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Asian Students' Perceptions of Their Own Study Habits

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Abstract

This research examines the study habits of Asian students studying in a small private Asian university environment. The study attempts to investigate the perceptions of students about their own study habits in eight different areas, which include time management, concentration and memory, note taking, test strategies and test anxiety, organizing and processing information, motivation and attitude, reading and writing. The results suggest that students with higher academic performance are more motivated to learn and are more positive about their own study habits. Higher achievers tend to give themselves higher self-evaluation scores in all the above mentioned areas. There are no significant differences in the perceptions of study habits between higher and lower achievers, except in the area of organizing and information processing.

Introduction

Good study habits are important for students, especially college or university students, whose needs include time management, note taking, internet skills, eliminatory distractions, and assigning a high priritizing studies (Igun, 2007). According to Solomon (2002), many students entering college in the 21st century are poorly prepared for tertiary education. Many have poor or no study habits, i.e., routines that are necessary for academic success. More and more students are entering college without the ability or know-how for taking notes and for critical/logical reasoning. Many do not plan their study time and do not know how to organise subject material in order to learn and succeed. What then, can tertiary education institutions do to help these students increase their chances of success academically?

Skills in study habits may need to be taught just as subject matter needs to be taught. As early as 1956, Morgan (cited in Riaz, Kiran and Malik, 2002) stated that almost every college student feels at one time or another that he/she should improve his/her study habits. According to Morgan, it is the responsibility of teachers concerned to incalculate effective study habits among students. It cannot be taken for granted that students will develop good study habits by self-training. Rohwer (1984) also pointed out that although the use of appropriate study skills is an integral part of the learning process and contributes significantly to students' academic achievement, educators often overlook students' skills in study habits. Many educators expect students to acquire skills in study habits on their own. Diekhoff and Dansereau's (1982) research indicates that this expectation is unlikely to be fulfilled and that academically unsuccessful students typically continue to use ineffective study habits. Jones and Harlan (2005) joined the call for educators to be concerned about the extent to which students possess independent learning skills/habits. Solomon (2002), takes the same line of thinking, and argues that if effective study habits are not learned or taught before students enter college or university, the students must learn them during their freshmen year and this must then be regarded as remedial work. Without reasonably good study habits, a student will not likely succeed.

The Present Research

The setting for this research project is a small private international residential university. The international programmess at this university draw students from a number of different countries in South-east Asia and beyond. The medium of instruction is English. At the university, the issue of study habits and skills has been raised over the past few years because a significant number of students are not achieving a satisfactory grade point average of at least 2.00. Some students have been discontinued as a result of poor academic performance over several semesters. Hence, the purpose of this study is to survey Asian students studying in this small private international university to ascertain their perceptions of their own study habits in the areas of time management, concentration and memory, note taking, test strategies, organising and processing information, motivation and attitude, reading and writing.

Besides addressing the study habits of students in general, this study will also attempt to establish whether there are any significant differences in the perceptions of study habits by students who attained higher cumulative grade point averages (3.00 to 4.00) and students who obtained cumulative grade point averages of below 3.00. If there are significant differences in their self-evaluations of study behaviours, it may help, to a certain extent, explain the differences in academic performance. Furthermore, the establishment of higher and lower achievers' strengths and weaknesses in their study habits through self-evaluation is a useful step in the process of providing help for those who need it. Data collected from students' self-evaluations of their study habits may also help to provide a better understanding of students' attitudes, learning habits and problems outside classes.

The Nature and Importance of Study habits

What are study habits? Azikiwe (1998) describes study habits as the way and manner a student plans his or her private reading outside classroom contact hours in order to master a particular subject or topic. Nneji (2002) defines study habits as learning tendencies that enable students to work privately. Crede and Kuncel (2008) see them as something that is done on a scheduled, regular and planned basis. It typically denotes the degree to which the student engages in regular acts of studying that are characterized by appropriate study routines (for example, reviews of material, and organisation and information processing) occurring in an environment that is conducive to studying. It is related to student's knowledge of appropriate strategies and methods and the ability to manage time and other resources to meet the demands of the academic tasks.

Learning is a complicated process. No two students have the same study habits. A single study method may not be appropriate for all situations. Different students tend to have different study strategies or habits in terms of time management, focus, note taking, test strategies, organising and processing information, reading and writing. There are also differences in the level of motivation and concentration, not to mention attitude, which also plays a role in forming study habits. It is generally accepted that students with good study habits tend to get better grades (Reid, cited in Nourian, Mousavinasab, Fehn, Mohammadzadeh and Mohammadi, 2008). Fielden (2004) believes that good study habits help students in critical reflection and in skills outcomes such as selecting, analysing, critiquing, and synthesising.

