



## STUDY HABITS;

### COMPARISON OF SCORES AND STUDY HABITS OF FIRST YEAR MBBS STUDENTS COMING FROM LOCAL SYSTEM VS GENERAL CERTIFICATE OF SECONDARY EDUCATION SYSTEM

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**ABSTRACT... Objectives:** To determine the efficacy of Local Education System and GCSE system by comparing the scores obtained by first year MBBS students of both streams of education in the first professional exam. The study also determined the effect of education systems on the study habits of these students. **Study Design:** Cross-sectional study. **Setting:** Rawal Institute of Health Sciences, Islamabad. **Period:** June 2015 to June 2016. **Methods:** Students of first year MBBS were interviewed by the researcher by using a close ended questionnaire to compare the study habits between the two groups. First professional exam scores and study habits were noted and compared in both the groups of students coming from two different educational systems by applying Independent Sample T test and Chi Square ( $\chi^2$ ) test of independence, respectively, using SPSS 21 version. **Results:** After analysing the data gathered, it was found that students from both the systems performed equally in the first professional exams irrespective of their educational background, hence there is no relationship between the type of secondary education and performance in professional examinations. Similarly, there was no association between the study habits and the system of education. Our study concludes that study habits are personal traits and vary from one student to another student. **Conclusion:** The performance of students cannot be calculated simply through the system of education because of the complex and intermingled associations between cognitive, affective and contextual factors in higher education. This study concludes that predictability of academic success based on education system attended is questionable.

**Key words:** Education System in Pakistan; Education System in UK; GCSE; Secondary Education; Professional Education; Study Habits.

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## INTRODUCTION

Government of Pakistan has institutionalized local education system which is practiced through local education boards. Internationally recognized British General Certificate of Secondary Education (GCSE) is being practiced in Pakistan since 1959 in selected private sector schools conducting Ordinary (O) and Advance (A) level examinations.<sup>1</sup>

At the secondary level, there are two parallel systems of education that exist in Pakistan; local education system (Secondary and Higher School Certificates) and British education system (Ordinary and Advance Level General Certificate of Education).

Study habits are study practices that include the frequency of studying sittings, rehearsal of learned material, review of material, studying in a favourable surroundings and self-testing. Approach of Students toward the act of studying are referred to as study attitudes.<sup>2</sup> The learning behaviour of student is outcome of factors that are complex in nature and comprise of internal and external factors that play a critical role in education. Educational incentives, support provided for learning, assessment and competition faced by the students during the course of studies are some internal factors whereas pressures related to the family, job and future expectations are considered to be external factors.<sup>3</sup> It is also documented that successful students use multiple study methods while the

students struggling for better grades only bank on a single method.<sup>4</sup>

A number of studies have been conducted in order to identify the influence of secondary education on the learning aptitudes and abilities of the higher education students, studies that compare local system of education with the internationally competitive education systems and those conducted to determine the performance measures of the students while pursuing a college degree.

Research on present education system of Pakistan has also been conducted that suggested curriculum change as it is not only out-of-dated but is unable to compete with international standards(5–10). Research(11–13) has also been conducted on the study habits of the students in different disciplines and their impact on the academic scores but no significant research work has been conducted on the comparing the study habits of students of two different systems of education and their relation with the academic achievements.

The purpose of this study is draw important conclusions after comparing scores and study habits of first year MBBS coming from two prevailing systems of education in Pakistan that is local secondary education board and General Certificate of Secondary Education (GCSE) system.

## METHODS

This is a cross-sectional study which was conducted at Rawal Institute of Health Sciences, Islamabad from June 2015 to June 2016. Total 104 students of first year MBBS were interviewed by the researcher by using a close ended questionnaire to compare the study habits between the two groups. Before carrying out the actual study, a pilot study on 20 students was carried out and

questionnaire was changed accordingly. The scores obtained in first professional exam and study habits were noted and compared in both the groups of students coming from two different educational systems. The scores were compared by applying Independent Sample T test whereas variables of study habits were compared in both the groups by applying Chi Square ( $\chi^2$ ) test of independence using SPSS 21 version. To assess the study habits, the categorical (nominal) variables were compared among the two groups of students and were also analysed by applying the Chi square ( $\chi^2$ ) test of independence so as see any relation between groups and their respective study habits at a selected probability level of 5%. The questionnaire was validated on a sample of first year students and was found to demonstrate good content and construct validity. Reliability of the questionnaire was analysed and was found to be 0.421.

## RESULTS

Out of 104 students included in study, it was found that 90 students (86.5%) averaged a score of 73.6% marks (SD 5.90) in FSc and 14 students (13.5%) from GCSE system averaged a score 72.1% (SD 6.54) in A-levels.

The scores obtained in first professional exams (details at Table-I) were analysed and it was found that the mean score of FSc students was 68.4% (SD 6.65) and that of A-Level Students was 66.7% (SD 8.82). The calculated means exhibits that the scores of students from local system is relatively higher than that of the A-levels students. The results were treated using independent t-test with a confidence interval of 95% and it was found that there is no statistically significant difference between 1<sup>st</sup> Prof Exam scores of local education system students and that of GCSE students;  $t(15.5) = 0.693$ ,  $p = 0.499$  (>significance level  $\alpha = 0.05$  i.e. 5%).

