

# A Comparative Study of Two Evaluation Techniques in Community Medicine: Structured Viva-Voce Examination versus Traditional Viva Examination

Madhura D Ashturkar

Department of Community Medicine, MIMER Medical College, Talegaon Dabhade, Maharashtra, India

## ABSTRACT

**Introduction:** Assessment and evaluation is an integral part of medicine. Viva-voce examination is one of the methods of assessment in medicine. Viva examination is very important as all domains can be tested. The present study is carried out to compare between traditional viva examination and structured viva examination.

**Material and methods:** Study design: Qualitative Research study was conducted on VIIth semester students in the formative assessment. A Pretested, Structured Designed Questionnaire was prepared. The response of the students on 5 point likert scale was taken after the traditional viva and structured viva examination.

**Results:** Total students examined with the structured viva examination were 52. Student's response was taken on 5 point Likert scale after traditional viva method and structured viva examination. The chi square test is applied to each question to compare with traditional and structured viva voce examination. Feeling anxiety when facing examiners, Impact of prior impression of student, Appearance of student has effect, first or last roll numbers of the students, each examiner having different scoring system, examiner's mood while assessing the traditional and structured viva examination were found to be statistically significant.

**Discussion:** Structured viva examination can overcome the limitations of traditional viva method provided that the cards should be prepared in such a way that all topics to be covered and difficulty level of questions is equal. **Conclusion:** Structured viva examination is better method of formative and summative assessment than traditional viva examination in community medicine.

**Key words:** Structured Viva -Voce examination, Traditional Viva examination, Community Medicine

## INTRODUCTION

Assessment is a methodical procedure that involves determining the degree to which pupils have met

learning objectives. Any evaluation procedure needs to be closely linked to the learning goals. Because oral examinations have a high face validity, are flexible, and can measure clinical competence in areas that written exams might not be able to, they are an attractive option for evaluating students when objectivity, uniformity, validity, reliability, and practicability are met.<sup>[1,2]</sup>

Viva examination is very important as all domains, that is, cognitive, affective, and psycho-motor domains can be tested. Language skills and communication skills can be tested. Viva examination can test ability of reasoning and logical expression and depth of knowledge.

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### Address for correspondence:

Dr. Madhura D Ashturkar, Professor, Department of Community Medicine, MIMER Medical College, Talegaon Dabhade, Maharashtra, India . E-mail: dr.madhura@mitmimer.com

The viva-voce examination is a type of evaluation that has been used historically due to its adaptability and ability to evaluate academic and clinical abilities, two things that are directly related to the practice of medicine.

Viva examinations are prone to many errors. These include related to halo effects, errors of central tendency, errors of contrast, and general tendency toward leniency. Numerous factors, including applicant fear, rater inconsistency, and environmental conditions, can impact the technique's reliability.<sup>[2,3]</sup> On the other hand, reasonable dependability has been proven with standardized, structured oral examinations conducted by hand-selected examiners.<sup>[4]</sup> Conventional viva examinations lack objectivity and are more subjective.

Thus, the goal of the current study is to compare the two methods-the traditional viva examination and the organized viva voice examination.

## MATERIALS AND METHODS

**Study design:** The cross-sectional study was conducted on VII<sup>th</sup> semester students in the formative assessment. All the students were given prior information about the cards which were prepared for the viva examination in community medicine.

A pretested and structured designed questionnaire was prepared. The questionnaire was prepared with questions on which students response was noted on 5 point Likert scale toward the Traditional and Structured Viva-Voce examination. Likert scale includes strongly agree, agree, neither, disagree, and strongly disagree.

Students were asked to respond on 5 point Likert scale for traditional viva method before the students appearing for structured viva examination.

The sets of two examiners were conducting viva examination with two cards each containing ten questions. Cards were designed that weightage was given to all topics and difficulty level of questions was similar.

The response of the students on 5 point Likert scale was taken after the structured viva examination. Feedback from teachers was taken to know the views on traditional and structured viva examination.

## RESULTS

Total students examined with traditional viva and structured viva examination was 52.

Student's response was taken on 5 point Likert scale after traditional viva method and structured viva examination.

