Full Length Research Paper

Study of the relationship between study habits and academic achievement of students: A case of Spicer Higher Secondary School, India

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The studies on the correlation of academic achievement have paved way for control and manipulation of related variables for quality results in schools. In spite of the facts that schools impart uniform classroom instructions to all students, wide range of difference is observed in their academic achievement. The study sought to determine the relationship between study habits and academic achievement of students. A survey design was employed in this descriptive correlation study. The target population included the 9th standard students at Spicer Higher Secondary School. Stratified random sampling was used to select the respondents, study habits inventory by N.M. Palsane and school examinations records was the main instrument for data collection. Quantitative method was used to analyze field data collected. Interpretation and recommendations of the findings was made accordingly as per computed Pearson’s product moment coefficient of correlation. Results of this study revealed a positive relationship of 0.66 between study habits and academic achievement. The results implied that the study habits need a significant attention if we are to improve performance. There was a clear finding that the teachers and students seem not to take effort in developing good study habits.

Key words: Study habits and academic achievement.

INTRODUCTION

Background of the study

Looking at the history of mankind, we find that each century has witnessed different transformations. Accordingly, there has been new emphasis and shift in educational processes (Mangal, 2001, p.1).

Education is an activity or process, which modifies the behavior of a person from instinctive to human behavior (Taneja, 2003, p.9). This definition reveals the innate truth that education aims at discovering aptitudes as well as to progressively prepare man for social activity; because of this, education through which the basic needs (food, shelter and clothing) are provided is necessary for the survival of the society.

Simply put, performance is how well or badly something is done. Its relevance stand out because of the significance it holds to the society. In the educational parlance, performance manifests through academic

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achievement, which is the manifestation of a student’s habit of study and they in turn are formed and strengthened through education. The development of good study habits is equally relative and helpful not only in academic work but in career actualization.

And because this interrelationship cannot be overlooked, the academic achievement and study habit of the student to a large extent culminates into shaping an individual destiny. The general belief is that students who exercise good study habits are likely to excel than those with poor study habits. According to Sharma (2005, p.67) “academic performance is a necessary evil because one kind of ability is rewarded economically and socially more than others.” This necessitates concern over factors that are commonly linked with academic achievement.

There is tremendous pressure on students to earn good grades because academic achievement is assumed to possess predictive value and used to bar the gate or to open between the primary, secondary schools and university, and also between the university and certain social professions (Sharma, 2005, p.69).

Parents desire that their children climb the ladder of performance to the highest level as much as possible. The desire puts a lot of pressure on students, teachers, schools and the entire education system in general, making it to revolve around the academic achievement of students. The importance of academic achievement has raised several queries among educational researchers, such as why does one student perform better than another? Unfortunately,

“explanations provided however correct they may be, in their own way, have placed a lopsided view of the problem and merely scratched its surface” (Dashpande, 1984, p.6).

In search for an answer to the queries, a number of attempts have been made by researchers to identify factors which influence academic achievement. Badhiri (1991)’s investigation into the causes of low achievement in government high schools in Chenglapattu Educational District, Tamil Nadu showed that the causes of poor performance were low motivation, policy of liberal promotion to the next class, poor study habits and lack of parental involvement in education. It could be stated that the variables that influence academic achievement of students by and large fall in the following four categories highlighted as:

Student-related, Teacher-related, Home-relate and School-related:

a. **Student-related**: intelligence, anxiety, interest, achievement motivation, aptitude, emotional stability, study habits and language ability.

b. **Teacher-related**: teaching skills, method of teaching, personality and behavior, classroom interaction, teaching experience, teacher motivation, home work and reinforcement.

c. **Home-related**: socio-economic status, home environment, religion, birth order, family size and cultural influence.

d. **School-related**: school climate, medium of instruction, type and location of school.

This study addressed the increasing importance of the student’s academic achievement measured by the test scores, through examining study habits of students in its relation. So a question arises in mind whether this factor is related to academic achievement or not? This was an effort to search for the relation.

Little study has been done looking at the learning habits of students at any level of the education system especially in Asia, much which is directed to mainly the western countries. Sawar et al. (2009, p.204) acknowledge the fact that,

“since we live in the information age, this fact clearly makes new demand on the educational system, requiring radical changes on ‘what’ and ‘how’ pupils learn and why students are not doing as per expectations.”

It is important to have a clear understanding of what benefits or hinders one’s educational achievement. This is the premise on which this study is justified.

