

## Measuring Preschoolers' Geometry Knowledge: An IRT Analysis of a Rescaled Measure.

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The current study modified and evaluated the validity and reliability of a measure of early geometry knowledge. Preschoolers ( $n = 252$ ) were administered geometry items from a measure of broad math skills along with measures of their spatial, numeracy, and patterning skills. The geometry items' psychometric properties including their reliability and validity as a measure of preschoolers' geometry knowledge were assessed. Children's scores on the geometry measure were correlated with their spatial, numeracy, and patterning skills indicating that the measure has strong validity. The current study also indicated that the measure is reliable. Thus, the modified measure which takes about 10 minutes to administer may be used in future research and by educators to assess children's developing geometry knowledge.