

## ORIGINAL ARTICLE

## STUDENTS' PERCEPTION ABOUT FREQUENT EXAMINATIONS

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**Background:** A powerful way of improving one's memory for study material is to be tested on that material. Frequent testing in the classroom may boost educational achievement at all levels of education. Repetitive evaluation of subject matter is called 'frequent testing'. **Methods:** Data on perceptions of frequent assessment were collected from students of all five years of BUMDC, Karachi with a questionnaire. The 14 item questionnaire was clustered around 8 variables: the purpose, test content and objectives, timing, feedback on assessment, the assessor, frequent exams, understanding of curriculum, and test taking strategies. A 3 point itemized rating scale of 'Yes', 'No' and 'Not sure' was used for collecting responses. Students of all 5 years of MBBS of BUMDC were given the questionnaire forms and asked to complete them. **Results:** The study population consisted of 213 (64%) females and 120 (36%) males. Their mean age was 20±8 years. The most frequently endorsed purpose of assessment, as perceived by students was to achieve high grades. A second important purpose was motivation for learning. **Conclusion:** The underlying values of all these points are important to teachers and students seeking better ways to teach and learn. Frequent testing will enhance learning and studying habits, while increasing recall and the depth of knowledge learned.

**Keywords:** Student, testing, questionnaire, examination, assessment, education, perception

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## INTRODUCTION

A powerful way of improving one's memory for study material is to be tested on that material.<sup>1</sup> Frequent testing in the classroom may boost educational achievement at all levels of education.<sup>2</sup> Repetitive evaluation of subject matter is called 'frequent testing'.<sup>3</sup> It means testing students at shorter periods rather than 2 or 3 midterms and one final exam type evaluation.<sup>4</sup> A balance needs to achieve to get both teaching and testing done at specific time. Since 1920's many studies have been conducted to see the effectiveness of frequent testing.<sup>5</sup> The results of these studies favoured an improved outcome in student performance as the testing frequency increases. Most studies were done at US college level students.<sup>6</sup>

Regardless of how frequently they are used, tests serve as an important function by examining student's responses to specific questions and problems. Whether formative or summative tests were used, frequent testing had a positive effect upon academic achievement.<sup>7</sup> It was argued that more tests would increase in structural effectiveness, and would make students to study and review more often.<sup>8</sup> More tests can give teachers a way to correct student errors, to reward good performance and give feedback. But still others noted that frequent testing can take time away from instruction.<sup>9</sup>

Over the past seventy years researchers found that a way to increase student achievement is to increase the number of tests given.<sup>10</sup> Another study reports that there is improvement in student performance when tests were given weekly instead of monthly.<sup>11</sup> There is a drawback as to when classes meet for a set number of

times for testing; there is little time for learning activities during class meetings.<sup>12</sup> Overall frequent assessment enhances student learning.<sup>13</sup> As they get more opportunities to work with their course material, they have a better chance to learn it.<sup>14</sup>

Assessment is one of the main contributing factors in student learning.<sup>15</sup> When students are tested on material, they remember the material better than that when they are not tested.<sup>16</sup> Taking a test on material can have a greater positive effect on future retention of that material than spending an equivalent amount of time restudying the material.<sup>17</sup> Overall students like being quizzed about the material that they are taught, they admit to study more frequently and also learn more and preferred frequent testing.<sup>18</sup> However the characteristics and impact of assessment are examined less from student point of view. The learner is an active partner in the process of learning; he or she perceives, interprets and integrates new information to form a meaningful whole to his prior knowledge and former experiences.<sup>19</sup> This study aims to describe the students' perception of frequent assessment in a classroom setting.

## METHODS

Three exams in a 3 month period are conducted at Bahria University Medical & Dental College (BUMDC), (2 continuous assessment test (CAT) and one Module test). Data on perceptions of frequent assessment were collected from students by means of pre-structured questionnaire to see how students perceived it from their point of view.

Of primary importance were views on the extent to which assessment was taken. Since assessment is designed to promote learning and is one of the most

important tools in higher education, it was considered important to solicit views on why assessment was taking place and how useful the assessment process was.

The 14 item questionnaire had 8 variables. The purpose (1 item), test content and objectives (2 items), timing (1 item), feedback on assessment (1 item), the assessor (1 item), frequent exams (4 items), understanding of curriculum (1 item), test taking strategies (1 item). All the items reflect the range of assessment issues which are documented in literature. A 3 point itemized rating scale of 'Yes', 'No' and 'Not sure' was used for collecting responses. Students of all 5 years of MBBS of BUMDC were given the questionnaire forms and asked to complete them. Non probability consecutive sampling methodology was used was. The students were administered the questionnaire during class time at the end of module exam. Total number of enrolled students in the university was 500, out of which 333 students responded.