**Statement of problem**

Achievement is the end-product of all educational endeavors. The main concern of all educational efforts is to see that the learner achieves. The distressing phenomena: scholastic underachievement and failure have caused serious concern to educationists, guidance counselors and educational planners for several decades as this amount to colossal wastage of resources available for education.

“This necessitates serious probe into the causes that underlie and factors that lead to underachievement and failure, so that means could be devised to grapple with this enormous problem (Mishra and Danga 2005).”

**Objectives of study**

The objectives of the study were as follows.

a. To determine students’ academic achievement of 9th standard while at 8th standard in the academic year 2008-2009 at Spicer Higher Secondary School.

b. To determine student’s study habits of 9th standard at
Spicer Higher secondary School in 2009/10 academic year.
c. To find out the effect of study habits of 9th standard students on academic achievement at Spicer Higher Secondary School in academic year 2009/10.

THEORETICAL FRAMEWORK

This study is based on social cognitive theory propounded by Albert Bandura as early as in the 1960s.

Social cognitive theory strongly lays emphasis on one’s cognition. It suggests that the mind is an active force that constructs one’s reality selectively, encodes information, performs behavior on the basis of values and expectations and impose structure on its own actions. It is through an understanding of the processes involved in one’s construction of reality that enables human behavior to be understood, predicted and changed. In view of the theory, the student’s academic achievement is a product of interaction of his personality and consequently, study behavior he develops basing on his expectations of the outcome of his actions.

REVIEW OF RELATED RESEARCHES TO STUDY HABITS

Study habits is a well planned and deliberate pattern of study, which has attained a form of consistency on the part of the students towards understanding academic subjects and passing examination (Pauk, 1962; Deese, 1952; Akinboye, 1974 cited by Oyedeji). Therefore, study can be interpreted as a planned program of subject matter master. According to Crow and Crow, (2007), the chief purposes of study are: to acquire knowledge and habits which will be useful in meeting new situations, interpreting ideas, making judgments creating new ideas and to perfect skills.

Therefore, successful achievement in any form of academic activity is based upon study, interpretation and application. Everyone has different study habits. All often, students perform poorly in school simply because they lack good study habits. In many cases, students do not know where to begin. Those students in high school who succeed especially well usually study alone and follow a study technique that has been worked out by them and that incorporates desirable procedures. Good health, sufficient sleep, appropriate exercise and nutritious diet are essential to achievement of good study results. Study conditions that are unfavorable include inadequate lighting, extremes of temperatures, humidity, poor posture, subnormal physical conditions and emotional disturbance.

Although habits differ from person to person, some general principles can be derived about studying efficiently. Here are some good study habits that lead to better academic achievement.

1. Attending classes regularly
2. Taking down notes during teaching
3. Concentrating on study
4. Studying with aim of getting meaning not cramming
5. Preparing a time table
6. Following a time table
7. Having proper rest periods
8. Facing the problems regarding home environment and planning
9. Facing the challenges posed by school environment
10. Keeping daily survey of work done

Good study habits rest on the attitudes towards work and sense of responsibilities. Child (1981, p.95) reports that, “studies with human and animal subjects have revealed that an ability to learn how to solve problems of a given kind can be developed with sufficient practice on tasks of a similar nature.”

Study habits vary from student to student. Some habits are considered to be more desirable than others from the point of view of academic achievement. Crow and Crow (2007, p.261)’s Educational Psychology states that study requires a purpose and what one learns as a result of study depends largely upon the degree to which one succeeds in achieving that aim or purpose. Child (1981, p.95)’s Psychology and the Teacher asserts that we talk about forming bad or good habits in many everyday activities in both social and educational contexts. We behave, by and large, in characteristic ways because we have discovered through experience that some responses are more effective than others.

Sawar et al. (2009) in their analysis on “Study Orientation of High and Low Academic Achievers at Secondary School Level on Pakistan” revealed that the high achievers had better study orientation, study attitude than the low achievers.

METHODOLOGY OF RESEARCH

Research design

The study adopted a descriptive correlation survey design

Type of research

This research is an applied research. It aims at improving students as products of education system by developing generalization about the behavior of students which are a pre-requisite for success in examinations.

Methods of research

The study applied quantitative approach. Vermeulen (1993, p.15)
Table 1. Distribution of sample based on gender.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage (%)</th>
<th>Cumulative percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>48</td>
<td>56.5</td>
<td>56.5</td>
</tr>
<tr>
<td>Girls</td>
<td>37</td>
<td>43.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Procedure of sampling.

