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EVALUATING THE USEFULNESS OF SELF-SCORING AFTER DISCUSSING ANSWERS WITH 3RD YEAR MBBS PHARMACOLOGY STUDENTS.

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Abstract

Introduction: Students may only utilise the idea of self-evaluate when they are able to choose the standards that will be applied and make assessments about the extent to which their work satisfies those standards. **Methods:** The present study was conducted at Suleman Roshan Medical College Tando Adam, after the approval from institutional ethics review committee, from January 2022 to December 2022. During the course of an entire year, Eleven separate tests, comprising 2 midterms, have already been given. Following the final test, the pupils were provided with a Likert question asking them to contrast the new assessment format with old one in terms of its academic potential & ability to assess their competence. As well, the pupils were tasked with assessing the test's difficulty level, relevancy, & duration. **Results:** A total of n=82 participants had submitted the responses on evaluating the usefulness of self-scoring after discussing answers with 3rd year MBBS Pharmacology students. The responses were obtained by likert Scale. Analysis of the findings had revealed that majority of the participants had either strongly agree and agree with the questions regarding evaluating the usefulness of self-scoring after discussion thus suggesting the fact 3rd year MBBS students were favouring the concept of self-scoring. Results were analysed using P-value of ≤ 0.05 (95% CI) as significant. **Conclusion:** It has always been discovered that learners view this type of exam as a far more useful educational instrument than the traditional one. The students are given real - time feedback, were made aware of one's wrong responses & gaps in knowledge, & given the chance to think about them.

Key words: Self-scoring, MBBS, Pharmacology

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INTRODUCTION

The written test has a number of benefits. It makes it easier to evaluate the learning of many students over a short amount of time and across a wide range of information. The test results provide principals of schools with evidence about the calibre of teaching.^{1, 2} That is often uncertain to a student how well he or she understood a task correctly as well as whether the justification for the response was adequate. The test's findings are often inaccurate & late.^{2, 3} Just at undergraduate level, there aren't any significant examples of pupils employing self-assessment as just a method of assessment, despite the fact that it has been suggested as one of various approaches to increase students' autonomous learning.^{1, 4} Students should only use the notion of self-assessment when they can determine the standards to be used and make assessments of how much of their work satisfies these standards. Our goals were to increase the written exam's pedagogical value and decrease the amount of time teachers spent grading papers, which we believed to be rather pointless from a pedagogical standpoint.⁵ Also, we sought to enhance the students' position by providing them with a chance to discuss how exam questions, answers, and potentially ambiguous points were developed as well as an immediate assessment of their performance. Furthermore, we predicted that allowing students to assess the questions will improve the exam's overall quality. The examination procedure needed to be developed in a way that didn't compromise the validity of the written test. Finally, we sought to ascertain whether a student's attitude towards self-marking was influenced by their gender, age, or exam performance.^{6, 7}

The capacity to accept ones personal restriction & comparative mismanagement, in addition to an understanding of sources of uncertainty of an actual world as well as the constraints of a field of work, are key aspects for technical learning inside the 21st millennium. These qualities are also important for fostering student-centered teaching⁸. The best time to teach self-assessment approaches is immediately following a teaching session. A last exam self-evaluation exercise could serve as a teachable moment⁽⁹⁾.

If learners self-mark their own achievements soon after the exam, students are capable of recognizing own personal mistakes, information limitations, comprehending shortfalls, and certain other achievement concerns. Yet, exams are typically perceived as stressful and dangerous by students, especially if they have a high stakes, like exams that decide whether or not they will advance to the next year of the course. Primarily people view exams as obstacles to be conquered, many pupils are not aware of a chance for education that exams present.⁹ Twelve broadly defined outcomes are included in the outcome-based curriculum that the Dundee Medical School implemented. The 12th outcome emphasises self-awareness and self-learning as crucial professional qualities. This was believed that because topics in Dundee's degrees exams were "twice scored," learners' self might be utilised as a quality assurance versus teaching grading. This might make it possible to utilise the time saved by the teachers while grading better effectively by decreasing the amount of marks.¹⁰

Methods

This present investigation took place at Suleman Roshan Medical College in Tando Adam following gaining consent first from college ethical review committee. All pupils administered the test as usual with adjustments listed below. The max number of points is allotted for every question just on examination. The examination materials are returned to the instructor following the examination. After just a short reprieve, the instructors and pupils are reassembled. This training leadership is indeed the curriculum master. Every pupil's response sheet is returned with a green ballpoint pen, which is the only one that may be used for scoring. The starting point for passing points is displayed. The proper response to each academic paper is supplied alongside the accompanying question, and the two are thereafter addressed.¹¹ Throughout the course of a year, a variety of tests, including two midterms, have been given. Our study's long-term viewpoint might be viewed as a positive. After the exit test, the students were given a Likert survey asking them to compare and contrast the new exam format with the previous one in terms of its educational

value and capacity to gauge their knowledge. The difficulty, relevance, and duration of the exam were also rated by the students. The questionnaire included a space for comments at the conclusion. Each phase of the written test procedure was timed by the participating teachers.

