Study Habits and Academic Achievement: A Comparative Analysis of the High and Low Academic Achievers

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The present study was conducted to analyze the differences in the study habits and attitudes of high and low academic achievers. Sample of the study (N=800) was comprised of high (n=400) and low academic achievers (n=400). Both the genders were given equal representation in the sample. Age range of the sample was 17-19 years (Mean = 18.22 years). Data was collected through stratified random sampling technique, from different male and female colleges of Hyderabad city. Study Habits and Attitude Inventory was administered on the participants. Analysis of results revealed significant differences in the study habits and attitudes of high and low academic achievers. High achievers showed better time management skills, better study habits and punctuality as well as good concentration than the low academic achievers. Low academic achievers significantly spent much time in social activities rather on their studies, had more problems in the classroom, and problems with teachers. The implications of the study are important for teachers and parents to understand the problems of low academic achievers, and to guide them accordingly.
Keywords: Study habits, high, low, academic achievers, adolescent

The quality of a nation depends upon the quality of its citizens and quality of citizens depends upon the quality of their education. Besides other factors the quality of education largely depends upon the study habits and attitudes of the learner (Sarwar, Bashir, Khan, & Khan, 2009). The basic aim of education is to nourish the mind and to develop controlled and mature personalities of students for the betterment of the society generally and for the individual specifically (Bhatta, 2007). It prepares individuals to meet the challenges of the future successfully. The academic potentials of an individual reflect through academic achievement, which is a function of study habits and attitude of the students.

Undoubtedly all humans possess an innate tendency to learn and the process of learning continues throughout the life. Different activities are performed on a daily basis through learning but to learn "how to study" is a separate matter (Sarwar, Bashir, Khan, & Khan, 2009). Learning of proper study habits and attitudes demands an organized, internalized and purposeful thinking pattern; which can be achieved by personal determination only. Study habits and attitudes are the necessary basic skills to organize and complete academic learning tasks.

An underachiever or low academic achiever is one whose academic performance falls below the normative range of potentials (Nagaraju, 2004; Sirohi, 2004). Several studies have pointed out that different factors are responsible for underachievement like, motivation (Ryan & Deci, 2002), study habits and attitude towards education (Sirohi, 2004), concentration, self-confidence, fear of examination, anxiety, and self-concept (Chamundeswari, Sridevi, & Kumari, 2014; Lin, 2001). Students mostly hesitate to ask questions in class to clear their concepts because they consider it an unnecessary activity which does not contribute towards their overall achievement. Only those students, who had motivation to learn more, participated actively and raised the questions in class (Amin, Tani, HoonEng, Samarasakera, & Huak, 2009). Good study habits and attitudes lead towards success and happiness because of the accomplishment of academic goals (Sarwar, Bashir, Khan, & Khan, 2009). Continuous academic success enhances positive self-esteem and self-concept (Ahmed, Zeb, Sehat Ullah, & Asghar, 2013), while
low academic achievement develops frustration and learned helplessness in students. Study skills are the precursor to positive class performance, which drives later achievement and persistence in behavior. Some researches (Kember & Leung, 2006; Schneider & Lee, 1990; Sirohi, 2004) however indicate that study habits and attitudes are influenced by classroom environment and assignments or homework given by the teachers. If assignments are more creative and interesting then these become a source for increasing motivation in students to complete the tasks. Hattie, Biggs, and Purdie (1996) used Meta-analysis to examine fifty-one study skills interventions to determine under what conditions these are effective. Findings revealed that the promotion of learner activity and contextual learning lead to the best outcomes.

The relationship between study habits and academic achievement is positive, direct, and independent of scholastic aptitude (Aluja & Blanch, 2004). Findings of numerous studies (Wikoff & Kafka, 1981; Matt, Pechersky, & Cervantes, 1991) indicate that students with good study habits and attitudes get higher grades despite having lower scholastic aptitude. It is essential for students to understand and to gain information about learning strategies because without such knowledge they cannot become effective learners.