Students' success in college and university is not solely attributed to study habits. A variety of important factors come into play, which include high school education background, motivation to succeed, intellectual ability, organisational skills, personal characteristics, cognitive processes (Chan, Yum, Fan, Jegede, Taplin, 1999), just to mention only a few. Study habits is one of those factors, but how much impact they have on academic performance is not really clear and conclusive. It has been suggested that good study habits and academic achievement go hand in hand (Anonymous, 2009). Data from the NAEP (National Assessment of Education and Progress) 1994 US History and Geography Assessments show that there is a positive relationship between good study habits and academic performance. The findings of Sarwar, Bashirk Khan and Khan (2009) also suggest that high achievers had better study orientation, study habits and attitude than the lower academic achievers.

Everyone is different, and for some students, good study habits do not come naturally. All too often, students perform poorly simply because they lack good study habits. In many cases, they do not know where to begin, do not fully understand the material, are not motivated by it, or feel that there was too much work given to them with little time to complete or study it. For these students, if their study habits do not improve, they will continue to do poorly in tests and not perform to their fullest potential. Padma (2007) sees students' performance in school to be a topic of great concern for teachers, parents, and researchers. It puts a lot of pressure on students, teachers, schools and the education system in general.

Related Literature and Prior Research

There is an abundance of literature on how to improve study habits to get better grades. This literature often outlines and suggests steps for students to obtain good study habits. It includes such titles as 'Developing Sound Study Habits – 7 Steps' (Anonymous, 2009), 'How to Study and Succeed in College' (Solomon, 2002), 'Good Study Habits for College students' (De Escobar, 2009), 'Effective Study Habits for College Students' (Rethansmith, nd), 'Tools of the Trade: the Habits of Successful students' (Anonymous,

2002), 'Acquiring Effective Study Habits in Five Easy Steps' (Seebach, 2006), 'Developing Good Study Habits' (TeBeest, 2000), just to cite a few of them. The above mentioned literature tends to suggest that students of any level can improve their grades and become better students by learning good study habits.

The Literature also says that poor study methods disrupt the progress of students (Rowntree, as cited in Sarwar, Bashir, Khan and Khan, 2009), underachievers have many non-productive study habits (Gibson, as cited in Sarwar, Bashir, Khan and Khan, 2009), and that students' study habits tend to show differences in how they learn and how serious they are about their learning (Young, as cited in Sarwar, Bashir, Khan and Khan, 2009). Students who do not devote sufficient time to their studies seldom have proper study habits (Nagaraji, as cited in Sarwar, Bashir, Khan and Khan, 2009). Sorenseon, (cited in Riaz, Kiran and Malik, 2002) while outlining the good basic study habits, stated that one must study with the primary intention of understanding. According to Crow and Crow (cited in Riaz, Kiran and Malik, 2002), the effective habits of study include a plan and place, a definite time Table, and taking of brief well organised notes.

Several studies, as mentioned early, have shown that there is a positive relationship between study habits and academic performance. Rasul and Stafig (as cited in Riaz, Kiran and Malik, 2002), studying university students' study habits, concluded that study habits have a positive relationship with learning, which will result in better achievement. Data from the NAEP (National Assessment of Education and Progress) 1994 US History and Geography Assessments also suggest that there is a positive relationship between good study habits and academic performance. It also reported that many students in the 90th percentile did not possess good study habits. According to this study of 8th and 12th grade students, the author argued that the positive relationship between good study habits and performance could be interpreted in various ways. The positive relationship could be due to the fact that high performing 8th and 12th grade students were significantly more likely to discuss their studies at home with parental efforts to ensure good study habits. On the other hand, it is also possible that the academic abilities of high performing students enable them to read more easily and find doing their homework/study less burdensome and enjoy talking to their parents about their success in school. In terms of NAEP findings, increased efforts may or may not be the most effective way to improve student performance (NAEP, 1994)

More recent research study results on high school students in Pakistan also support prior studies in that high achievers had better study orientation, study habits and attitudes than the low achievers (Sarwar, Bashir, Khan and Khan, 2009). Crede and Kuncel (2008), investigating studying habits, skills, and attitudes of students generated similar results. They added that study habits and attitudes are significantly related to academic performance of students. Other researchers (Ikegbunam, Ikeotuonye and Bashmir, and Denga, as cited in Nneji 2002) identify poor study habits as one of the major causes of poor academic performances among Nigerian university students. Okonkwo, Gilmery, Udom, Bakare and Khan (as cited in Nneji, 2002) agree that good study habits have positive effects on academic performance. Jones and Harlan (2005) in their study of study skills of students at a post-secondary vocational-technical institute reported that students in the lower quartile, compared with students from the upper quartile, tended to exhibit large deficiencies in preparation, concentration, and comprehension and that these students reported motivational problems that would interfere with the development and use of good study habits and skills. A study conducted by Stark (2008) further suggests that the most marked problems in study habits and skills are in the areas of time management, concentration, reading speed, note taking, and comprehension.

