ORIGINAL ARTICLE

Usefulness of Entry Test - What MBBS Part-I results show?

TEHSEEN IQAL, S.M. ABBAS NAQVI, MUHAMMAD USMAN, *AZHAR HUSSAIN, MUHAMMAD IMRAN YAWAR*

ABSTRACT

To see how students admitted after entry test in Nishtar Medical College, Multan, perform in First Professional MBBS Part-I, we analyzed the results of three successive sessions i.e. N-51, N-52 and N-53. A total number of 437 students' results were analyzed. We grouped the students into top 50 of F.Sc (F.Sc-50), top 50 of Entry Test (ET-50) and top 50 of MBBS Part-I results (MBBS-50). When we analyzed the MBBS-50 group, it was seen that in N-51 (Session 2002-2003), twenty one of MBBS-50 students were from F.Sc-50 group, twenty of MBBS-50 were from ET-50 group. In N-52 (Session 2003-2004), seventeen of MBBS-50 were from F.Sc-50 group. eighteen of MBBS-50 were from ET-50 group. In N-53 (session 2004-2005), twenty eight of MBBS-50 students were from F.Sc-50 group; eleven of MBBS-50 students were from ET-50 group. So in three successive MBBS batches (i.e. N-51, N-52 and N-53 batches), F.Sc-50 group contributed more as compared with the ET-50 group. Less number of students failed from F.Sc-50 group as compared with ET-50 group. F.Sc-50 group also have more high achievers as compared with ET-50 group. F.Sc-50 group showed improvements in its performance over the three years period. We conclude that F.Sc results are reflecting more precisely the students' performance in future as compared with the entry test results.

Key words: Medical College Admission Test (MCAT), student performance.

INTRODUCTION

Entry test for admission to medical colleges was introduced in Punjab from the year 1999. Its basic aim was to extract the best available talent from amongst the candidates. It was hoped that the students admitted to medical colleges after their screening through entry test would perform better than the students who were admitted only on the basis of their FSc marks. The decision to start entry test was also made on the background feeling of dissatisfaction over the functioning of some Boards of Intermediate and Secondary Education (BISE). Entry test had put extra burden on the students as well as parents. Entry test also promoted private academies in place of regular institutions, so it was criticized by the teachers of regular institutions also. As these academies were working in big cities only, students from small towns and villages felt deprived. So the usefulness of the entry test was questioned many times by many quarters of the society, but the issue was not scientifically studied.

There has been ruling from the judiciary that the scores on the tests used for selection decision should have a good relationship with the success in the course or the job for which the tests has been given. If any selection test does not fulfill this requirement, it needs to be improved or replaced by a better one[1].

Department of Physiology, Nishtar Medical College, Multan.
Correspondence to Dr. Tehseen Iqbal

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Entry test was based on a paper containing MCQ type of questions having 1100 marks. In FSc Examination, there were also 1100 marks. Final merit list for entry to medical colleges was made by considering both the FSc and entry test marks.

In the present study we tried to test the hypothesis that entry test is helping to select students who would be better performers in medical colleges.

MATERIALS AND METHODS

This retrospective study was carried out in the Department of Physiology, Nishtar Medical College, Multan in March 2006. We analyzed the records of three successive batches of MBBS students. These batches i.e., N-51, N-52 and N-53 were admitted in Nishtar Medical College, Multan in the years 2002, 2003 and 2004 respectively and they passed their First Professional MBBS Part-I examination in 2003, 2004 and 2005 respectively. All these students were admitted on the same criteria based on FSc and Entry Test marks.

For every student, marks obtained in F.Sc., Entry Test and First Professional Part-I examination were secured from the record. Students, whose record was incomplete, were excluded from the study. In each batch (i.e. N-51, N-52. N-53), while considering the students' marks obtained in FSc, Entry Test and MBBS First Professional Part-I, we made three separate lists of students by arranging them in a descending order. Then we selected top-50 students from each list and named them as follows:

1. F.Sc-50 group: These were the top-50 students in FSc group admitted in Nishtar Medical College, Multan, during 2002, 2003, 2004.
2- E. T-50 group: These were the top-50 of Entry Test group admitted in Nishtar Medical College, Multan, during 2002, 2003, 2004.
2. MBBS-50 group: These were the top-50 students according to result of First Professional MBBS Part-I, during 2003, 2004 and 2005.
3. A fourth group was made by considering the students from FSc-50 and ET-50 groups failing in MBBS Part-I.
4. Fail group: Students present in FSc-50 group and ET-50 group but failing in the First Professional MBBS Part-I Examination.