Significance of the Study

Study habits are a set of skills which help students learn effectively and to complete their academic tasks successfully. Generally it has been observed that most of the students do not study or learn effectively and earn lower grades. It is the need of the hour to identify the causes of low academic achievement to help and guide students for better learning and achievement. Study attitudes are one of the many other factors related with underachievement. Thus the present study was conducted to analyze the differences in the study habits and attitudes of high academic achievers and low academic achievers.

Objectives

The main objective of the research was to explore the differences in the study habits of low and high academic achievers. It also aimed to measure gender differences in the study attitudes of the participants.

Research Hypotheses

It was hypothesized that;

(1) There would be a significant difference in the study habits and attitudes of high and low academic achievers.

(2) There would be a significant difference among the scores of high and low academic achiever participants on time management, concentration and social life subscales of the study habits and attitude inventory.

(3) There would be a significant gender differences in the study habits and attitudes of high and low academic achievers.

Method

Participants

Sample (N=800) of the study comprised of high (n=400), and low academic achievers (n=400) from different colleges of Hyderabad city. Both genders were given equal representation in the sample. The age range of the sample was 17-19 years. Mean age of the participants was eighteen years (mean age = 18.22 years). The achievement of the participants was assessed through their matriculation mark-sheets issued by the Board of Intermediate and Secondary Education (B.I.S.E, Hyd.) for authentic academic records. The sample was divided into two groups, high academic achievers (n=400; male=200, female=200) and low academic achievers (n=400; male=200, female=200). The participants who had achieved A grade or A-1 grade or more than seventy percent marks (>70 %) in matriculation were placed in the group of high achievers while those participants who had secured less than fifty percent marks (<50 %) were grouped as low academic achievers. This criterion of low and high academic achievers has been used in different researches conducted in Pakistan (Fazal, Hussain, Majoka, & Masood, 2012).

Measures

Two measures namely Study Habits and Attitude Inventory (SHAI) and Personal Information Questionnaire (PIQ) was used to collect the data of the participants.

Personal Information Questionnaire

Personal information questionnaire was used to collect the characteristics of the participants i.e., age, education, gender, education of father and mother, occupation of father, social status, residence, academic achievement etc.

Study Habits and Attitude Inventory (SHAI)

The Study Habits and Attitude Inventory (SHAI) is a standardized inventory to measure the study habits and attitudes of adolescent students. It was developed by the Malik and Parveen (2013). SHAI consists of seventy items divided into eight sub-scales namely (1) Study Habits and Attitude, (2) Family Environment, (3) Attitude Towards Assignment and Class, (4) Concentration, (5) Attitude Towards Teacher (10 items), (6) Examination, (7) Time Management, and (8) Social Life. The score on each item ranges from one to five (1-5). The response category is Likert type scale ranging from "Almost always" to "Always never". Score 1 was assigned to "almost never" and score 5 assigned to "almost always". Some items were scored in the reverse direction to avoid response set bias. The inventory is a reliable (Cronbach alpha r= 0.82) instrument to measure the study habits and attitudes of adolescent students.

Procedure

Firstly written permission was sought from the principals of different colleges. Questionnaires were administered in the classrooms after developing rapport and taking informed consent. Participants were encouraged to ask questions about the statements of the questionnaires at any time. Their academic records were also collected from the administration office of the colleges. Stratified random sampling technique was used to collect the data. Different male and female colleges were taken as strata in the present study. Sample was collected from ten different male and female colleges in Hyderabad city.

Analysis of Results

For the analysis t-tests was used to measure the differences in the study habits of the low academic achievers (n=400) and high academic achievers (n=400).

Table-1 shows the t-test scores of high achievers and low achievers on different subscales of the study habits and attitude inventory (SHAI).