Much of the study from literature is based on a non-Asian context, and while much of it might well be applicable internationally, care needs to be taken in assuming all of it is directly applicable to the Asian education learning environment. A study by Chan, Yum, Fan, Jegede, and Taplin (1999) compared the study habits and preferences of high achieving and low achieving students at Open University of Hong Kong (OUHK). This study dealt with distance learning students. There are few, if any, studies that compare higher academic performing students' perceptions of their study habits with the perceptions of lower academic performing students in an Asian context at the tertiary level. This study is an attempt to fill the gap, and to provide a better understanding of study habits from a students' perspective at the post-secondary level. As mentioned above, study or learning strategies literature places emphasis on several areas – time management, concentration and memory, note taking, test strategies, organising and processing information, motivation and attitude, reading and writing. It is the purpose of this research project to obtain data of Asian students' perceptions of their own study habits in the above mentioned areas.

This study seeks to extend the research on students' study habits from the Asian students' perspective at the post-secondary level. It attempts to investigate students' perceptions of their own study habits in

relation to their academic achievements. Hence this study seeks to find answers to the following questions:

1. What are the Asian students' self-evaluations of their own study habits in terms of time management, concentration and memory, note taking, test strategies, organising and processing information, motivation and attitude, reading and writing?

2. Are there any significant differences in the self-evaluations of study habits between students of higher and lower academic achievements?

3. What specific behaviours distinguished the students with higher CGPA (3.00 or better) from students with weaker CGPA (less than 3.00)?

Method

The survey instrument was an adaptation from the University Houston website. The website was established for use by any student who wishes to conduct a self-assessment of his own study habits. Students were randomly selected in this study. No attempt was made to get representation from freshman, sophomore, junior and senior students. One hundred and fifty (150) questionnaires were given out. One hundred and sixteen students (116) responded (a response rate of 77.33%). A survey questionnaire on study habits consisting of eight components was given to students to complete. The eight components are: *time management, concentration and memory, study helps and note taking, test strategies and test anxiety, organising and processing information, motivation and attitude, reading and selecting main idea, and writing.* Each component consisted of eight items, giving a total of 64 items. The items in the questionnaire were used to elicit students' self-descriptions of their behaviour regarding topics related to study habits. (The items under each component are presented in Appendix A). Students were asked to respond to all the items under each component by ticking one of four boxes – never (1), sometimes (2), usually (3) or always (4). A perfect score for each component is 32 (8 x 4). At the end of the questionnaire, respondents were asked to give comments about their study habits.

Analyses and Results

The first part of the analysis treats all respondents as one group. The highest possible total score for the eight items in each component is 32 (8 x 4). Table 1 presents the mean scores and standard deviations for each of the eight components. The highest mean score is *test strategies,* with a mean score of 22.4655 out of 32.00. Overall, students gave a higher self-assessment of their study habits on *test strategies and test anxiety*, but lower on *time management*, *reading and selecting of main ideas*, and *writing*. The other study habits sit in between these.

The mean scores for the eight items in each component are presented in table 1 below.
Table 1: Component Means and Standard Deviations Using Maximum Score of 32

	N	Minimum	Maximum	Mean	Std. Deviation
Time management	116	8.00	29.00	20.3276	4.14472
Concentration & memory	116	12.00	30.00	21.1207	3.49697
Study helps and note taking	116	10.00	32.00	21.7586	4.22955
Test strategies and test anxiety	116	12.00	32.00	22.4655	4.00745
Organisation & processing information	116	11.00	32.00	21.7241	3.66081
Motivation & attitude	116	11.00	32.00	21.1552	3.92673
Reading and selecting main ideas	116	10.00	31.00	20.3793	4.14447
Writing	116	12.00	30.00	20.0259	3.62950

Total possible score for each item is 32.

Table 2: Component Means and Standard Deviations A Scale of 1 to 4

	N	Mean	Std. Deviation
Time management	116	2.54	0.33
Concentration & memory	116	2.65	0.26
Study helps and note taking	116	2.75	0.30
Test strategies and test anxiety	116	2.81	0.31
Organization & processing information	116	2.72	0.22
Motivation & attitude	116	2.67	0.31
Reading and selecting main ideas	116	2.55	0.22
Writing	116	2.50	0.26

1 = never 2 = sometimes 3 = usually 4=always

Table 2 presents the mean score from a different perspective. Instead of computing the average scores in relation to the total possible score of 32, a scale of 1 for *never*, 2 for *sometimes*, 3 for *usually* and 4 for always is used. This table presents the same information as Table 1, but from a scale of 1 to 4. The mean score for every component is somewhere between *sometimes* (2) and *usually* (3). These mean scores tell us that students perceived their study habits to be somewhere between *sometimes* and *usually*. As stated above, in this self evaluation of students' study habits, respondents gave the highest score on *test strategies and test anxiety* (2.81 out of 4.0) and the lowest score in *writing* (2.50 out of 4.0). If the perception scores were to be seen as the true revelations of the study habits of the respondents, there is much room for improvement. The concern here is that, on the average, no mean scores reach 3.00 (*usually*) or higher (*always*), which tends to suggest that overall students do not have very good consistent study habits. Respondents gave themselves lower scores on time management, reading and selecting main idea, and writing study habits.

