

## VALIDITY AND RELIABILITY STUDY OF IDENTIFICATION SCALE FOR UTILIZATION DEGREE OF BASIC SCIENTIFIC PROCESS SKILLS OF PRE-SCHOOL TEACHERS

Uzm. Sara Kefi  
Foça Belediyesi Çocuk Evi Müdürü  
Foça- İzmir  
[sarakefi@gmail.com](mailto:sarakefi@gmail.com)

Doç. Dr. Nadir Çeliköz  
Yıldız Teknik Üniversitesi  
İstanbul  
[ncelikoz@gmail.com](mailto:ncelikoz@gmail.com)

### Abstract

In this study, the question of “Can a valid and reliable assessment instrument which is aimed to determine the utilization degree of basic scientific process skills of pre-school teachers be developed?” was considered to be basic problem and discussed in detail. Accordingly, revealing the connection between the Validity (1) and Reliability (2) and the degree of basic scientific process skills of pre-school teachers (3) and other variances was considered to be secondary problem and also discussed in the study. 471 pre-school teachers working at Pre-School Educational Institutions subjected to the Ministry of National Education in the cities of Ankara, İstanbul, İzmir, Konya, Kırklareli ve Sakarya participated in the validity and reliability study of the scale. KMO and Barlett test were carried out for the sample competence and generalizability of the scale, Expert Opinion and Pearson Product-Moment Correlation were carried out for the Scope and Face Validity, Cronbach Alfa ve Split Half tests were carried out respectively for the Internal consistency and Split-half reliability. Independent T-test and One-way Analysis of Variance were applied to reveal the connection between the degree of using the basic scientific process skills of Pre-School Teachers and some variances. The findings that were acquired proved to be a valid and reliable assessment instrument for the teachers working in the field, preservice teachers receiving education, researchers and administrative staff. As the scale determining the degree of using the basic scientific process skills of Pre-School teachers is the first scale developed for the Pre-School teachers in Turkey, the scale is considered to be useful in field reseaches and to contribute to the field.

**Key Words:** Pre-School Teachership, Scientific Process Skills, Validity-Reliability.