Table 1

t-Test of the Scores of High Academic Achievers (n=400) and Low Academic Achievers (n=400) on the Sub-Scales of the Variable of Study Habits and Attitude Inventory (SHAI)

Subscales of SHAI	High Achievers		Low Achievers		t
	M	SD	M	SD	
Study habits	39.80	2.58	18.57	4.59	22.04*
Family Environment	38.01	3.60	12.66	5.35	23.45*
Attitude towards assignment	37.70	3.29	19.70	5.11	20.02*
Concentration	37.75	3.73	17.19	3.09	16.25*
Attitude towards teachers	36.84	2.86	24.16	3.64	17.12*
Examination	36.74	3.12	23.00	3.78	17.33*
Time Management	36.82	3.68	17.48	3.40	21.94*
Social Life	26.93	3.28	36.43	4.03	12.73*

df=798, *$p < .01$

Results of table-1 indicate significant differences between the t-values on all subscales of the study habits and attitude inventory including time management (t=21.94), concentration (t=16.25), study habits (t=22.04), examination (t=17.33), attitudes towards teachers (t=10.12), social life (t=12.73) and family environment.

The results show support for hypotheses 1 and 2. There were significant mean differences among high and low achievers on all the sub-scales of the SHAI. It shows that high achievers have more concentration, good time management skills, positive study habits, and more concern about examination preparation. The low achievers scored higher on social life which indicates that their higher involvement in social activities as compared to high academic achievers (mean low achievers = 36.43, mean high achievers = 26.93, t= 12.73, p<.01)

Tables 2 and 3 represent the gender differences in the study attitudes of high academic achievers and low academic achievers.

Table 2
t-Values of the Scores of the Male (n=200) and Female (n=200)
High Academic Achievers on the Variable of Study Habits and
Attitude Inventory (SHAI)

Subscales of SHAI	Male High Achievers		Female High Achievers		t
	M	SD	M	SD	
Study habits	39.99	2.78	39.83	2.13	1.72
Family Environment	39.76	3.02	37.26	4.05	2.84*
Attitude towards assignment	37.54	2.99	37.85	3.34	1.24
Concentration	37.97	2.77	37.21	4.48	1.54
Attitude towards teachers	36.31	2.45	38.30	1.49	1.28
Examination	36.07	2.52	36.44	1.41	0.49
Time Management	36.02	3.44	33.21	3.40	2.01
Social Life	28.46	2.75	26.10	3.03	2.13

df=398 , *p < .05

Results of table-2 indicate non-significant differences among male and female high achievers nearly on all subscales of the SHAI, except family environment (t=2.840, p< .05). Thus the results are not supporting hypothesis 3 about significant gender differences among high academic achievers. Findings indicate that both male and female high achievers have good concentration, time management skills, positive study habits, positive attitude towards teachers and class assignments as well as controlled social activities.

Table 3

t-Values and Descriptive Statistics of the Scores of the Male (n=200) and Female (n=200) Low Academic Achievers on the Variable of Study Habits and Attitude Inventory (SHAI)
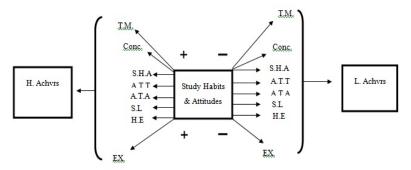
Subscales of SHAI	Male Low Achievers		Female Low Achievers		t
	M	SD	M	SD	
Study habits & attitudes	17.39	3.55	21.75	3.07	3.04*
Family Environment	24.35	4.94	22.96	4.72	1.43
Attitude towards assignment	20.09	5.73	19.30	4.39	1.02
Concentration	16.47	2.92	18.91	3.10	0.25
Attitude towards teachers	22.48	3.73	25.58	3.03	1.12
Examination	21.02	4.30	24.97	2.84	3.33*
Time Management	16.07	3.06	18.90	3.12	1.94
Social Life	32.30	3.69	31.94	4.34	0.73

df=398, * p< .05

Table-3 represents the differences in the study habits and attitudes of male and female low academic achievers.

The results indicate that there are insignificant gender differences on all subscales of SHAI except examination and study habits. Female low achievers have somewhat better study attitudes and attitude towards examination preparation than male low achievers. Although both groups have low academic achievement but girls are somewhat better than boys.

The diagram represents the relationship between study habits and academic achievement. When students concentrate on academics, follow a study schedule, start early preparation for exams, are punctual and attentive during class, have good communication with teachers they learn effectively and have better academic achievement or vice versa.

