

Patterns in Parents' Broad Early Math Support

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Early math skills (i.e., patterning, numeracy and spatial) predict later math achievement; however, little work has examined parents' home support of these skills or how support changes over time. The current study compared parents' math support in their child's preschool and kindergarten years, and will explore its relations to parents' math-related beliefs during both years.

Thirty-four parents (91% mothers) completed surveys about their math support and beliefs at the start of their child's preschool year (time 1) and end of their kindergarten year (time 2). Parents rated the frequency of their patterning, numeracy, and spatial support on a 6-point scale (0 = never, 1= once a month or less, 2= 2- to 3-times a month, 3= 1- to 2-times a week, 4= 3- to 4-times a week, 5 = daily).

Time 1 and time 2 math support (i.e. averaged composite of patterning, numeracy and spatial support) were strongly correlated, $r(28) = .67, p < .001$; however, this support was less frequent at time 2 ($M = 2.50, SD = .64$) than time 1 ($M = 2.85, SD = .64$), $t(29) = -4.07, p < .001$. At time 2, numeracy support ($M = 3.44, SD = .86$) was more frequent than spatial ($M = 2.72, SD = .69$), $t(33) = 6.37, p < .001$ and patterning support ($M = 2.51, SD = .94$), $t(33) = 6.80, p < .001$, while spatial and patterning support were comparable, $t(33) = 1.87, p = .07$.

Findings suggest that parents' math support in the preschool year is especially important given its relationship with their later math support. Additionally, parents' math support decreases from the preschool to kindergarten year and parents continue to provide patterning support infrequently during the kindergarten year. Further research should explore how to promote more frequent early math support (especially about patterning) among parents.