuc (2014)**.

Objectives4: To study the relationship between the learning engagement & academic achievement of secondary school students studying through open mode.

Ho4- There exists a significant relationship between learning engagement & academic achievement of secondary school students studying through open mode.

Table – 2: Correlation between the Learning Engagement & Academic Achievement of Secondary Students Studying through Open Mode

Variables	df	Mean	S.D	'r'
Academic Achievement	248	298.78	39.68	0.45
Learning Engagement	248	99.34	8.68	

It can be inferred from the above table that the correlation between academic achievement and learning engagement is .45 for $df = 248$. It means there is moderate positive correlation between these two variables. It implies that learning engagement of secondary students studying through open mode affects the academic achievement positively and significantly. Statistically, it implies that academic achievement varies similarly to learning engagement. High learning engagement may result into high academic achievement and vice versa. This study also matches with the research done by **A. Dogra & S. Dutt (2016), Maria J Casuso - Holgado (2013) & S. Gunnuc (2014)**.

(c) Comparison of Learning Engagement of Regular and Open Mode Secondary Students:

Objective5: To study the difference between the learning engagement of secondary students studying through regular & open mode.

Ho5- There exists a significant difference between the learning engagement of secondary school students studying through regular & open mode.

(III) 't' Value of Learning Engagement of Secondary Students Studying Through Regular and Open Mode

Table – 3: Comparison of Learning Engagement of Regular and Open Mode Secondary Students

Group	Sample Size	Mean	S.D	Mean Difference	't' Value
Regular Mode Students	250	106.78	16.3	7.44	5.13*
Open Mode Students	250	99.34	16.4		

**significant at 0.05 & 0.01 levels*

The above table shows that the calculated value 't' value is **5.13** which is significant at .05 & .01 level of confidence. Now, it is safe to explain that there exists a significant difference in the learning engagement of secondary students studying through regular and open mode. This result reveals that secondary students studying through regular and open mode have different levels of learning engagement. The interpretation of the second objective & the hypothesis of the present study as well as the findings of past studies support this statement that Secondary students studying through regular mode have higher learning engagement than the open mode students. This study also matches with the research done by **A.Dogra & S. Dutt (2016), Maria J Casuso - Holgado (2013) & S. Gunnuc (2014).**

(IV) Comparison of Various Dimensions of learning Engagement of Regular and Open Mode Secondary Students

Table -4: Comparison of Various Dimensions of learning Engagement of Regular and Open Mode Secondary Students

Dimensions of Learning Engagement	Regular mode students		Open mode students		't' Value
	Mean	S.D.	Mean	S.D.	
Cognitive Engagement	35.11	2.38	32.33	3.36	10.77
Emotional Engagement	37.13	1.13	34.54	2.71	14.07
Behavioral Engagement	34.54	2.97	32.47	3.44	7.23
	106.78		99.34		

**significant at 0.05 & 0.01 levels*

A glance at the above table shows that 't' values for the three dimensions of learning engagement are significant at .05 & .01 levels of confidence. Now, it is safe to explain that there exists a significant difference in cognitive, emotional & behavioral engagement of secondary students studying through regular and open mode. This result reveals that secondary students studying through regular and open mode have different levels of cognitive, emotional & behavioral engagement. The findings of the present study support this statement that Secondary students studying through regular mode have higher cognitive, emotional & behavioral engagement than the open mode students. This study also matches with the research done by **A. Dogra & S. Dutt (2016)**, **Maria J Casuso - Holgado (2013)** & **S. Gunnuc (2014)**.

This means that secondary students who are studying through regular mode are more engaged cognitively, emotionally and behaviorally as comparison of open mode students. This study also matches with the research done by **J.S. Lee (2016)** & **A. P. Delfino (2019)**.

CHAPTER-VI: DISCUSSION, CONCLUSION, IMPLICATIONS & SUGGESTIONS

The main objective to do the research is to fetch the conclusion. Conclusion is essential for the study that tells about its result. This is derived from analysis and interpretation of collected data.

6.1 Discussion of the Result: The results analysed and interpreted in the previous chapter require to be discussed for the verification of hypotheses constructed in the first chapter. The discussions for achieving the conclusions are as under.

1. Students studying through regular mode have higher academic achievement. The reason behind this conclusion is that regular students have higher learning engagement. On the other side, students studying through open mode possess lower academic achievement. The reason behind this conclusion is that open students have lower learning engagement.

2. Learning engagement of regular mode students was found higher. The fact behind this conclusion is their higher involvement in learning activities. On the other side, learning engagement of open mode students was found lower. The fact behind this conclusion is their lower involvement in learning activities.

4. Positive moderate correlation learning engagement and academic achievement of secondary students studying through regular mode was investigated. It means that academic achievement is directly correlated to the learning engagement of regular mode students.

5. Positive moderate correlation between learning engagement and academic achievement of secondary students studying through open mode was investigated. It means that academic achievement is directly correlated to learning engagement of open mode students.

6. Students studying through regular mode have higher learning engagement. This is due to the fact that they are cognitively, behaviorally and emotionally involved in learning activities. On the other hand, Secondary students studying through open mode have lower learning engagement in comparison to regular mode students. This result may be due to the fact that open mode students are not as cognitively, behaviorally and emotionally involved as regular mode students.

6.2 CONCLUSIONS AT A GLANCE: The following conclusions can be drawn on the basis of analysis of the data:

1-Secondary school students studying through regular mode possess higher academic achievement while secondary school students studying through open mode possess lower academic achievement.

2-Secondary school students studying through regular mode possess higher learning engagement while secondary school students studying through open mode possess lower learning engagement.

3-There is a positive moderate correlation between the learning engagement and academic achievement of secondary students studying through regular mode.

4-There is a positive moderate correlation between the learning engagement and academic achievement of secondary students studying through open mode.

5- Students studying through regular mode possess higher learning engagement than the open mode students.

6- Students studying through regular mode possess higher cognitive, behavioral and emotional learning engagement than the open mode students.

6.3 EDUCATIONAL IMPLICATIONS OF THE STUDY: The findings of this research will help the students to develop the insight regarding academic achievement & learning engagement and will help them to know the importance of learning engagement in order to enhance the academic achievement. They will be able to know the multiple dimensions of the learning engagement like cognitive, behavioral & emotional engagement. They will come to know the importance of regular attendance in class, regular interaction with teachers & classmates and active involvement in school and classroom activities. As an

awareness to administrators of open schools to provide proper facilities such as building, furniture library, quantity of study material and eligible teaching staff so as not to allow dissatisfaction among the secondary students studying through open mode. In this way they can improve the learning environment of the secondary students studying through open mode.

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