

## **Validity and reliability of eight-grade digital culture test in light of item response theory**

### **Abstract:**

The purpose of this study is to construct a digital culture test in light of the Item Response Theory and to investigate its psychometric properties. The study sample consisted of six hundred fifty (650) male and female students in the eighth grade from the Directorate of Education and Teaching of Salt District. To obtain the results, the descriptive approach was used. The results showed that the items have acceptable indicators of discrimination and extend on the continuum of difficulty adequately. The validity and reliability of the test were verified by using several methods, including content validity and internal consistency. The study findings showed that most of the test items fit the assumptions of the two-parameter logistic model. The results also displayed statistically significant differences in the arithmetic means of the digital culture test due to gender in favor of female students. Moreover, the outcomes presented statistically significant differences attributed to the education sector variable favoring the private sector.

**Keywords:** Digital Culture Test, IRT, Psychometric Properties, Teaching.

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