

ABSTRACT

DETERMINING THE VALIDITY AND RELIABILITY OF EARLY NUMERACY ASSESSMENT FOR 48-60 MONTH OLD CHILDREN

Başak YILMAZ

Master's Thesis, Department of Early Childhood Education

Supervisor: Asst. Prof. Gözde İnal KIZILTEPE

This study was conducted for the purpose of adaptation and administration of Early Numeracy Assessment to 48-60 month-old preschoolers who were taken as samples for Aydın. These 48-60 month-old children who were attending to public kindergartens in districts of Aydın Efeler city center in 2014-2015 academic year constituted the universe of this study which was characterized as a survey. The data were collected by random sampling among 300 children using "Personal Information Questionnaire" and the Turkish adaptation of "Early Numeracy Assessment" which was developed by VanDerHeyden (2008) to determine children's numeracy ability levels were utilized by the researcher. The data gathered through Early Numeracy Assessment were then used for determining validity and reliability. In order to determine the reliability of the scores from Early Numeracy Assessment, Kuder Richardson (KR-20) values were found to be .963 for Count Object Circle Number, .976 for Count Objects Write Number and .971 for Identify Number Draw Circles and .985 for the composite for Early Numeracy Assessment. These high KR-20 values show high internal consistency for the test. According to these findings, scores of Early Numeracy Assessment, have been acknowledged as valid and reliable for 48-60 month-old children.

KEY WORDS: Early Childhood Education, Cognitive Development, Mathematical Thinking, Number Development