



ACHIEVEMENT IN CHEMISTRY OF IX GRADERS IN RELATION TO STUDY HABITS

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ABSTRACT

The Study was conducted to investigate the significance of relationship between Achievement in Chemistry and Study Habits. Sample of the study consisted of 151 IX class students selected randomly from two Government schools of Ludhiana city. Study Habit Inventory by Achievement test in Chemistry (developed and standardized by the investigator) and Study Habit Inventory by Mukhopadhyaya and Sansanwal (2011, revised) were used as tools for data collection. The results of the study showed that there exists a positive and significant relationship between the two variables of the study.

KEYWORDS: Achievement in Chemistry, Study Habits, IX Graders .

Introduction: Indian Education has made its place in the eyes of the world, if we look into the past, India was known for its education system as well as for Indian philosophy. Earlier education was according to different strata of society but now with the modernization and westernization the entire concept of education has changed. The concept of education has never been so important and central in the life of individuals, organizations, and societies in the history of our civilization as it is observed in the contemporary times. Today's societies are living, developing, thriving, competing and improving on the pivot of knowledge only. To satisfy the needs of students of the 21st century new experiments, creative innovations, and appropriate strategies are being developed and tried out to improve education at all levels. Now the sole focus is to accelerate the achievement or more appropriately academic achievement of the learners.

If we analyze the term achievement, it is a product of the interaction between several factors operating in the pupil. These factors can be cognitive such as learning style, creativity (Gupta, 1977; Nanda & Pal, 1994; Padhi, 1995; Kaur & Bawa, 1995; and Chaturvedi, 1997); Socio economic status (Das Gupta, 1975; Dwivedi, 1983; Sarah & Kumari, 1983; Sharma, 1984; Mehrotra, 1986; Misra, 1986; Singh, 1986; Sontakey, 1986; Kapoor, 1987; Trivedi, 1988; Ganguli, 1989; Devanesan, 1990; Reddy, 1991; Indira, 1991; Garg, 1992; Rani, 1992; and Panigrahi, 2005). Attitude (Marjoribanks, 1987; Ngailiankim, 1988; Ray, 1990; Bhaskaran, 1991; Diwan, 1991; Sam, 1992; Mazumdar, 1992; and Bhattacharya, 1997) are an important correlate of academic achievement. Among the other correlates of achievement Study Habit is another variable which has been explored by the studies of (Singh, 1984; Stella & Purushothaman, 1993; Gelat, 1999; Alude & Onelemhemhen, 2001; Siddiqui & Fatima, 2014, Chawla & Singh, 2015).

Achievement: Achievement signifies accomplishment or gain or a performance carried out successfully by an individual on the completion of task. It means all those behavioural changes which take place in an individual as a result of learning experiences of various kinds. According to Rao (1980), "Achievement is concerned to a great extent with the development of knowledge, understanding and acquisition of skills. In the words of Verma and Upadhyay (1981) achievement is the attainment or accomplishment of an individual in some or particular branch of knowledge after a certain period of training." According to Dictionary of Education (2008), "Academic achievement is a measure of knowledge gained

through formal education usually indicated by test scores, grade point average and degree."

Achievement in Chemistry: As Achievement refers to a degree or level of success or that of proficiency attained in some specific area concerning scholastic or academic work. Higher the achievement more is the openings for the students and they can go for better lines and better jobs in all fields thereby bringing success in one's life. This success is equally related with Science so study of Science is one of the essential aspects. Chemistry is one of the main branches of Science dealing with chemicals and reactions. Here Achievement in Chemistry is considered as scores obtained by the students in the achievement test in Chemistry.

Study Habits-The characteristic pattern which an individual follows in learning about things and people." Edel (1969) described study habit as the time preferred, the time lapse between study sessions, the degree of noise or music tolerated or invited as physical conditions of the study, the extent to which the extra-curricular activities and the particular study mechanisms employed by different students. Study Habits can be interpreted as a planned programme of subject matter mastery." he should practice it ardently so that he may not lapse into his old ineffective Study Habits." According to Onubugwu (1990), "Study Habits is a technique, a student employs to go about his or her studies which are consistent and have become stereotyped as a result of long application or practice." According to Dictionary of Education (2008), "Habit is a state of body, natural or acquired, aptitude acquired by practice, custom and manner, whereas study is described as earnest endeavors, application of books and subjects, which one studies. Therefore study habit is the endeavour towards studies acquired through state of body which is natural or acquired."