Table 3: Component Means and Standard Deviations of Two Groups of Respondents Using Maximum Score of 32 (CGPA of 3.00 or higher and CGPA of less than 3.00)

	GPA	**N**	**Mean**	**Std. Deviation**
Time management	cgpa equal or greater 3.00	63	20.5873	4.31290
	cgpa below 3.00	53	20.0189	3.95402
Concentration & memory	cgpa equal or greater 3.00	63	21.2222	3.56707
	cgpa below 3.00	53	21.0000	3.44182
Study helps & note taking	cgpa equal or greater 3.00	63	21.7460	4.53648
	cgpa below 3.00	53	21.7736	3.87617
Test strategies & test anxiety	cgpa equal or greater 3.00	63	23.1111	4.19336
	cgpa below 3.00	53	21.6981	3.66682
Organisation & processing information	cgpa equal or greater 3.00	63	22.4762	3.44944
	cgpa below 3.00	53	20.8302	3.73515
Motivation & Attitude	cgpa equal or greater 3.00	63	21.7460	3.45463
	cgpa below 3.00	53	20.4528	4.35257
Reading & selecting Idea	cgpa equal or greater 3.00	63	21.0635	3.96709
	cgpa below 3.00	53	19.5660	4.24042
Writing	cgpa equal or greater 3.00	63	20.3175	3.44461
	cgpa below 3.00	53	19.6792	3.84194

Total possible score for each item is 32. cgpa = cumulative grade point average

Table 4: Component Means and Standard Deviations of Two Groups of Respondents Using a Scale of 1 to 4 (CGPA of 3.00 or higher and CGPA of less than 3.00)

	GPA	**N**	**Mean**	**Std. Deviation**
Time management	cgpa equal or greater 3.00	63	2.57	0.2807
	cgpa below 3.00	53	2.49	0.1128
Concentration & memory	cgpa equal or greater 3.00	63	2.67	0.2023
	cgpa below 3.00	53	2.63	0.0624
Study helps & note taking	cgpa equal or greater 3.00	63	2.76	0.2063
	cgpa below 3.00	53	2.74	0.9148
Test strategies & test anxiety	cgpa equal or greater 3.00	63	2.89	0.2291
	cgpa below 3.00	53	2.71	0.0584
Organisation & processing information	cgpa equal or greater 3.00	63	2.81	0.1726
	cgpa below 3.00	53	2.61	0.1044
Motivation & Attitude	cgpa equal or greater 3.00	63	2.74	0.1785
	cgpa below 3.00	53	2.58	0.0740
Reading & selecting main idea	cgpa equal or greater 3.00	63	2.62	0.1865
	cgpa below 3.00	53	2.46	0.0560
Writing	cgpa equal or greater 3.00	63	2.54	0.2390
	cgpa below 3.00	53	2.45	0.0555

1 = never 2 = sometimes 3 = usually 4 = always

cgpa = cumulative grade point average

The second part of the analysis divides all the respondents into two groups, one group consists of all respondents with cumulative grade point average of 3.00 or better and the other group has cumulated grade point average of less than 3.00. The results of the analysis are presented in Table 3 and Table 4. Table 3 uses total score of 32 and table 4 uses a scale of 1 to 4 (1, *never*, 2, *sometimes*, 3, *usually*, and 4, *always*). These tables show that respondents with cumulative grade point averages of 3.00 or better consistently gave themselves a higher evaluation of their study habits when compared with those of cumulative grade point averages of less than 3.00. However, the mean scores still stay between *sometimes* (2) and *usually* (3). No attempt is made to compare the perceptions of male and female students. Both groups gave themselves lower scores in *time management,* and *writing*. The results seem to suggest that the respondents see themselves as having poorer study habits in these areas in relation to others.

Table 5: Test of Differences in Perceptions of Study Habits Between Two Groups (CGPA of 3.00 or better and CGPA of less than 3.00)

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper

Time Management	Equal variances assumed	.920	.339	.734	114	.464	.5684	.77408	-.96502	2.10189
	Equal variances not assumed			.740	113.132	.461	.5684	.76827	-.95363	2.09050
Concentration & Memory	Equal variances assumed	.325	.570	.340	114	.735	.2222	.65432	-1.07398	1.51842
	Equal variances not assumed			.341	111.843	.734	.2222	.65229	-1.07022	1.51467
Study helps & Notes	Equal variances assumed	1.279	.261	-.035	114	.972	-.0276	.79179	-1.59608	1.54097
	Equal variances not assumed			-.035	113.967	.972	-.0276	.78112	-1.57495	1.51984
Test strategies and test anxiety	Equal variances assumed	.682	.411	1.913	114	.058	1.4130	.73845	-.04987	2.87586
	Equal variances not assumed			1.936	113.816	.055	1.4130	.72993	-.03302	2.85902
Organisation & processing Information	Equal variances assumed	.509	.477	2.465	114	.015	1.6460	.66776	.32318	2.96882
	Equal variances not assumed			2.448	107.132	.016	1.6460	.67238	.31310	2.97891
Motivation & attitude	Equal variances assumed	2.182	.142	1.784	114	.077	1.2932	.72506	-.14313	2.72953
	Equal variances not assumed			1.749	98.515	.083	1.2932	.73952	-.17425	2.76065
Reading & selection of main Ideas	Equal variances assumed	.540	.464	1.962	114	.052	1.4975	.76308	-.01421	3.00912
	Equal variances not assumed			1.951	107.766	.054	1.4975	.76751	-.02392	3.01883
Writing	Equal variances assumed	.830	.364	.943	114	.348	.6382	.67683	-.70257	1.97900
	Equal variances not assumed			.934	105.605	.352	.6382	.68326	-.71647	1.99290