Results

A total of n=82 participants had submitted the responses on evaluating the usefulness of self-scoring after discussing answers with 3rd year MBBS Pharmacology students. The responses

were obtained on the questions provided in five qualitative outcome measures that were strongly agree, agree, neither agree nor disagree, disagree and strongly disagree.

Analysis of the findings had revealed that majority of the percentages of the participants had either strongly agree and agree with the questions regarding evaluating the usefulness of self-scoring after discussion thus suggesting the fact 3rd year MBBS students were favouring the concept of self-scoring the findings were illustrated in table 1, figure 1

Questions	Strongly Agree	Agree	Neither Agree/Disagree	Disagree	Strongly Disagree
Immediate feedback/Result	35.71%	53.57%	10.71%	0.00%	0.00%
Help in remembering what you have done and where you are wrong	28.57%	35.71%	17.86%	17.86%	0.00%
Does it helps in identifying the answers of complex questions	42.86%	35.71%	17.86%	0.00%	3.57%
Does it helps you refining your existing knowledge	39.29%	46.43%	0.00%	14.29%	0.00%
Instructor oral feedback (interaction) improves conceptual learning	42.86%	46.43%	0.00%	3.57%	7.14%
Unclear points and misunderstandings resolved immediately	50.00%	35.71%	14.29%	0.00%	0.00%
Does it helps in learning effectively	57.14%	35.71%	7.14%	0.00%	0.00%
Does it helps you to behave like professional	39.29%	32.14%	28.57%	0.00%	0.00%
Ability to recognize own strength and weakness	50.00%	46.43%	3.57%	0.00%	0.00%
Does it help in self-motivation	53.57%	28.57%	10.71%	7.14%	0.00%
What do you think? Is it fruitful	57.14%	7.14%	32.14%	3.57%	0.00%
What do you think? This activity should also be done by other subjects	53.57%	21.43%	10.71%	3.57%	10.71%