Review of Related literature Various studies have been reported by different researchers involving Achievement and Study Habits. Results of studies by Singh (1984), Deb and Grewal (1990), Kasat (1991), Misra (1992), Stella and Purushothaman (1993), Verma (1996), Gelat (1999), Alude and Onelemhemhen (2001), Kumar and Sohi (2013), Adeyemi and Adeyemi (2014), and Chamundeswari et al (2014) showed a positive relationship between Achievement and study habits but the results of studies by Chaudhary (2001), Lawrence (2014), and Siddiqui and Fatima (2014) confirmed no significant relation between Achievement and Study Habits but the studies of Rajyaguru (1997) found other variables as better correlates of achievement than Study Habits.

Significance of the Study: A nation's destiny is dependent upon its citizens, so the wholesome development of human resources is the need of the hour. Our children are the future citizens of the country so we being parents, teachers and educationists try to raise those habits by which they can flourish. The very first step is to inculcate right types of habits especially study habits because if we analyze it, this is the foundation of life as school life ultimately leads to social life. This view is supported by the study undertaken by Nancy and Sheeba (2001) who concluded that if we improve student's habit of preparation for examination, reading, note taking, school environment and habits of concentration there will be considerable improvement in their process outcome in Biology. Now a days schools are putting their best but in spite of all the efforts made in the schools to raise the abilities, capacities and other personality traits of the children, it has not been possible for us to attain the optimum level of educational goal. Normally children feel problem in Science particularly in Chemistry and physics portion. The present study wants to check correlation between Achievement in Chemistry and Study Habits. So that proper care should be taken by the parents and teachers to develop and facilitate achievement in the subject by developing proper Study Habits

Objective

1. To investigate the significance of relationship between Achievement in Chemistry and Study Habits of the students.

Hypothesis

Ho1 There exists no significant relationship between Achievement in Chemistry and Study Habits.

Sample:

The study conducted on 151 IX grade students selected randomly from two Government Secondary Schools of Ludhiana district of Punjab affiliated to Punjab School Education Board, Mohali.

Tools

1. Chemistry achievement test (Developed and Standardized by the investigator).
2. Study Habit Inventory by Mukhopadhyaya and Sansanwal (2011, Revised).

Result and Discussion:

To investigate the significance of relationship between Achievement in Chemistry and Study Habits of the IX grader students, coefficient of correlation was applied and the value is given in the table below:

Table: Significance of relationship between Achievement in Chemistry and Study Habits

Variables	N	Standard deviation	r
Study Habits	151	23.27	0.38*
Achievement in Chemistry	151	8.00	

*Significance at 0.01 level of significance.

Table reveals that value of correlation between Achievement in Chemistry and Study Habits is 0.38, which is significant at 0.01 level of significance. This leads to rejection of null hypothesis which states that 'There exists no significant relationship between Achievement in Chemistry and Study Habits' There is significant positive relationship between Achievement in Chemistry and Study Habits. This finding is well supported by the studies conducted by Bhanot (2004), Pazhanivel (2004), Sardana (2006) and Fayombo (2011).

Implications: The present study shows a positive relationship between Achievement in Chemistry and Study Habits. Hence this study shows that Study Habits plays an important role in case of increasing achievement of students. Therefore, the teachers and the parents should adopt new and innovative methods of teaching by which Study Habits can be developed and there by facilitating Achievement in the subject. The study is important for the counseling purpose that can help individuals to understand themselves better and become able to deal with their strengths and weakness. Study of Mehta and Malhotra (1993) revealed that Study Habits and Study Attitudes were the important predictors of academic achievement. Sampath and Selvarajg nanaguru (1997) indicated that there was no significant difference between Study Habits of boys and girls. Hence educational institutions must offer varied programs to provide opportunities to the students to develop their Study Habits to become them socially competent individuals.

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