Knowledge, attitude, and perception of students toward computer-based tests in competitive examinations

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ABSTRACT

Introduction: Due to the inclusion of computerized tests in education, it is required to reconsider and rethink, modify, or change the traditional examination methods. Electronic assessment tools had reduced the burden of teachers and facilitate to conduct examinations purposefully. Computer-based examinations can be used to promote more effective learning by testing a range of skills, knowledge, and understanding. The aim of this study is to find out the perception of students on computer-based tests for competitive examinations for professional courses. **Materials and Methods:** A total of 80 participants actively participated in this survey from different parts of Tamil Nadu. 15 questions were asked to them which were related to creating awareness about computer-based tests for competitive examinations and the results were analyzed by statistical tools. **Discussion:** In this survey, more than 70% of the students have given positive feedback about the computer-based tests for competitive exams. Remaining 30% faced difficulties due to the lack of knowledge in computer operations. The basic problem was understood that students from a rural background were not much aware about computer-based tests and had a lack of practice. **Conclusion:** Many people got to know about computer-based tests in and are now aware about them; thus, this survey has become beneficial to the population. The survey concludes that computer-based tests are very useful in most of the ways and few of the implementations will give 100% successful rate by the community.

KEY WORDS: Coaching centers, Computer-based tests, Rural students, Underprivileged students

INTRODUCTION

Due to the inclusion of computerised tests in education, it is required to reconsider and rethink, modify, or change the traditional examination methods. Electronic assessment tools had reduced the burden of teachers and facilitate to conduct examinations purposefully. Computer-based (CB) examinations can be used to promote more effective learning by testing a range of skills, knowledge, and understanding. Accessing and managing information and managing and developing communication skills are possible to assess online which cannot be assessed in regular essay based examinations. JISC (2008) quoted Weaver (2003) that "… diversity decreases the dependency on the traditional formal examination, a method that does not suit the learning styles of many students.[1] The key factor in determining whether an assessment program is good depends on whether the assessment tasks are relevant to the aims and intended learning outcomes for the course, not forgetting the attitudes and skills that are to be tested." Computer and related technologies provide powerful tools to meet the new challenges of designing and implementing assessments methods that go beyond the conventional practices and facilitate to record a broader repertoire of cognitive skills and knowledge.

According to Bodmann and Robinson, CB tests offer several advantages over traditional paper-and-pencil or paper-based (PB) tests.[2] Technology-based assessment provides opportunities to measure the level of knowledge and reasoning that is difficult to do by traditions methodologies. The link between observation and interpretation through computer-based technologies makes it possible to score and interpret multiple aspects of student performance on a wide range of tasks chosen for cognitive features and compare the results against profiles that have interpretive value. Computer-based assessment technique is becoming more and more common in HEIs because of its relevance and direct approach

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toward computer-assisted instruction. According to Conole and Warburton: "Common aptitude tests items are written to test particular levels of ability that they have the potential to deliver more accurate and reliable results than traditional tests." Traditional methods of assessment are being replaced by automated assessment in all over the world gradually, but it is not clear yet to up to what extent these changes will be fruitful to the academicians and administrators of HEIs (McAlpine, 2004). Therefore, it was significantly important to perceive university teachers' approaches toward CB and/or PB examinations.[3]

It was observed through literature that little attention was paid to understand teachers' thoughts about how they differentiate between CB and PB examinations in terms of their effects on teaching and learning. Authors of this research, therefore, analyzed teachers' attitude in new and different dimensions or categories, i.e., not only limited to gender-based attitudinal differences but also discipline-wise, designations-wise, qualifications-wise, teaching experience-wise, computer skilled (trained), and non-skilled (untrained) teachers and the teachers who experienced[4] to conduct CB examinations versus to those who never experienced.

MATERIALS AND METHODS

This survey was taken by questioning 80 people with a set of 15 questions. The responses were taken and were compiled, and the results were evaluated. The questions asked were about the computer-based examinations, stress on a person for academic preparation,

1. Are you aware of computer-based competitive examinations?
2. Have you written competitive examinations?
3. How was the preparation for online dint for other competitive exam?
4. Does academic preparation put more stress on a person preparing for competitive exam
5. Does competitive exam help students from rural regions?
6. Has competitive exam benefitted every student equally?
7. Should competitive exam be conducted based on the current curriculum?
8. Does competitive exam have aptitude testing also?
9. Should admission include board exam marks also, including ones competitive exam marks?
10. Is competitive exam coaching helpful for getting ranks in the competitive exam?
11. How much preparation is required for a student for securing ranks in the competitive examination?
12. Can everyone afford competitive exam coaching?
13. Is competitive exam affordable for underprivileged students?
14. What are the steps that the government must take for these people?
15. Are students benefitted because of competitive exam?

RESULTS AND DISCUSSION

In recent times, the higher secondary examinations[5] have had dominance over entrance examinations. Just the Class XII marks are not sufficient for a student to get into a professional course. This created a platform for the entrance examinations. Most of the population today seeking professional courses are reliable on professional development required computer-based aids. In this survey, we look into the importance of entrance examinations and at present computer-based test for these competitive examinations is in practice. Thus; here, we look into the benefits of computer-based tests for competitive examinations for getting into professional courses. From this survey, we have come to know that most of the people are aware of the competitive exam and most of them have written the competitive exam. Nowadays, because competitive exams are mostly the only way to get into professional courses, so this awareness is now of major importance.