A test of homogeneity of variance was carried out. The Levene test (SPSS) was used. The test indicates that $p > 0.05$. The null hypothesis that the variances are equal is accepted. There are no significant differences between the variances of both groups – those with grade point average equal or greater than 3.00 and those with a grade point average less than 3.00 (Table 5).

Given that Levene's test has a probability greater than 0.05, it is assumed that the population variances are relatively equal. Therefore, the t-value, df and two-tail significance for the equal variances is use to determine whether the perceptions of study habits differences exist.

As shown in Table 5, the t-value, df and two-tail significance, show no significant differences between the two groups' perceptions of their own study habits except for the *organising and processing of information component (p<.05).* Although their perceptions of *test strategies and test anxiety (p=.058), reading and selection of main idea (p=.052), including motivation and attitude (p=.077)* to study habits are not significantly different, they come close to being significant (Table 5).

Respondents were asked to make comments about their study habits at the end of the questionnaire. Fifty-three students wrote comments (45.68%) about their study habits. The comments are divided into two groups – comments from respondents whose cumulative grade point average is less than 3.00 and those of 3.00 or higher (See Figure 1 and Figure 2).

Figure 1
Comments from respondents whose cumulative grade point average is less than 3.00.

"I study whenever I have a test or exam."
"I cannot concentrate or study for test until the last minute. When I read the textbook that I cannot understand, I always feel sleepy."
"I have a memory problem. It is hard for me to keep all the things I study in memory or memorised."
"I am not a student who understands what I read and everything that the lecturers give."
"I do not like my study habits because I always plan for the things that I am supposed to do, but I cannot follow the plan and always finish the assignments at the last minute."
"My study habits are not good. I like to study at night and enjoy my day."
"My study habits are unorganized and messy."
"Sometimes, I am very lazy to study."
My study habits would have been better if not for internet. I am usually distracted by it."
"I like to put off learning to the last minute."
"My study habits depend on the subjects I study."
"Sometimes, I do better under pressure, it gives me better ideas to work with."
"My study habits are just right for me."
"I only study when exams come."
"My study habits are very poor."
"I do not have a study habit. I change all the time."
"I am not serious on my time schedule. I do not know what is the most important points to study. I waste a lot of my time. I review but cannot remember what I have learned."
"My study habits are very poor. I wish for motivation because I have a weakness of putting things off to the last minutes."
"I tend to study things I really like."
"I am a last minute worker in terms of study habits."

Figure 2:
Comments from respondents whose cumulative grade point average is 3.00 or better.

"I believe in being well prepared from the beginning of the semester and throughout the semester. I have a well prepared schedule and a determination to avoid bad grades."

"I study everyday after class."

"I am happy with the results of study. It is just that I do not have the time to review all the textbooks before the final exam. That's why I do not get an A in every course."

"I usually study a few days before my examinations. I do not study or review at the last minute. I take notes if the subject is more difficult and required critical thinking."

"My study habits are largely based on my motivation and attitude towards study."

"I study well under pressure. I have high confidence in my classes and always aim for an A."

"I think I need to organise my study more if I want to get A^s all the time. I need to improve my time management and writing skills."

"I am satisfied with my study habits to a certain extent, but I am trying to strive to achieve a better way to obtain my education so that I may recall many of the materials in the future and apply them in my job."

"I study well when I feel good. The more I study, the more I understand the subject."

"I try to use my time efficiently in studying. As I Study, I take a few minutes break when I feel like I am losing my concentration. I try to evaluate what I am studying. I focus more on understanding the meaning than memorising. Whenever I read, I take down my own notes, underline important facts and pause now and then to reflect on what I have just read. When I study for exams, I always review my notes a few times."

"I am not sure what study habits I have, but I usually focus on the due date of my assignments. I prioritize the important assignments that I have to do first. I think I am bad at reading skills – they pull me down in other areas."

"I like to study in my room at the night time. This is the best time for me because I can understand what I study. If I have a test in the morning, I will go to sleep before 12 midnight. I start to do my home work early in the semester, so that I do not have to worry about it. This will give me more time to focus on class tests and other things."

"I like to study alone in a quiet room. I do not like discussing in a big group or work in a group. I prefer to read roughly through the material several times. By reading through the material several times, I tend to understand and remember the materials better. I usually meditate 5 to 10 minutes before reading, it helps me to focus and concentrate."

"I try to keep notes from every class. When I take notes in class, I become more attentive. I review my notes before any tests. During exam time, I am more conscious about my sleeping and eating habits. I review my materials at least twice before I take my exams."