Sr.	Group	Total	Annual Exam			Supplementary Exam		
			Appeared	Pass	Fail	Appeared	Pass	Fail
1.	FSc	90	87	71	16	16	13	3
2.	GCSE	14	14	10	4	4	4	-
3.	Total	104	101	81	20	20	17	3

Table-I. Details of 1<sup>st</sup> professional examination of students.

After analysis of the data, it was found that there is no statistically significant association between study habits between local education system students and that of GCSE students; (P Study Habits > significance level  $\alpha = 0.05$  i.e. 5%). Response of students against different study habits along with results of Chi square ( $\chi^2$ ) test of independence are tabulated in Table-II and III respectively.

## DISCUSSION

After analysing the data gathered, no relationship was found between the type of secondary education and subsequent performance in professional examinations. Similar results were found by Tam<sup>14</sup> and Huws et al<sup>15</sup> in their studies concluded that success in higher education examinations does not have any relation with secondary education. However, Kayani<sup>9</sup> in his research found that GCE students performed better than SSC students as A-level students were more confident with better conceptual understanding. Another research by Rehmani<sup>16</sup> found out that the difference in two systems of education does impact the academic performance of students pursuing higher education. There was no association between the study habits and the system of education. Our study concludes that study habits are personal traits and vary from one student to another student.

The majority of students from both the groups complete the class and home assignments in allocated time and no relationship between this study habit and the grouping of students was found and is related to the personal fear of losing graded marks rather than any form of education. This is supported by the findings of the study of Kumar<sup>17</sup> and Ogoemeka & Helen.<sup>18</sup>

The analysis did not indicate any relationship between the grouping of students and habit of sharing/taking help & studying with colleagues/peers. Studying alone or in group depends how the individual is groomed which is more focused towards the culture. In Pakistan, children are accustomed to study in groups due to our socio-economic background vis-à-vis higher average number of children in house. The same has

also been seconded by Rogoff<sup>19</sup> who suggests that human development must be understood as a cultural process and that is evident from the study habit of studying in groups. Nonis and Hudson<sup>20</sup>, Treisman<sup>21</sup> and Hanks<sup>22</sup> concluded that the students learn more when they share and discuss the topics among each other. Sarwar et al<sup>23</sup> concluded that the high grade achievers are in habit of discussing with their.

The analysis did not indicate any relationship between Active participation in class and the grouping of students. The participation of students during the class clear the doubts of the students and students have better assimilation of the subject matter. Such active learning results in better retention of the subject as compared to what they vicariously learn as confirmed by Petress<sup>24</sup> in his study.

With regard to note taking during class, analysis did not reveal any relationship with the grouping of students. This outcome supports the work of Derville<sup>25</sup>, Kesselman-Turkel & Peterson<sup>26</sup> and Nonis & Hudson<sup>20</sup> who stressed that students must develop the habit of taking notes during the lectures regardless of their reading styles as it has significant influence on the results.

No relationship was found between the systems of education with reviewing the material before or after the class. Osa-Edoh & Alutu<sup>27</sup> in their study also found similar results.

Pre-fixed schedule had no relationship with respect to performance and academic outcomes of the grouping of students which was in line with Schmidt<sup>28</sup> who investigated 216 macroeconomics students. Nonis & Hudson<sup>20</sup> reported comparable results from their investigation of 264 undergraduate students.

As all 104 students responded that they give more time to major subjects therefore no statistics was computed being constant. Somuah et al<sup>29</sup>, Derville<sup>25</sup> and Kesselman-Turkel & Peterson<sup>26</sup> highlighted that students pay more attention to major subjects during preparation for the examinations.

Study Habit	Response	FSc	GCSE	Total
Completion of Class tasks within allocated time	No response	2	1	3
	No	19	4	23
	Yes	69	9	78
	Total	90	14	104
Completion of Home assignments within allocated time	No response	2	0	2
	No	16	1	17
	Yes	72	13	85
	Total	90	14	104
Sharing / taking help from colleagues	No response	1	0	1
	No	11	1	12
	Yes	78	13	91
	Total	90	14	104
Active participation in class	No response	1	1	2
	No	37	7	44
	Yes	52	6	58
	Total	90	14	104
Take notes during class	No response	-	-	-
	No	14	3	17
	Yes	76	11	87
	Total	90	14	104
Review of study material before attending lecture	No response	2	-	2
	No	71	13	84
	Yes	17	1	18
	Total	90	14	104
Review of study material after attending lecture	No response	7	-	7
	No	35	8	43
	Yes	48	6	54
	Total	90	14	104
Study according to pre-fixed schedule	No response	3	1	4
	No	54	10	64
	Yes	33	3	36
	Total	90	14	104
Prefer to study with colleagues/ peers	No	28	6	34
	Yes	61	7	68
	Total	90	14	104
	No response	-	-	-
Prefer to study specific topics	No	21	4	25
	Yes	69	10	79
	Total	90	14	104
	No response	-	-	-
Studying preference more at	College	2	1	3
	Home	88	13	101
	Total	90	14	104
	No response	-	-	-
Time given more to subjects	Major	90	14	104
	Minor	-	-	-
	Total	90	14	104
	No response	-	-	-
Time given more to subjects	Minor	-	-	-
	Total	90	14	104
	No response	-	-	-
	Study method	Conceptual	64	8
Rote memory		26	6	32
Total		90	14	104
No response		-	-	-
Preferred time for preparing examination	Near the exams	48	5	53
	Throughout the year	42	9	51
	Total	90	14	104
	No response	-	-	-
Preferred informational format	Books	69	12	81
	Books, articles	3	1	4
	Books, handouts	11	1	12
	Electronic	5	0	5
	Handouts	2	0	2
	Total	90	14	104
Direct impact of factors on study habits	Behavioural	3	1	4
	Environment	20	0	20
	Family	9	0	9
	Friends	17	3	20
	Institute	10	3	13
	Institute, Environment	3	1	4
	Personal	23	4	27
	Personal, friends	4	1	5
	Personal, institute	1	1	2
Total	90	14	104	