T.M = Time Management,   Conc. = Concentration,   S.H.A= Study Habits & Attitude.
A.T.T= Attitude Towards Teachers,   A.T.A= Attitude Towards Assignment.
S.L = Social Life,   H.E= Home Environment,   Ex = Examination.

Discussion

Findings of the present study reveal significant differences in the study habits and attitudes of high and low academic achievers. High achievers possess better time management skills, concentration, study habits, attitude towards examination, teachers and

assignments than low academic achievers. These findings are consistent with previous studies (Addiba, 2004; Crede & Kuncel, 2008; Nuthana & Yenagi, 2009). Past research shows that knowledge and information in academics cannot be learned without proper study habits and strategies (Shen, 2007). Findings of the present study have pointed out that low academic achievers have poor study habits and attitudes including poor time management skills, low concentration, lack of proper preparation for examination, as well as irresponsible class behaviour and inappropriate attitudes towards teachers. Low achievers mostly spend their time in social activities rather than focusing on studies.

Non-significant gender differences were found in the study habits and attitudes of the high and low academic achievers. Among low achievers, females showed comparatively better attitudes towards examinations and better study habits than low achiever boys. It shows that male low achievers are more non-serious towards academics. Among the low academic achievers, non-significant gender differences were found on the social life variable, which shows that both males and female low academic achievers engage equally in social activities. It explains their poor time management skills, lack of concentration and poor study habits and attitudes as compared to high academic achievers. Education nourishes and cultivates the human mind through the learning process. High achieving students mostly spend their time on academic activities and learning tasks, which enables them to perform more efficiently (Naderi, Abdullah, Aizan, Sharir, & Kumar, 2010; Schmidt, Zdzinski, & Ballard, 2006). They follow a timetable or schedule to study and learn different subjects as well as complete their assignments besides doing other tasks as well (Punnose, 2004).

Findings have indicated the importance of facilitative home environment which is also important for developing good study habits and attitudes. Parental guidance and interest in the studies of their children develop feelings of responsibility in children which enables the acquisition of positive study attitudes. Poor study habits and attitudes create hurdles in the achievement of better results (Sarwar, 2004). The early years of education are very important to develop proper study habits and attitudes in the students therefore must be focused on by the teachers and parents. The students who remain unable to meet standards of achievement need more attention and proper guidance in developing positive study habits and attitudes.

Conclusion
Study skills are the third pillar of education besides cognition and personality therefore these are equally important for the achievement of academic goals. It is the need of the hour that students must grasp proper study habits and attitudes because those students who don't know how and when to study will not be able to compete with others. Good study habits, concentration, committed class behaviour and better time management skills play significant positive role in the development of study habits and attitudes.Whereas spending more time in the social activities causes low academic achievement. Mostly low achieving students waste their precious time in different social activities rather than studies which in turn increase their academic and learning problems.

Limitations
Present study was conducted on college students. In the future researchers should focus on school age children as well, because early years of learning in schools are an important time to develop good study habits and attitudes.

Recommendations
Following are the recommendations for future research:

- To understand the causes of low academic achievement more comprehensively some other variables or predictors such as test anxiety, locus of control, parental involvement etc. should be focused on by the researchers.
- Study Habits and Attitude Inventory (SHAI) should be applied on the students at different levels (primary, secondary, higher secondary) of school age children to measure and identify the key learning styles and study problems at the basic levels.
- Awareness of the parents about the study habits and attitude is equally important because they play a key role in the development of the habits and attitudes of their children. Thus sources such as print and electronic media should be used for spreading social awareness messages regarding parental involvement in attitude development regarding education in children.
- Proper teacher training workshops about the importance of learning of positive study habits and self-regulations and their benefits should also be scientifically quantified.

Implications of the Study

Findings of the study are equally important for teachers, students and parents. Proper study habits and attitudes are important for learning as well as contributing significantly towards academic achievement of students. These can be learned at any time however, early age is more important for developing these habits. Low academic achievers need more attention, especially male students as they have appeared to be lower than the females in proper study habits and attitudes.

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