"I usually assign different days for different subjects for review. By doing this I am able to use my time wisely and complete given assignments for that subject on time. During exam period, I study according to the exam schedule. Following the exam schedule helps me to organize what material I should study first. "

Discussion and Conclusion

When the students' self-evaluation responses are considered as one group, the results indicate that *test strategies and test anxiety* is high in their minds and they seem to be more concerned about this component in their view of their study habits. This component received the highest score (a mean of 2.81 out of 4.00) in the self evaluation of their study behaviours. Overall, they gave their study habits in this area closer to *usually* (3), doing all the things listed under this component (see Appendix Section A). They gave a lower self-evaluation for their other study habits which include *time management, concentration and memory, study helps and note taking, organising and processing information, motivation and attitude, reading and selecting main idea and writing*. Yet these are the areas that they should have paid more attention to with some study plans or organised schedules to help them cope with tests and examinations. These deficiencies in study habits are reflected in their perceptions and comments made by many students. Many respondents said that they only study when there was a test or exam. This seems to suggest that students' study habits are strongly determined by tests and examinations. So there may be merits in giving tests often throughout the semester because this forces students to put time and effort into studying.

When the responses were divided into two groups for analysis, students with a cumulative grade point average of 3.00 or better gave themselves higher evaluations of their study habits in the following components than students with cumulative grade point average of less than 3.00: *Test strategies and test anxiety* (23.11 compared to 21.89, or 2.89 against 2.71); *organisation and processing of information* (22.47 compared to 20.83 or 2.81 against 2.61); motivation and attitude (21.74 compared to 20.45 or 2.74 against 2.58); reading and selecting main idea (21.06 compared to 19.56 or 2.62 against 2.46); writing (20.31 compared to 19.67 or 2.54 against 2.45). The self-assessments of study habits of other components are very similar – time management, concentration and memory, study helps and note taking. (Please see Tables 3 and 4).

The comments made by these two groups of students support the results of the statistical analyses provided in Tables 1, 2, 3 and 4. The typical comments are cited earlier on in this paper. Comments from students with a cumulative grade point average of less then 3.00 suggest that they lack motivation; possess poorer attitude about studying; leave study to the last minute; do not understand study material well; try to memorise study material; have no planned schedule for study; and lack aims, objectives and focus in learning (Figure 1). They do little reading. All these suggest that this group of students do not possess good study habits that will help them cope well with tertiary education. This is consistent with Solomon's (2002) comment that many students entering college in the 21st century are ill-prepared for tertiary studies. For this group of students, a course in the freshman year on developing good skills in study habits may be useful in helping them cope better with tertiary studies. However, no amount of effort on study habits will improve performance for students who do not understand what they read or hear.

Comments made by students with a cumulative grade point average of 3.00 or better seem to be more positive in attitude and motivation with regard to their learning habits. The self-evaluations of their own study habits tend to suggest that they study more regularly; are more focused on learning; have confidence in their ability; understand the materials they read; have higher aims; strive to do better; are more conscious of time management; read more; take and review notes before exams; and they tend to have some kind of study plan. It could be that understanding more of what they read and hear generates in these students more confidence in their ability and motivation to learn.

Overall, there is room for improvement, in terms of study habits, for all responding groups in this study indicated by the self-assessments. Students with lower than a 3.00 cumulative grade point average consistently give themselves a lower evaluation in all areas of their study habits compared to students with cumulative grade point average of 3.00 or better. Students with a cumulative grade point average of 3.00 or better, based on the comments they made, are more positive about their learning and are more motivated than the lower achievers.

The t-value, df, and two-tail significance test shows no significant differences between the two groups' perceptions of their study habits except for *organising and processing of information* (Table 5). This finding is consistent with some of the typical comments received from students who are lower academic achievers. Some said that that they could not always understand the materials they read or heard in lectures. Others said that they tried to memorise study materials. This is a real concern. The comments seem to suggest that lower achievers' problems may be more than study habits. The lack of understanding of the study material may be due to students' language deficiencies or lack of academic ability. It could also be the lack of adequate high school education. Students may not have enough language skills to comprehend what they read or hear in lectures. These appear to indicate that they are ill-prepared for tertiary studies. Perhaps, some kind of instrument may be developed to measure or identify students' readiness for tertiary studies in terms of language skills, motivation, and general high school educational background. Ill-prepared students may be required to take remedial courses before they are admitted as regular students.

The lack of language skills, academic ability, and adequate preparation for tertiary studies can reduce students' confidence about their ability and motivation to learn, which in turn lead to poor attitudes towards forming good study habits. For these students providing remedial work during the freshman year and continuing to develop language skills may be a way to address what appear to be study habit problems. If students are deficient in language skills or/and are ill-prepared for tertiary education, working on developing study habits or skills may not be the most effective way of helping them to improve their academic performance.

There are no significant differences in their self-assessments of other study habits. Although students' perceptions of *test strategies and test anxiety, reading and selection of main idea, motivation and attitude* are not significantly different between the two groups of respondents (those with 3.00 or better cumulative grade point average and those with less than 3.00), they come very close to being significant. However, these gaps may be reduced if *organising and processing of information* in lower academic achievers are addressed.