SPSS-19 was used for data analysis, and  $p < 0.05$  was considered significant. Pearson Chi-square for qualitative variables was applied. 'Not sure' responses were taken as separate category and Chi-square test was used to account for all three responses.

## RESULTS

Students' responses are tabulated as percentages in Table below.

**Table-1: Summary of the findings (%)**

Questions	Yes	No	Not sure	No response
1. Do you agree with frequent testing during one module? (7, 10 and 13 <sup>th</sup> weekly exams)	84	12	3	1
2. Were the test content reviewed in these exams?	73	16	10	1
3. Were the objectives covered in instruction?	76	14	9	1
4. Did you spend more time in cramming the subject rather than understanding?	35	50	13	2
5. Are you taught test taking strategies?	38	54	7	1
6. Are you being rushed through the curriculum?	60	25	13	2
7. Does frequent testing help in preparing for the final exams?	88	7	4	1
8. Are you expected to perform well in exams?	82	6	10	2
9. Is your college interested in improving test scores rather than overall student learning?	38	38	24	
10. Are you given feedback based on your last test score?	45	46	7	2
11. Can teachers influence how well students do in exams?	79	11	10	
12. Would you study more if given frequent tests?	76	13	9	2
13. Does frequent testing makes students work harder for good grades?	79	12	8	1
14. Does frequent testing help in improved class discussion?	73	18	7	2

## DISCUSSION

In discussing frequent assessment practices as perceived by students, students agreed that the purpose of assessment was to grade a student's performance.

How many tests a student needs? It is a question of prime importance for student learning. Students like being tested, daily quizzes<sup>20</sup>, weekly tests<sup>21</sup> or monthly assessments in a long semester period. Moderate number of tests about 3 month interval is considered to be frequent. Earlier research also proves that there is a 14% improvement in student success rate when tests were given weekly instead of monthly.<sup>22</sup> Pikunas and Mazzota<sup>11</sup> found that performance was 10% higher when tests were given weekly instead of every 6 weeks, and Graham<sup>23</sup> found a 4 % increase just from the addition of unannounced quizzes.

Eighty-four percent (84%) of the students agreed to the frequency of repeated exams as appropriate. Seventy-three percent and 76% of our students also agreed to the question whether the test content and objectives were covered in teaching before being given in the exams.

Karpicke and Roediger<sup>24</sup> asserts that repeated assessment curbs the most ineffective type of learning in which students wait just before the test and then attempt to cram the material in over a short period of time. Cramming works in the short term, allowing regurgitating the information for an exam the next day, but it is a terrible strategy for ensuring long term storage. Knowledge learned through cramming is less durable. Our finding confirms that 50% of the students did not do cramming if they were given frequent tests but about 35% did do cramming to pass tests.

Another finding relates to the role feedback plays in improving exam performance. Students learn more (as measured by exam scores) when each test is followed by a debrief session that focuses on their mastery of material missed on the exam. Kuo and Simon<sup>3</sup> say it is possible to hypothesize that 'proper feedback and/or instruction has to accompany each test in order for the frequent testing to be effective in improving learning outcomes'. In our study 46% students denied of being given feedback and a close figure of 45% agreed of being given feedback and hence received the benefits of the feedback as proved by reported research.

A collaborative study showed that frequent quizzing without extra reading (studying) increases student performance on final exams.<sup>25</sup> This is in accordance with the findings in our study where 88% of the students thought that frequent exams help in preparing for the final exams.

One of the questions checked the pressure on the students to perform well in the exams as a determining factor for anxiety level in students. Researchers from the University of Vermont found strong relationships between procrastination, anxiety, and achievement with the finding that regular procrastinators had higher anxiety and lower grades than those who procrastinated less. Patrick J Wolf<sup>26</sup>

compared this to breast cancer: when detected early, the cancer is easily removed, but if it is given the time to metastasize, the cancer disfigures and often kills. The 82% of the students in our study said that they were expected to perform well in the exams. Wolf<sup>26</sup> also notes that skills obtained from frequent test taking will serve students well throughout their lives. For example, feedback from frequent testing allows the students to evaluate the areas in a course in which they could improve. In the business world, it is known as 'benchmarking' –the action of improving against a standard. As students enter the work force, they can analyze their performance from past projects and actions of other firms, and then adjust their own actions to become more effective and efficient workers. The continuous process of improvement shows why top performers are the best and why others struggle.<sup>27</sup> This ability to frequently analyze and improve will help students reach their highest potential during and after their education. This effect was tested by three questions in our study, whether students would study more, work harder for good grades and have better class discussion if given frequent tests; all three questions produced a massive more than 75% result. The underlying values of all these points are important to teachers and students seeking better ways to teach and learn.

## CONCLUSION

Frequent testing will enhance learning and studying habits, while increasing recall and the depth of knowledge learned. Performance on midterm and final exams will rise as students receive regular evaluation throughout the course from testing. Students' academic experience will improve as they experience less anxiety while learning essential skills.

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