

# Wiki-Space based Learning [WSBL] in reference to Achievement Motivation [A.M.] & Academic Achievement [A.A.] among Grade XI Students

Dr. Monika Singh

---

## **Abstract**

*The aim of present research was to Effect of Treatment, Achievement Motivation and their interaction on Academic achievement of learners by taking pre-academic achievement scores as covariate. In this study the Senior Secondary schools of Banasthali, Rajasthan was considered as the population of the study. From these senior secondary schools one of senior secondary school of Banasthali, Rajasthan was randomly selected for the study. Achievement Motivation (a-ach) Scale (AMSn-DM) developed by Pratibha Deo and Asha Mohan was found contextual. Though this tool was developed and standardized in 2012 the items were found relevant. The results indicates that there was significant effect of the resultant of interaction between Treatment and Achievement Motivation on Academic Achievement of learners when Pre-Academic Achievement is taken as covariate. In light of this, the null hypothesis that there is no significant effect of interaction between Treatment and Achievement Motivation on Academic Achievement learners when Pre-Academic Achievement is taken as covariate is rejected. In order to know the Trend of effect of interaction between Treatment and Achievement Motivation on Academic Achievement of learners when Pre-Academic Achievement is taken as covariate.*

**Key words** - Achievement Motivation, Academic Achievement and learners.

---

Date of Submission: 07-12-2022

Date of Acceptance: 20-12-2022

---

## **I. Introduction**

Online learning environment is the most common characteristic of learning and in this environment the teaching is the ability for exchanging the duration and place of the educational interactions. The ability to support content capsulated in many directions includes multimedia, video, and text, those giving the opportunities to access the learning content that explores all media attribute. The strength of the net access to huge repositories of content on anywhere receivable subject includes contents organized by the teacher and other participants and peer students, is of rigorous high quality, media rich for interactive learning, strong obligation, integration of faith and learning and geographically independent.

Learning through all of these tools is referred to as web based learning and technology-based learning. Social media integrates technology, social interaction and content creation and to collaboratively connect online information. All of these online learning tools are included in web-space. Mentioned technologies provide tools to connect users and to update on recent changes in school content. A feed reader can be used to centralize all of the recent changes and works with Real Simple Syndication (RSS) tool. This may be particularly useful when employing a blog or wiki in a classroom as user would be made aware of up to date information. Thus, blogs and wiki-space both are important web 2.0 tools. Comparing Blogs and Wikis, Franklin, T. and Van, H. M. (2008) says Wiki-space differs from blogs as it allows more than one people to build up a corpus of knowledge in a set of interlinked Web pages, using process of exiting and editing pages.

Moreover, which of factors (Intelligence, Achievement Motivation, Scientific Aptitude, Social Intelligence and Self-Concept) interacting with wiki-space can influence the academic achievement in science needed to be found out. Wiki space intends to provide the learner a podium, to self-regulate free from any influence, helping them to develop thinking process and their communication in science.

## **Objective of the study**

Effect of Treatment, Achievement Motivation and their interaction on Academic achievement of learners by taking pre-academic achievement scores as covariate

## **Hypotheses of study**

There is no significant effect of Treatment, Achievement Motivation and their interaction on Academic Achievement of learners by considering Pre Academic Achievement as covariate.

**Sample of the study**

In this study the Senior Secondary schools of Banasthali, Rajasthan was considered as the population of the study. From these senior secondary schools one of senior secondary school of Banasthali, Rajasthan was randomly selected for the study.

**Tool for the study**

Achievement Motivation (a-ach) Scale (AMSn-DM) developed by Pratibha Deo and Asha Mohan was found contextual. Though this tool was developed and standardized in 2012 the items were found relevant.

**Data analysis method**

For studying the effect of Treatment, Intelligence and their interaction on Academic Achievement of learners by considering Pre-Academic Achievement as co-variate, 2x2 Factorial design ANCOVA was used

**EFFECT OF TREATMENT, ACHIEVEMENT MOTIVATION AND THEIR INTERACTION ON ACADEMIC ACHIEVEMENT OF LEARNERS BY TAKING PRE-ACADEMIC ACHIEVEMENT AS COVARIATE**

The second objective was to study the effect of Treatment, Achievement Motivation and their interaction on Academic Achievement of learners by taking PreAcademic Achievement as covariate. There were two levels of Treatment namely, WSL Programme and Conventional method. On the basis of Achievement Motivation, the Learners were divided into two levels namely, Above Average Achievement Motivation and Below Average Achievement Motivation. Thus the data were analysed with the help of 2x2 Factorial Design ANCOVA when Pre - Academic Achievement is taken as covariate. The results are given in Table 4.2. Table 4.2. Summary of 2x2 Factorial Design ANCOVA for Academic Achievement of students by taking Pre - Academic Achievement as covariate.