MBBS-50 group and Fail group were retrospectively analyzed on the basis of their F.Sc and Entry test marks and frequency distribution of students from F.Sc-50 group and ET-50 group among R-50 group was found. F.Sc-50 group and ET-50 group were followed toward their First Professional MBBS Part-I results and students were categorized according to their percentage of marks obtained in Part-I result. Distribution of students was shown in the form of a curve. Skewness of curve showed the predilection of the group toward high achievement or low achievement side in MBBS First Professional Part-I. Results were statistically analyzed by using Chi-Square test.

RESULTS

Table 1 shows the representation of FSc-50 and ET-50 groups in the high performance, MBBS-50 group. N-51 and N-52 batches showed non-significant (P>0.05) difference in the performance of FSc-50 group and ET-50 group as represented by the MBBS Part-I results.

N-53 batch showed a highly significant (P<0.001) difference in the performance of FSc-50 and ET-50 groups; more high performers were seen from amongst the FSc-50 group in MBBS Part-I as compared with ET-50 group.

Table-II shows the failures in FSc-50 group and ET-50 group during the last three years. Difference between FSc-50 group and ET-50 group was non-significant (P>0.05) in N-51 and N-52 batches, while N-53 batch showed a highly significant (P<0.001) difference between FSc-50 group and ET-50 group; more low-performances (failures) were seen in ET-50 group as compared with the FSc-50 group.

Graph 1,2 and 3 show the performance curves of FSc-50 and ET-50 groups during the last three years. Graph 1 shows that there was no difference in the performance curves of FSc-50 and ET-50 groups during 2002-2003.

During 2003-2004 and 2004-2005, performance curves of FSc-50 group were skewed toward the high achievement side while the performance curves of ET-50 group were skewed toward the low-achievement side.

Table 1: Representation of FSc-50 group and ET-50 group in MBBS-50 Group during last three years

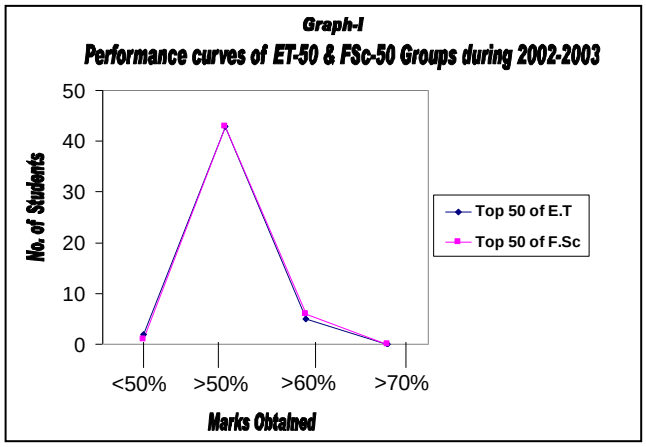
Group	N-51 (2002-03)	N-52 (2003-04)	N-53 (2004-05)
FSc-50 (n=50)	21	17	28
ET-50 (n=50)	20	18	11
P-value	N.S	N.S	H.S

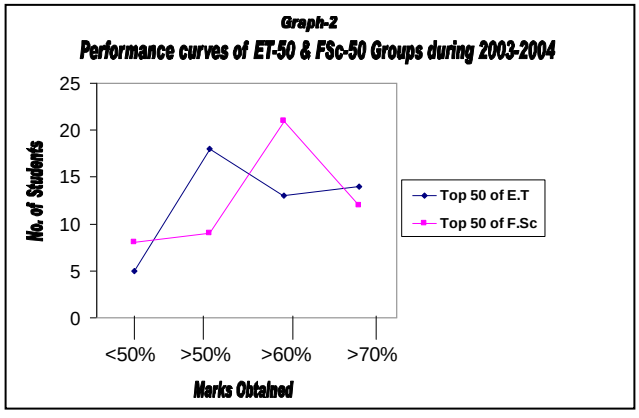
N.S= Non-significant i.e., P>0.05, H.S=Highly significant i.e., P<0.001