The findings of this research support prior research results on motivation and attitude, which is positively related to academic achievements (Sarwar, Bashik, Khan and Khan, 2009); Rasul, Stafig, Udom, Bakare, and Khan (as cited in Sarwar, Bashik, Khan and Khan, 2009). Students with cumulative grade point average of 3.00 or more seem to view their study habits more positively and are more motivated to learn. Higher performing students may have higher academic abilities which enable them to understand the study materials better, and score better grades, which in turn motivate them to work harder – a kind of positive reinforcement. The opposite may be happening to lower performing students. Lower understanding leads to lower grades and lowers motivation to work harder.

Limitations and Further Research

This study is based on the self-evaluation responses given by students. There is a possibility the self-evaluations may be biased because students might want to give better assessments of their own study habits. However, the analyses of the comments given by the participants in this study appear to be consistent with results obtained from the statistical analyses of their responses. This seems to suggest that responses obtained from the self-evaluations are reasonably reliable. Secondly, this study was conducted at a small private university. Inferences may not be made about students studying in other universities in Asia.

From the results of this study, further research may be carried out to find answers to the following questions. (1) Why are Asian students with lower grade point average scores less motivated and less positive about their learning habits when compared to higher academic achievers? (2) Is there a relationship between students' perceptions of their ability to read and understand study material and their study habits? (3) Is there a relationship between high school grade point average from different high school systems and college/university study habits?

References

Anonymous (n.d.). *Developing sound study habits – 7 steps*. Retrieved on March 13, 2009 from: http://www.virtualed.org/kirkman/study.html

Anonymous (2002). *Tools of the trade: the habits of successful students.* Retrieved on August 16, 2009 from: http://www.morris.umn.edu/academic/psychology/psy1051/habits.htm

Anonymous (2009). *Good study habits and academic achievement.* Retrieved on August 16, 2009 from: http://getbettergradesnow.blogspot.com/2209/04/good-study-habits-and-academic.html

Azikiwe, U. (1998). Study approaches of university students. *WCCI Region II Forum*. Vol. 2. Lagos. P. 106 – 114.

Chan, S.C., Yum, C.K., Fan Y.K., Jegede, O. and Taplin, M. (1999). A comparison of the study habits and preferences of high achieving and low achieving Open University students. Paper presented at the 13th Annual Conference of the Asian Association of Open Universities, Beijing, 14 – 17 October

Crede, M. and Kuncel, N.R. (2008). Study habits, skills, and attitudes: the third pillar supporting collegiate academic performance. *Perspectives on Psychological Science*, Vol. 3, Number 6, pp 425-453

De Escobar V.M. (n.d.). Good study habits for college students. Retrieved on July 14, 2009 from: http://ezinearticles.com/?Good-Study-Habits-For-College-Students&id=2231413

Diekhoff, G., & Dansereau, D. (1982). A prose learning strategy training program based on network and depth of processing models. *Journal of Experimental Education,* 50, 180 – 188. Cited in Jones, C. H. and Harlan E. J. (1995). Study skills of students at a post-secondary vocational-technical institute. *Journal of Industrial Teacher Education*. Vol. 35, Number 2. Retrieved on April 14, 2005 from: http://scholar.lib.vt.edu/journals/JITE/v35n2/slate.html

Fielden, K. (2004). Evaluating critical reflection for postgraduate students in computing. Informing Science and Information Technology Education Joint Conference, 2005, Flagstaff, Arizona. www.informingscience.org/proceedings/InSITE2005/138f36Field.pdf

Igun, S.E., Adogbeji, O. B. (2007). Study habits of postgraduate students in selected Nigerian universities. *Library Philosophy and Practice* 2007. Retrieved on June 15, 2009 from: www.webpages.uidaho.edu/~mbolin/igun-adogbeji.htm

Jones, C. H. and Harlan, E. J. (1995). Study skills of students at a post-secondary vocational-technical institute. *Journal of Industrial Teacher Education.* Vol. 35, Number 2. Retrieved on April 14, 2005 from: http://scholar.lib.vt.edu/journals/JITE/v35n2/slate.html

Khan, S. B. (1975). Structure of academic attitudes and study habits. *Educational & Psychological Measurements*. Vol. 3, pp 835-842

Lalitha, A.R. (2000). Building good study habits. *The Kerala Journal of Education; Research and Extension*. Kerala State Council of Educational Research and Training

NAEP (1997). Good study habits and academic performance: findings from the NAEP 1994 US history and geography assessments. Retrieved on August 16, 2009 from: http://nces.edu.gov/pubs97/web931.asp

Nneji, L.M. (2002). Study habits of Nigerian university students. HERDSA Conference. http://www.ecu.edu.au/conferences/herdsa/main/papers/ref/pdf/Nneji.pdf

Padma, M.S. (2007). *Research in correlates of achievements a trend report*. Retrieved on June 14, 2007 from: http://www.education.nic.in/cd50years/g/Z910J01.htm

Rethansmith (n.d.). *Effective study habits for college students 89*. Retrieved on August 16, 2009 from: http://hubpages.com/hub/Effective-Study-Habits-for-College-Students

Riaz, A., Kiran, A., and Malik, N. H. (2004). Relationship of study habits with education achievements. *International Journal of Agriculture & Biology*.

