Çevrimiçi Sınav Görüş Anketi
Online Examination Assessment Survey

EXTENDED SUMMARY

The purpose of this study is to develop a new scale for evaluating online examination which is using as an alternative to paper-pencil exams. Study was conducted in medium-sized university which was located in east part of Turkey and it was established in the more recently. The application made with 80 students enrolled in Computer I course in Department of Science Education. Application of online examination was used between two paper-pencil exams which were called mid-term exam and final exam. Examination was conducted in Computer Laboratory Classroom. All students were used own computer for examination starting and stopping. For possible technical problems, an observer was stands by in the classes. Students used their personal user name and password to access MOODLE which is a kind of learning management system. Questions showed on PC screen one by one and the different order in same questions pool. So that, every students answered same questions but different order. That application used for cheating prevention between students. Students could start their own examination when they ready. But for synchronizations, observer was announced the start of exam. Main point of online exam was students' experience. So that, exam was not taking a long time and no more than 5 questions.

Before the preparing scale items, aimed to prepare short and clear sentences. Therefore, review of the literature was used for preparing items pool. Also, one of academician's views used who is a staff in department of Computer and Instructional Technology. 7 reserve and 18 normal questions used in the items pool. Alfa index (α) was used to determine scale reliability. The internal consistency analysis was used to assess the construct validity of scale. Factor analysis used to data reduction for scale. There are two types of factor analysis which are Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). In this study, used EFA to define sub-factors of scale because study does not have any basis of pre conceived special theories. KMO & Bartlett's Test of Sphercity used to check the sampling adequacy for factor analyses. The range of the KMO results falls between 0 to 1. And, the accepted index globally is 0.6 and up. The other important step for factor analyses, Bartlett's Test of Sphercity has to be less than 0.05. Analyze results showed that KMO index is 0.8 and Barlett's Test of Sphercity under the 0.05 ($p \leq 0.05$) for scale. Varimax rotation technique was used to define items and correlated factor. Factor analyses were done three times to find items and sub factor coherence.

The current study found that online examination assessment scale had three components. These are (1) practicality-suitability $\alpha=0.89$ (8 Items), (2) affective factor $\alpha=0.82$ (6 Items), (3) reliability $\alpha=0.82$ (3 Items). The scale can use in science instruction to evaluate online examination with specific factors. Additionally, it needs to use in other courses and departments to evaluate general validity and reliability of that scale.

Ek 1: Çevrimiçi sınav değerlendirme anket maddeleri ve faktörler

Faktör 1: *Pratiklik ve kullanışlılık*

14. İnternet üzerinden yapılan sınavdaki sorular daha anlaşılırdı.
10. Çevirimiçi sınavı kağıt-kalem sınavına tercih ederim.
11. Sınavın internet üzerinden olması hoşuma gitti.
12. Bütün sınavların internet üzerinden olmasını isterim.
8. Çevirimiçi sınav, kağıt-kalem sınavına göre daha düzenliydi.
25. Çevrimiçi sınavdaki sorular öğrenmemi daha iyi ölçüyordu.
4. İnternet üzerinden yapılan sınav etkili ve kullanışlıydı.
5. Kağıt-kalem sınavı yerine çevirimiçi sınavı tercih ederim.

Faktör 2: Duyuşsal *etki faktörü*

7. Çevirimiçi sınav, kağıt-kalem sınavına göre daha stresliydi.
16. Çevirimiçi sınavda sınav kaygım daha fazlaydı.
6. Çevirimiçi sınava uyum sağlamam zor oldu.
15. Çevirimiçi sınavdan sonra, kağıt-kalem sınavına göre daha çok yorulduğumu hissettim.
13. Bütün sınavların kağıt-kalem olmasını isterim.
20. Çevirim içi sınavda kağıt-kalem sınavına göre soruları okumak daha zordu.

Faktör 3: *Güvenirlik*

23. Çevrimiçi sınavda soruların seçimi uygundu.
21. Çevrimiçi sınavda soruların zorluğu uygundu
22. Çevrimiçi sınavda sorular ayırt ediciydi.