**Table**

| SOURCE OF VARIEACE         | Df | SS y.x   | MSS y.x | F y.x - value |
|----------------------------|----|----------|---------|---------------|
| Treatment (A)              | 1  | 1367.78  | 1367.78 | 9.82**        |
| Achievement Motivation (B) | 1  | 1.99     | 1.99    | 0.01          |
| A x B                      | 1  | 1210.80  | 1210.80 | 8.69**        |
| Error                      | 73 | 10166.29 | 139.26  |               |
| Total                      | 77 |          |         |               |

\*\*Significant at 0.01 level

**Effect of Treatment on Academic Achievement of Learners by taking Pre-Academic Achievement as covariate**

From the Table 4.2, It can be seen that the adjusted F-value for treatment is 9.82 which is significant at 0.01 level with df = 1/73. It indicates that the adjusted mean score of Academic Achievement of Learners taught through WSL Programme and Conventional Method when Pre-Academic Achievement was taken as covariate differed significantly. So there was a significant effect of Treatment on Academic Achievement of Students when Pre-Academic Achievement was taken as covariate. Thus, the Null Hypothesis that there is no significant effect of Treatment on Academic Achievement of Learners when Pre-Academic Achievement was taken as covariate is rejected. Further the adjusted mean score of Academic Achievement of WSL Programme Group is 59.73 which is significantly higher than those of Conventional Method Group whose adjusted mean score of Academic Achievement is 50.77. Thus, it may be said that the WSL Programme was found to be significantly superior to Conventional Method when Pre-Academic Achievement was taken as covariate.

**Effect of Achievement Motivation on Academic Achievement of Learners by taking Pre - Academic Achievement as covariate**

The adjusted F-value for Achievement Motivation is 0.01 (vide Table 4.2) which is not significant. It indicates that the adjusted mean scores of Academic Achievement of learners belonging to Above Average Achievement Motivation as well as Below Average Achievement Motivation did not differ significantly. So there was no significant effect of Achievement Motivation on Academic Achievement of learners when Pre-Academic Achievement is taken as covariate. In this light, the null hypothesis that there is no significant effect of Achievement Motivation on Academic Achievement of learners when Pre-Academic Achievement is taken as covariate is not rejected. It may, therefore, be said that Academic Achievement of Learners was found to be independent of their Achievement Motivation when Pre-Academic Achievement is taken as covariate.

**Effect of interaction between Treatment and Achievement Motivation on Academic Achievement of Learners by Taking Pre-Academic Achievement as covariate**

The F-value for interaction between Treatment and Achievement Motivation is 8.69 which is significant at 0.01 level with df = 1/73 (vide Table 4.2). It indicates that there was significant effect of the resultant of interaction between Treatment and Achievement Motivation on Academic Achievement of learners

when Pre-Academic Achievement is taken as covariate. In light of this, the null hypothesis that there is no significant effect of interaction between Treatment and Achievement Motivation on Academic Achievement learners when Pre-Academic Achievement is taken as covariate is rejected. In order to know the Trend of effect of interaction between Treatment and Achievement Motivation on Academic Achievement of learners when Pre-Academic Achievement is taken as covariate.

### References

- [1]. Agrawal, M. and Kumar, A. T. (2015): Academic Achievement and Self Concept of Secondary Level Students. International Research journal. Vol. 1, Issue 3, Pp. 26-29. Retrieved from <http://ierj.in/journal/index.php/ierj/article/view/29/26>.
- [2]. Bas, G. (2016): The Effect of Multiple Intelligences Theory-Based Education on Academic Achievement: A Meta-Analytic Review. Educational Sciences: Theory and Practices. Vol. 6, No.6, Pp. 1833–1864. doi 10.12738/estp.2016.6.0015
- [3]. Kavya kishor, P. B. and Kumari, S. (2015): Achievement in Science of Secondary School Students in relation to Achievement Motivation. Edutracks., Neeelkamal publication, Pvt, Ltd. Vol. 14, No. 3, Pp. 23-26.
- [4]. Sekhri, A. (2016): Association between Scientific Aptitude and Achievement in chemistry. Journal of American Research Thoughts. Vol. 2, Issue 3. Retrieved from <http://researchthoughts.us/UploadedArticle/282.pdf>
- [5]. Zimmerman, B. J. (2002): Teaching for self-Regulation, Creativity and Tolerance as mentioned in Anita Woolfolk, Educational Psychology 2008 9 th Edition. Pearson Education, Dorling Kindersley Publishing, South Asia, Pp. 512-513.

Dr. Monika Singh. "Wiki-Space based Learning [WSBL] in reference to Achievement Motivation [A.M.] & Academic Achievement [A.A.] among Grade XI Students." *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 12(06), (2022): pp. 38-40.