<table>
<thead>
<tr>
<th>Purposive method</th>
<th>sampling available</th>
<th>Simple random sampling</th>
<th>Population</th>
<th>Stratified random sampling</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Medium school</td>
<td>8th, 9th, 10th standards</td>
<td>9th standard</td>
<td>104 students</td>
<td>Indian</td>
<td>85 students of Indian origin present</td>
</tr>
</tbody>
</table>

describes quantitative studies as “focused on specific questions and hypotheses that remain constant throughout the investigation and the analysis is undertaken by means of standardized statistical procedures.”

Thus quantitative research methods use designs which maximize objectivity by using numbers, statistics and experimental control. Quantitative approaches in the study were used because the detailed information from the representative sample was required and generalizing of results and comparison across population was desired.

Descriptive research studies are those studies which are concerned with describing the characteristics of a particular individual or of group (Kothari, 2009:37).

Based on its quantitative approach, the study is a descriptive research. It was decided on the basis of the nature of the research problem. Descriptive research methods according to Best and Khan (2009, p.133),

“deal with the relationship among non-manipulated variables, because the events or conditions have already occurred, the researcher merely selects the relevant variables for an analysis of their relationships. The researcher starts with the observation of dependent variable(s), and then studies the independent variables in retrospect seeking for their possible effects on the dependent variable(s).”

This qualifies the present study to be a descriptive correlation study.

Research variables

The present research is a relational study that considered the principles of applied research and is based on two variables namely independent variable (study habits) and dependent variable (academic achievement).

Location of the study

The place of study was Spicer Higher Secondary School, Pune City, State of Maharashtra, India.

Population

The present study targeted 104 students of 9th standard at Spicer Higher Secondary School, in the academic year 2009-10.

Sample

The researcher selected English medium school using non-probability based purposive sampling method. The sample comprised of 85 students, selected by stratified random sampling technique from one institution: Spicer Higher Secondary School. All boys and girls of Indian origin, who were present on the days of data collection, were included in the study (Tables 1 and 2).

Data collection tools

Researcher used standardized tools to increase validity and reliability of data collected, that is, Study Habits Inventory developed by Palsane M.N. For academic achievement and test scores for annual examination for the year 2008/9 while the students were in 8th standard was used. The advantage of standardized tests over the interview and questionnaire is that they are objective and standardized descriptions of behaviours quantified by numeric scores (Table 3).

This inventory was constructed and standardized by M.N. Palsane of Poona University, Department of Experimental Psychology. There are 45 statements in this inventory and three alternatives, viz: a) always b) sometimes and c) rarely or never. All these are used to frame statements depicting good as well as bad study habits. No time limit for giving answers

Reliability of the Scale: The test – retest (interval of 4 weeks) reliability coefficient is 0.88.

Validity: This inventory is a kind of checklist and poses only face validity.

Indices of academic achievement

Academic performance can be assessed in a variety of ways. In the
Table 3. Description of data collection tools.

<table>
<thead>
<tr>
<th>Data collection tool</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Habits Inventory by Palsane, M.N.</td>
<td>Budgeting time, physical conditions of study, reading ability, note taking, factors in learning motivation, memory, taking Examination, preparation for examination and health.</td>
</tr>
</tbody>
</table>

Table 4. Data analysis and statistical tools.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Statistical tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frequency, mean and Class intervals.</td>
</tr>
<tr>
<td>2</td>
<td>Frequency, mean and Class intervals.</td>
</tr>
<tr>
<td>3</td>
<td>Pearson’s coefficient of correlation</td>
</tr>
</tbody>
</table>

western countries, measures such as grade-point average, performance on standard tests like the Stanford Achievement test, the Science Research Associates (SRA) tests and Standardized tests of reading have been used.

In India, the total or aggregate of marks scored in all the subjects in a particular examination is usually taken as an index of academic achievement. Thus, the researcher used the student’s marks at 8th standard.

Statistical techniques of analysis

The researcher made us of frequency counts, percentage tabulation and graphs to determine student’s academic achievement and study habits, thus answering objectives 1 and 2.

Pearson’s product moment coefficient of correlation \( (r) \) was used to establish the extent of relationship between the variables for objective 3.

Data analysis involved scoring coding, classification and tabulation of the data collected. The preliminary analysis procedures included frequencies, percentages and means (Table 4).