Graphical illustration represented in figure 1

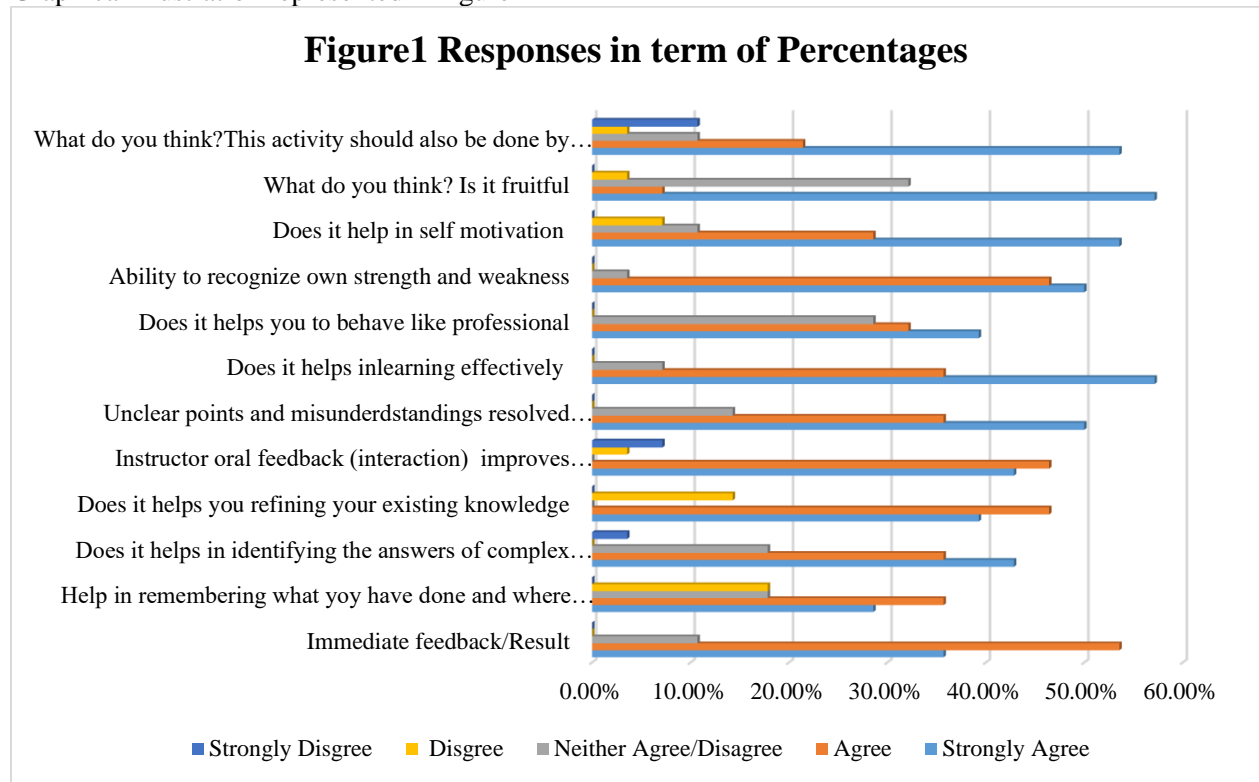


Table 2 Cross tab analysis performed on responses obtained from participants

Questions	Strongly Agree	Agree	Neither Agree/Disagree	Disagree	Strongly Disagree	p-value
Immediate feedback/Result	30	45	9	0	0	<0.05
Help in remembering what you have done and where you are wrong	24	30	15	15	0	
Does it helps in identifying the answers of complex questions	36	30	15	0	3	
Does it helps you refining your existing knowledge	33	39	0	12	0	
Instructor oral feedback (interaction) improves conceptual learning	36	39	0	3	6	
Unclear points and misunderstandings resolved immediately	42	30	12	0	0	
Does it helps in learning effectively	48	30	6	0	0	
Does it helps you to behave like professional	33	27	24	0	0	
Ability to recognize own strength and weakness	42	39	3	0	0	
Does it help in self-motivation	45	24	9	6	0	
What do you think? Is it fruitful	48	6	27	3	0	
What do you think? This activity should also be done by other subjects	45	18	9	3	9	

Further analysis based on cross tab had suggested that a significant number of students $p < 0.05$ were of the opinion that regarding evaluating the usefulness of self-scoring after discussion as shown in table 2

Discussion

In light of this research, we can say that both our own and the students' reactions to the new written test approach have far beyond our high expectations. The outcomes of this investigation were both unexpected and encouraging. Above all, the students believe that this type of test is a much more effective learning tool than the conventional one. The students receive quick feedback, are made aware of their wrong responses and knowledge gaps, and given the chance to think about them. Although it has additional educational advantages, this is occasionally seen to be unpleasant.

My findings suggest that two instructors were necessary to take part in the debate of a test answers and questions. An instructor who's in control of a test's layout could take a protective position. In some cases, it can be challenging to control the pressure that comes from the kids. A moderating colleague performs crucial duties in these situations.

In an additional research (6) which also validates that findings of this research, this type of formative assessment & self-marking strengthens the opinions of pupils, rectifies whatever inaccuracies & misunderstandings, & reduces conflicts. The few students who graded themselves significantly higher than the teacher are individuals who might attempt to persuade the teacher that the grading is unjust. Throughout instructor marking, it is straightforward to identify just those few self-evaluations. Those response papers may be properly corrected by the instructor, who can then be prepared for just any ensuing discussions. It was necessary, among many other reasons, that student evaluations weren't significantly different from instructor evaluations in order for the fresh examination structure to be accepted.

Although we knew that pupils preferred to rate oneself substantially lower than teachers did, researchers still found a strong correlation inside

this area. The students said that they intentionally underestimated in order to stay safe. It has been discussed and found to be inferior to their male co-workers. However, there were no gender-specific changes in this investigation. Eventually, when the new approach has been tried out multiple times, we predict that teachers will spend about 50% less time on assessment. Most importantly, the time is utilised in a different and better manner; the focus shifts from control to instruction.

Another investigation (11) that utilized the pupil as the 2nd indicator suggested that introducing student self-marking could be advantageous. Firstly, this would enable for just a 50% reduction in professional marking time, enabling an even more effective time management & permitting a review for discrepancies among employees and pupils grading. This was anticipated that somehow this sort of activity will lead to a rise in the standard of assessment tasks because the questions and answers were open to student examination. As well, the process allowed for the inclusion of appropriate student participation in the "model" responses.

Recommendations: Self scoring is a stepping stone towards student's performances in end exams so it is highly recommended that universities/colleges should instruct the department to implement this types of activities to improve student's outcome.

ETHICS APPROVAL: The ERC gave ethical review approval

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