Rohwer, W. (1984). An invitation to the developmental psychology of studying. *Applied Developmental Psychology*, 1, 74-114.

Sarwar, M., Bashir, M., Khan, M.N., and Khan, M.S. (2009). Study-orientation of high and low academic achievers at secondary level in Pakistan. *Educational Research and Review* Vol. 4, pp. 204-207.

Seebach, R.W. (2006). *Acquiring effective study habits in five easy step*s. Retrieved on June 8, 2009 from: http://www.amelox.com/study.htm

Solomon, Larry J. (2002). *How to study and succeed in college*. Retrieved on March 13, 2009 from: http://solomonsmusic.net/study.htm.

Stark, M.C. (2008). Retention, bonding, and academic achievements: effectiveness of the college's seminar in promoting college success. Ninth Annual National Conference on Retention, New York

TeBeest, K.G. (2000). *Developing good study habits*. Retrieved on August 16, 2009 from: http://www.paws.kettering.edu/~ktebeest/courses/study.pdf

The Open University of Hongkong (1999). High achievers versus low achievers. OPENLINK, July 1999, Vol 8, Issue 3. Retrieved on September 9, 2009 from: http://www.ouhk.edu.hk/~openlink/current/9907/e-resdl.htm

University of Houston (n.d.). Study Skills Assessment Questionnaire. Retrieved on February 12, 2009 from http://prtl.uhcl.edu/portal/page/portal/COS/Self_Help_and_Handouts/STUDY_SKILLS_QUESTIONNAIRE

Appendix A

Time Management

I go to classes and other meetings on time.
I give sufficient or enough study time to each of my courses.
I have a study time table and specific objectives for my study time.
I prepare a "things to do list every day."
I avoid activities which tend to interfere with my study plan.
I used the time when I am almost alert for study.
At the beginning of the term, I make up a daily activity and study schedule.
I begin my major course assignments early in the semester.

Concentration and Memory

I have a special place that I do my study.
I study in a place free from noise and visual distractions.
I find that I am able to concentrate - give undivided attention to the task for at least 20 minutes.
I am confident/satisfied with the level of concentration I am able to maintain.
I have an accurate understanding of the material I wish to remember.
l learn with the intention of remembering.
I practice the materials I am learning by reciting out loud.
I recall readily those things which I have studied.

Study Helps and Note Taking

While I take notes, I think about how I will use them later.
I understand the lecture and classroom discussion while I am taking notes.
I organised my notes in some meaningful manner.
I review and edit my notes systematically.
I take notes on supplementary reading material.
I have a system of marking/underlining important points in textbooks.
When reading, I mark or underline parts I think are important.
I write notes in the book while I read.

Test Strategies and Test Anxiety

I try to find out what the exam will cover and how the exam is to be marked.
I fee confident that I am prepared for the exam.
I try to imagine possible test questions during my preparation for an exam.
I take time to understand the exam questions before starting to answer.
I follow directions carefully when taking an examination.
I usually get a good night rest before I sit the scheduled exam.
I am calmly able to recall what I know during an exam.
I understand the structure of different types of tests and I am able to prepare for each type.

Organizing and Processing Information

When reading, I can distinguish between important and not important points.
I break assignments into manageable parts.
I maintain a critical attitude during my study and thinking before accepting or rejecting ideas.
I relate material learned in one course to materials of other courses.
I try to organise facts in a system way.
I use questions to better organise and understand the material I am studying.
I try to find the best method to do a good job.
I solve a problem by focusing on its main point.

Motivation and Attitude

I sit near the front of the class if possible.
I am alert in classes.
I ask the instructor questions when clarification is needed.
I volunteer to answer questions in class.
I participate in meaningful class discussions.
I attend classes regularly (miss very few classes, if any).
I take the initiative in group activities.
I use a study method which helps me develop an interest in the material to be studied.

Reading and Selecting Main Idea

I survey each chapter before I begin reading.
I follow the writer's organisation to increase meaning.
I review reading material several times during the semester.
When learning a unit of material, I summarise in my own words.
I am comfortable with my reading rate.
I ask questions and seek help on parts of the reading that I do not understand.
I am satisfied and happy with my reading ability.
I focus on the main points or objectives while reading.

Writing

I find that I am able to express my thoughts well in writing.
I write rough drafts quickly and without much difficulty from notes.
I put aside a written assignment for a day or so, then rewrite it.
I review my writing for grammatical errors.
I have someone else read my assignments and consider their suggestions for improving it.
I am comfortable using the library resources for research.
I am able to narrow a topic for an essay, research paper, etc.
I allow sufficient time to collect information, organise material and write the assignment.

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