RESULTS OF RESEARCH

In pursuance of the objectives of the present study, the analysis yielded some significant findings pertaining to the relationship between study habits and academic achievement of students. The study revealed the following facts:

Academic Achievement: The mean of test scores was above average marks obtained in the school exams. It was 74.4%.

Objective 1: To determine students’ academic achievement of 9th standard while at 8th standard in the academic year 2008-2009 at Spicer Higher secondary school (Table 5)

Observation

From table, the score with the highest frequency were between 80-84 scores. There is excellence performance, 4 students scored above 95. Concentration of scores, 56 students scored between 64.5 and 85.5. Only one student scored below average. The mean score was 74.4%. The performance is generally above average. Score range was found to be 48 marks.

Interpretation

It is clear from Table 5, even in one school where students are taught at the same time the same teachers’ under similar conditions variations seem to occur as indicated. This is a statistical support for some deep probe on the much needed phenomenon of student achievement so as to bring about educational indications to augment the observed scenarios of great disparity in score attainment. Anwar (2013 ) in his study found variation in mean score of the academic achievement of the students having good study habits as 72.7046 and that of the students having poor study habits as 57.8943. This is in agreement with Child (1981, p.95) who asserts that we talk about forming bad or good habits in many everyday activities in both social and educational contexts. We behave, by and large, in characteristic ways because we have discovered through experience that some responses are more effective than others. It means that the academic achievements of the students having good and poor study habits differ significantly and the
students having good study habits achieve higher than the students having poor study habits. In recent times, reports of large scale educational failure among Nigerian school going adolescents has raised more attention and greater concerns among stakeholders in Nigerian education. Isangedighi (1999) observed that indiscipline, inadequate motivation on the part of students, lack of information couple with teachers' nonchalant attitude to work and students' negative self-concept have often resulted into students' inconsistent and poor academic performances. Anwar observes that in all educational institutions, the whole teaching learning process is directed towards achievement in the academic field as well as in the sphere of co-currucular activities. The academic achievement is required to be of greater value and for the attainment of which the students, teachers and parents strive towards it. But, it is a well known fact that all the students can never attain the same level of achievement in the examination and in the recent past it has been realized that the number of failure is increasing. This has posed a problem before all those concerned with education and teaching.

**Study Habits:** Majority of students (48.2%) had average study habits, 25.9% unsatisfactory study habits, 16.5% good study habits and 9.4% very unsatisfactory, class mean was found to be 55.33 in study habits.  

**Objective 2:** To determine student’s study habits of 9th standard at Spicer Higher Secondary School in 2009/10 academic year.

**Observation**

Table 6 reveals that majority of students’ exhibit average study habits, despite higher academic performance indicated in earlier observations. 22 students showed unsatisfactory study habits and notably 8 students practiced very unsatisfactory habits. Range was 35.

**Interpretation**

It seems from the table, very little is done about developing study habits in schools. Although it is the students to know and to use good rules of study, the teachers need to be well acquainted with the functioning of study rules in order that they may give guidance in study practices.

“There is experimental evidence to support the assumption that distributed effort is more effective than effort applied continuously” Crow and Crow (2007, p.278).

Most teachers emphasize on long hours study, which in most cases yields low result. In a more recent meta-analysis, Crede and Kuncel (2008) found that non-cognitive factors like study habit, skill and study motivation, among other attitudinal constructs, accounted for incremental variance in academic performance beyond standardized tests and previous grades.

According to Menzel, cited by Rana and Kausar (2011), many students fail not because they lack ability but because they do not have adequate study skills. Students who have difficulty in college frequently do not have adequate study habits that affect their academic achievement. Moreover, a study by Nagaraju (2004) found that students usually do not devote sufficient time to their studies and seldom have proper study habits. Mendezabal (2013)’s study showed that the participants do not have favorable study habits and attitudes. Among the noted unfavorable study habits were inefficient time management, lack of planning and concentration in their studies, poor skills in reading, ineffective test taking techniques, and failure to inform their teachers of their difficulties with school work and ask for their help. The participants also demonstrated unfavorable attitudes toward teachers’ classroom behavior and methods.