The Chi-square test is applied to each question to compare with traditional and structured viva-voce examination.

While applying the test, strongly agree and agree are taken in one group and disagree and strongly disagree are taken in one group. Neither response was not considered any group.

For the questions about the language problem, difficulty in expression, external environment, being male or female, type and variety of questions asked, difficulty level of questions, and other work for examiners apart from taking viva-voce were not found statistically significant.

There is difference in traditional and structured viva examination but for the above questions the difference is not statistically significant.

Overall feedback was taken from all students; all students said that structured oral examination is better as they have to answer from the questions on the card.

Feedback from the staff members was taken.

Feedback was noted and it is as follows:

1. Structured oral examination is better as no time wasted for asking the questions this system will not affect the prior impression of the student.
2. The cards were prepared so there was no waste of time on thinking the question and asking the students.
3. The lacunae of the system are that other than card question we cannot ask other leading questions in relation to the topic. However, if the cards are such prepared that it will test all the domains of learning which will be helpful.
4. The time consumed for this method is less as in the traditional viva method first student may take 15-20 min and last student may take just 1-2 min.

## DISCUSSION

In many medical schools, the final summative examination includes the viva-voce or oral examination. It is employed due to its adaptability and ability to assess higher order cognitive abilities (Wakeford *et al.*, 1995).<sup>[5]</sup>

Without a doubt, the in-person interaction between the student and the examiner offers a special chance to evaluate interactive skills that cannot be evaluated in any other manner (Newble and Cannon 1987).<sup>[6]</sup>

Feeling anxiety when facing examiners in traditional and structured viva-voce examination

**Table 1:** Comparison of responses of study participants for traditional and structured Viva examination.

Question No.	Question	Chi-square P-value
1	Do you feel anxiety when facing examiners in traditional and structured viva-voce examination?	0.001
5	Do you feel there is impact of prior impression of student while assessing traditional and structured oral examination?	0.009
6	Do you think your appearance has effect on traditional and structured oral examination?	0.037
8	Do you think your roll no first/last influence your performance in traditional and structured oral examination?	0.01
11	Do you think each examiner has different scoring system while assessing traditional and structured oral examination?	0.001
12	Do you think examination given by previous candidate influence your performance in traditional and structured oral examination?	0.036
13	Do you think examiners mood will affect your performance in traditional and structured oral examination?	0.015

P-value <0.05 hence the Chi-square test is significant for all the above questions

found to be statistically significant. As while giving examination, fear and tension about on what topic the questions will be asked, how many marks will get, how is the examiner, etc. Holloway *et al.*<sup>[3]</sup>

Impact of prior impression of student while assessing traditional and structured viva-voce examination found to be significant. Even if on the day of the examination if student cannot answer, if the prior impression is good then he will get through the traditional viva examination.<sup>[7]</sup>

Appearance of student has effect while assessing traditional and structured viva-voce examination found to be significant. Particularly if girls are there, there is difference in assessment of traditional viva method.

Similarly, first or last roll numbers of the students, each examiner having different scoring system, and examiner's mood while assessing traditional and structured viva examination were found to be statistically significant.

While language barrier, difficulty in expression, external environment, being male or female, type and variety of questions, and difficulty in level of question not uniform while assessing the traditional and structured viva examination were not found to be significant.

Structured viva examination can overcome the limitations of traditional viva method provided that the cards should be prepared in such a way that all topics to be covered and difficulty level of questions is equal.

Hence, structured viva examination is better method of formative and summative assessment than traditional viva examination in community medicine.

## RECOMMENDATIONS

Some intriguing problems about the validity and reliability of oral approaches have been brought

up by research. Research on the effects of examiner training could be one highly interesting topic. Another research topic could be the personality traits that influence examination results in oral examinations.

Whether performance on orals improves with the level of medical expertise is a third topic that requires attention. Oral therapy is expensive and challenging to administer logistically. To support applying the method to a large number of candidates, more investigation into the subject being measured is required (Muzzin and Hart 1985).

## CONCLUSION

Structured viva examination is better method of formative and summative assessment than traditional viva examination in community medicine.

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