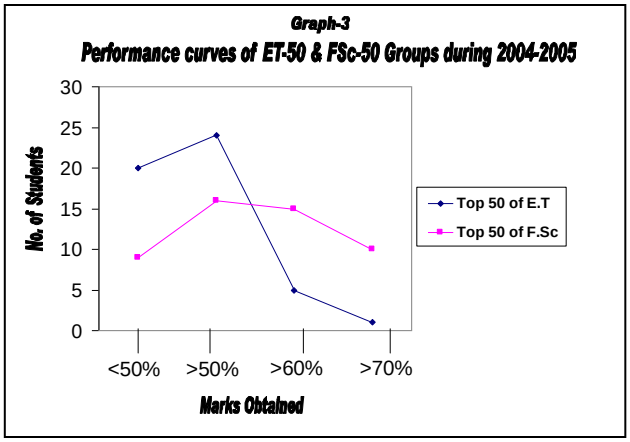
Table 2: Failures in FSc-50 group and ET-50 group during last three years

Group	N-51 (2002-03)	N-52 (2003-04)	N-53 (2004-05)
FSc-50 (n=50)	8	8	11
ET-50 (n=50)	11	05	28
P-value	N.S	N.S	H.S

N.S=Non-significant i.e., P>0.05, H.S=Highly significant i.e., P<0.001







DISCUSSION

Analysis and interpretation of results and their impact on future performance of students in their further study or in their professional life is an important aspect of education[2]. This aspect is often ignored in our country. In the present study we pointed out toward this neglected area of medical education and tried to find out some relationship between the student performance in entry test, FSc exam and their performance in Medical College.

Table 1 shows that representation of FSc-50 group is highly significantly (P<0.001) better as compared with the ET-50 group in the high achievement MBBS-50 group of first Professional Part-I results during 2004-2005. Table 2 is showing the less number of failures from FSc-50 group as compared with the ET-50 group. The difference was highly significant (P<0.001) during 2004-2005 Graph-2 and 3 show that more number of students from FSc-50 group were high achievers in First Professional Part-I exam as compared with the ET-50 group during 2003-2004 and during 2004-2005. So our findings show that the students' performance in entry test is not predicting accurately about their performance in First Professional Part-I exams.

Our findings are in total disagreement with the findings of Julian ER (2005) who showed a strong correlation between the performance of students in Medical College Admission Test (MCAT) and their performance in medical schools in America[3]. This difference may be due to the fact that in American entry test is assessing different attributes of the students like problem solving, critical thinking and writing skill in addition to the knowledge of their pre-medical subjects. Our entry test is just assessing the pre-medical knowledge of students.

Baig (2001) showed that the admission criteria to medical college lacks the testing of non-cognitive attributes and learning abilities necessary for a medical graduate to practice skillfully. Hence a valid instrument for testing the positive attributes, which could predict good performance of medical doctors, should be designed[4]. Rahbar et al (2001) showed a positive relationship between the students' performance at Aga Khan University, Karachi and the admission test scores[5].

It becomes clear by observing Graph 1,2 and 3 that the performance of FSc-50 group was gradually improving while the performance of ET-50 group was gradually decreasing over the last three years. The trend of improving performance of FSc-50 group is because of the recent reforms of the Punjab Government to improve the working of various Boards of Intermediate and Secondary Education. These reforms include the improved secrecy of paper setting, centralized system of paper marking, Inter-board exchange of papers and uniform schedules for examinations and declaration of results. Federal Ministry of Education has established a National Education Assessment System (NEAS) to set up national standards of educational assessment[6].

In the light of above discussion we can conclude that the entry test has failed to achieve its goal of selecting better students for medical colleges. So either it should be abolished or it may be directed towards the assessment of higher attributes of students' personality and attitude toward medical profession[3-4].

LIMITATIONS OF STUDY

As this study was carried out in one medical college of Punjab, so the evidence about usefulness of entry test presented in this paper may not be conclusive and similar studies in other medical colleges are advisable to get the full picture of the issue.

REFERENCES

1- Shahid SM. Measurement and evaluation: An Introduction. In: Educational measurement and evaluation (Code No. 6507). Dept of Teacher Education A I Open University, Islamabad. 2004: 7-59.
2- Pervez Iqbal, Analysis and interpretation of assessment data. In: Educational assessment (2nd ed.). Book Range, Multan. 2004: 212-248.
3- Julian, E. R. Validity of Medical College Admission Test for predicting medical school performance. Acad Med 2005; 80(10): 910-7.
4- Baig LA. Predictive validity of the medical college admission criteria for academic performance: results from the four MBBS batches of Karachi Medical & Dental College. J Pak Med Assoc, 2001; 51(9): 312-6.
5- Rahbar MH; Vellani C; Sajan F; Zaidi AA; Akbarali L. Predictability of medical students' performance at Aga Khan University from admission test scores, interview ratings and systems of education. Med Educ. 2001; 35(4): 374-80.
6- http://www.neas.gov.pk.