**High relationship between study habits and academic achievement:** it was positive and significantly related to academic achievement, as indicated by coefficient of correlation index ‘r’ of 0.66. This is in consistent with Anwar (2013)’s study which revealed that the correlation coefficient between study habits and academic achievement is 0.695. This shows positive correlation

<table>
<thead>
<tr>
<th>Class interval</th>
<th>Frequency (NO of respondents)</th>
<th>Mid point</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-85</td>
<td>-</td>
<td>-</td>
<td>Excellent</td>
</tr>
<tr>
<td>64-74</td>
<td>14</td>
<td>69</td>
<td>Good</td>
</tr>
<tr>
<td>53-63</td>
<td>41</td>
<td>58</td>
<td>Average</td>
</tr>
<tr>
<td>42-52</td>
<td>22</td>
<td>47</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>31-41</td>
<td>08</td>
<td>36</td>
<td>Very unsatisfactory</td>
</tr>
<tr>
<td>Total</td>
<td>N=85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 Scores made by 85 students upon study habit scale.
between academic achievement and study habits and the magnitude of the relationship is high and strong. It means that when there is an increase in the scores of study habits there will be also an increase in the academic achievements of the students.

**Objective 3:** To find out the effect of study habits of 9th standard students on academic achievement at Spicer Higher Secondary School in 2009/10 academic year.

**Observation**

As shown in Table 7 there is high relationship between study habits and academic achievement.

**Interpretation**

Table 7 shows a positive index meaning an increase in good study habits corresponds to an increase in academic achievement while a decrease of good study habits leads to low academic achievement. According to Fagbemi (2001), the degree of learning depends on the amount of time the child is actively engaged in learning. The time spent on studying helps students to retain the materials learnt, which will eventually boost the students’ performance outcome during tests or examinations. Mendezabal (2013) further revealed that their performance in licensure examinations was quite low. Significant relationship between study habits and attitudes and performance in licensure examination were clearly shown in this study. Further analysis revealed that study habits (work methods and time management) of the participants were correlated with their success in licensure examination while study attitudes (i.e. attitudes toward teachers and educational acceptance) were not significantly related to success in licensure examination. This connotes that students who had favorable study habits are likely to pass the licensure examination.

The present study was consistent with the findings of earlier studies (Crede and Kuncel, 2008; Nuthana and Yenagi, 2009; Awang and Sinnadurai, 2011; Khurshid et al., 2012; Osa-Edoh and Alutu, 2012; Nonis and Hudson, 2010), which reported significant correlation between study habits and academic achievement. In Mendezabal (2013)’s study, the unfavorable study habits and attitudes of the students may have contributed to their low performance in the licensure examinations. Later studies as stated in literature cited by Rana and Kausar (2011) agreed with this finding that many students fail not because they lack ability but because they do not have adequate study skills. Students who have difficulty in frequently college do not have adequate study habits. Bashir and Mattoo (2012)’s findings revealed a highly significant relation among various variables of study habits and academic performance. Successful achievement in any form of activity is based upon study, interpretation and application (Yoloye 1999); and that study should have a purpose. It therefore depends on individual to decide why he or she wants to study, either to gain new ideas or to find out relationship between two different things. What one learns as a result of study depends on the degree at which one succeeds in achieving that aim or purpose.

**Conclusion**

If academic failure is to be forestalled and standards improved, it is inescapable that schools from elementary level should provide relevant values and stimulating academic environments. Students should not be condemned but be encouraged and linked to teachers with whom they can establish reflective intellectual companionship that will help improve study habits.

**RECOMMENDATIONS**

No research effort can be said to be worthwhile if it does not emanate some of the important educational implications. It is anticipated that some of findings of the present study may help to improve academic achievement of students as they are a wakeup call to students, teachers, school managers and parents among many education stake holders.

The present study findings on study habits correlates with previous research that found that students who invest more in school do better’ (Battle and Lewis, 2002) and that those who exude more effort also perform better (Carbonaro, 2005 cited by Barry, 2006).

Therefore, the teachers and parents should identify good study habits and find ways and means of enhancing them among students.

The present study proposes the integration of all subjects covering good study habits related to the subjects at 8th standard and a practical exercise on study habits to be introduced at B.Ed level. This will act as a stronger foundation for purposeful scholarship.

**Conflict of Interests**

The authors have not declared any conflicts of interest.

**REFERENCES**

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<table>
<thead>
<tr>
<th>Coefficient of correlation in between</th>
<th>‘r’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study habits and academic achievement</td>
<td>0.66</td>
</tr>
</tbody>
</table>


Mendezabal MJN (2013). Study Habits and Attitudes: The Road to Academic Success. Open Science Repository Education, Online(open-access), e70081928. doi:10.7392/Education.70081928