The preparation for these competitive exams was different from the higher secondary examinations and people with the academic stress on the heads, thought they needed more time for the preparation for the competitive exam. Moreover, performing all these test manually requires a lot of effort from the student.[6,7] People have felt that the preparation for these competitive exams has an extra stress on the studentsbecause the preparation was much more difficult than other exam preparations [Figure 1].[8-10] Moreover, 83% of the students felt that also preparing for the higher secondary exams has put more stress on the students for securing ranks in the competitive exam.
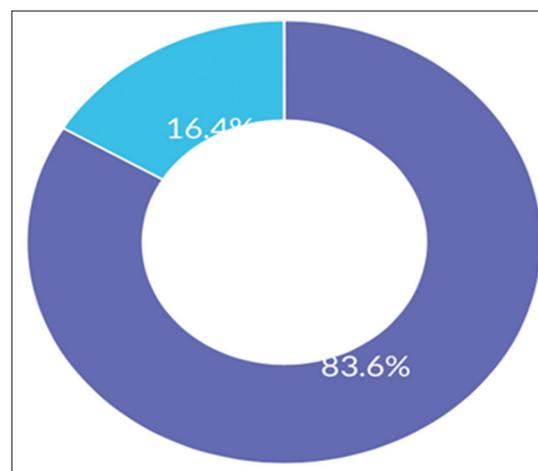

Figure 1: How much competitive exam preparation differs from board exam preparation

As the technological advances keep developing, the rural population does not get equal opportunities for getting exposed to these technology and find it difficult to work on their examination. This had created questions and had made different people act in different ways.[11] They need to be given equal opportunities to be exposed to the latest technologies and should get the same exposure as the other student in the cities to get for their preparation for these exams. About 15% of the students from the rural areas require this awareness and require more coaching and practice for these examinations.

Competitive exam should not be conducted based on one curriculum. Thus, the curriculum should be made uniform throughout India so that all of them get the same material and coaching for the preparation for these exams. This has faced so many problems as the curriculum we study on right now is different in different states as every state has its own state curriculum and there is a central CBSE curriculum. Thus, there should be only one curriculum followed throughout the country. However, this has eliminated the management quota where people get all the seats just based on the score they get on the computer-based tests. This also tests every person without taking into the caste system of seat selection; every person should be selected unanimously only based on the scores. This will improve the student's process of learning.[12]

The competitive exam coaching centers nowadays are very important, for once entrance exam preparation. However, there are some centers which operate commercially. From this survey, 75% of the people have stated that the coaching centers are helpful for a student for the computer-based tests as they guide the student for how he has to write the test and coaches the student on how he has to manage himself inside the exam hall.[13] The purpose of competitive exams is to filter students with the right aptitude for a said
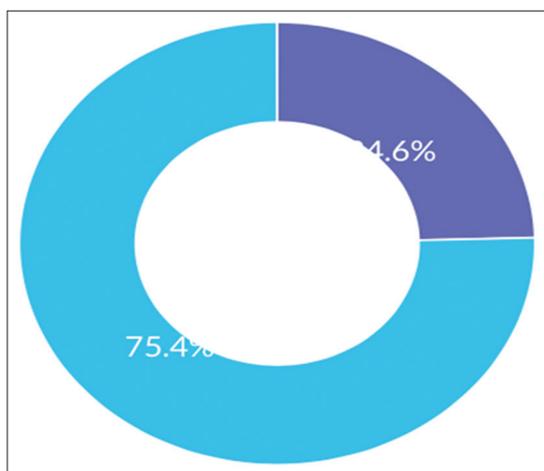
profession. Therefore, simply mugging up the study material may not prove to be useful; it's important to have a strategy in place.

Thus, a well-charted plan is the need of the day, and this brings us to one of the important advantages of enrolling in a coaching class - guidance. Thus, this helps the students to learn how to manage himself in the exam hall. However, the coaching centers are costly and are not affordable for everyone [Figure 2]. Hence, this is one of the major drawbacks as not every person gets the same opportunity at the same cost as it is not affordable to many people. Hence, the coaching should be given to the people at a cheaper cost so that everyone will be able to afford the coaching they deserve for their preparation.

Coming to the rural areas they not aware of anything about computer-based tests and have no idea what they are going to do in the exam hall. Their exposure to these exams is nowhere near to knowing how it is conducted and they sit blank inside there. Moreover, the journey for their coaching is also nowhere easier. They do not have any coaching centers nearby and have to travel a lot to learn or educate themselves.

The rural population has to receive more attention, and they have to be given the correct coaching for the examination, and with a little implementation, the computer-based examinations will have an immense effect on the population.

These computer-based exams have made the conduction of the exam easy. Before, it has been all paper, and they are subject-able to loss of the answer sheets and made documentation tougher. Now as it is all computerized and documentation has become much easier.

CONCLUSION

It is with no doubt that computer-based test for competitive examinations for the admission for

Figure 2: Illustrates what people felt about competitive exam on beneficence to people with equality

professional courses is a great implementation and has a positive effect on the population.

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