Table-II. Response against different study habits of students

Study Habits	Pearson $\chi^2$ Value	Df	Asymp. Sig. (2-sided) P
Completion of Class tasks within allocated time	1.569	2	0.456
Completion of Home assignments within allocated time	1.394	2	0.498
Sharing / taking help from colleagues	0.48	2	0.787
Active participation in class	3.002	2	0.223
Take notes during class	0.306	1	0.58
Review of study material before attending lecture	1.57	2	0.456
Review of study material after attending lecture	2.321	2	0.313
Study according to pre-fixed schedule	1.527	2	0.466
Prefer to study with colleagues/ peers	3.389	2	0.184
Prefer to study specific topics	0.182	1	0.67
Studying preference at home/ college	1.047	1	0.306
Time given more to subjects	No statistics computed being constant		
Study method	1.11	1	0.292
Preferred informational format	1.944	4	0.746
Preferred time for preparing examination	1.505	1	0.22
Direct impact of factors on study habits	9.016	8	0.341

Table-II. Results of study habits of students

The analysis showed no relationship between habit of giving more time to specific topics and the grouping of students. The fact also confirmed by Chinn et al<sup>30</sup>, Crede' & Kuncel<sup>2</sup> and Chowdhry&Warraich.<sup>31</sup>

No relationship between the grouping of students and their preference to study at home / college was found. According to Onuoha and Subair<sup>12</sup>, majority of the students prefer a quiet environment for study in quiet places which is usually available in the confines of homes or public libraries. In Pakistan, the concept of studying in libraries is minimal therefore, students rely to studying at their home which has also been confirmed by Somuah et al.<sup>29</sup>

After the analysis, no relationship between chosen studymethod and the grouping of students was found. Vacha<sup>32</sup> reported that cramming was an effective studying tactic for courses that use take-home essay exams and research papers as significant parts of the course grade. They found crammers' grades were as good as or better than those students using other study tactics.

The analysis showed no relationship between this study habit and the grouping of students. Nonis&Hudson<sup>20</sup>, Quist et al<sup>33</sup> and Somuah et al<sup>29</sup> concluded that the study-habit of studying near exam demonstrated a positive relationship with

exam scores.

No relationship between preference of format and the grouping of students was found. These facts have been seconded by Kayani<sup>9</sup> in his study conducted on 23 GCSE and 50 Government schools.

In order to make the study more fruitful, efforts have been made to check the influence of different stimuli on the study habits. It was found that all stimuli have different effects on the responding students. Majority of the students (27 students) agreed to the conclusion that the personal traits have the most influence on the study habit which was backed by Kai-Wen<sup>34</sup> and Aluja-Fabregat & Blanch.<sup>35</sup> Same number of students (20 each) indicated that the study habits are influenced by friends and environment which was also discussed by Kai-Wen<sup>34</sup> in his study. 13 students indicated that institution has influence on the study habits which was supported by Afsana<sup>36</sup> in her study on the personality traits, study habits and educational ambitions of secondary schools at Aligarh University. Other students gave a mixed response and indicated that multiple factors influence the study habits. Analysis in the present study showed that there is no relationship between this study habit and the grouping of students ( $\chi^2(8)=9.016, P=0.341 > 0.05$ ).

## CONCLUSION

The general perception that GCSE students have better cognitive abilities compared to students from local education system has been proved otherwise in this study. The performance of students cannot be calculated simply through the system of education because of the complex and intermingled associations between cognitive, affective and contextual factors in higher education such as the students' medical college experience, the prevailing environment in the institution, the processes of teaching and learning going on inside as well as outside of the classroom and nonetheless the study habits of the students. Considerable differences exist between students in their abilities, propensities, inspiration, educational goals and methods of learning. This study concludes that predictability of academic success based on education system attended is questionable as the students from both the systems performed equally and no relationship was found. Similarly, no association between the study habits and the system of education was found as the study habits are the personal traits and vary from student to student.

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