By the time they enter kindergarten, U.S. children show substantial differences in cognitive skills by socioeconomic status (SES), according to recently published AAP research (Larson K, et al. Pediatrics. 2015;135:e440-e448).

Children in the lowest socioeconomic quintile scored in the 34th percentile on standardized reading tests, while those in the highest scored in the 67th percentile (see figure). Math scores ranged from the 33rd to 70th percentile.

Many factors, including parent and child health status, reading and home routines, expectations for child learning, and preschool attendance contributed to the differences in cognitive skills at kindergarten entry. Children in lower SES quintiles had younger mothers (mean age 25 vs. 33 years), less frequent parent reading, less home computer use (27% vs. 84%) and fewer books in the home (mean 26 vs. 114). Parents’ supportive interactions, expectations for their child to earn a college degree (57% to 96%) and child’s preschool attendance (64% to 89%) increased across quintiles.

A sizable portion of the reading and math ability gaps were explained by parent reading (8% to 10%), child home computer use (6% to 7%), availability of books at home (2% to 4%), parent supportive interactions (6% to 7%), rule-setting (3% to 4%), parent aspirations for child education (4% to 6%) and preschool attendance or participation in classes at age 4 (6% to 7%). Family health factors, including maternal preconception health, prenatal smoking, maternal depression, child birth weight, breastfeeding and general child health status, together explained approximately 4% to 6% of the gaps.

The study shows multiple and complex factors shape SES gradients, and multipronged strategies are needed to address inequalities in skill development. The Academy recommends that early literacy promotion efforts and support for parent reading be integrated into primary care practice.

The research involved collaboration between the Academy and the University of California, Los Angeles. The study sample included 6,600 children from the U.S. Early Childhood Longitudinal Birth Cohort Study. Detailed parent interviews and child and family assessments were completed in the home when children were approximately 9 months, 2 years, 4 years and 5-6 years of age.

**RESOURCES**

- For more information on the study, contact Kandyce Larson, Ph.D., in the AAP Division of Health Services Research, at kalarson@aap.org or 800-433-9016, ext. 7624.
- For information about the benefits of promoting early literacy and tools you can use in your practice, see the Books Build Connections Toolkit at http://littoolkit.aap.org.
- For AAP resources related to early brain and child development, visit www.aap.org/EBCD.
Health, home routines among factors influencing cognitive skills at kindergarten
AAP Department of Research
AAP News 2015;36;14
DOI: 10.1542/aapnews.2015363-14

Updated Information & Services
including high resolution figures, can be found at:
http://aapnews.aappublications.org/content/36/3/14.1

References
This article cites 1 articles, 1 of which you can access for free at:
http://aapnews.aappublications.org/content/36/3/14.1#BIBL

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
Developmental/Behavioral Issues
http://beta.aapnews.aappublications.org/cgi/collection/development:behavioral_issues_sub
Cognition/Language/Learning Disorders
http://beta.aapnews.aappublications.org/cgi/collection/cognition:language:learning_disorders_sub
Research Update
http://beta.aapnews.aappublications.org/cgi/collection/research_update

Permissions & Licensing
Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
http://beta.aapnews.aappublications.org/site/misc/Permissions.xhtml

Reprints
Information about ordering reprints can be found online:
http://beta.aapnews.aappublications.org/site/misc/reprints.xhtml
Health, home routines among factors influencing cognitive skills at kindergarten
AAP Department of Research
AAP News 2015;36;14
DOI: 10.1542/aapnews.2015363-14

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://aapnews.aappublications.org/content/36/3/14.1