PRI Middle School Follow-Up Study: Sample

This five-year longitudinal study is investigating middle grades mathematics achievement and cognitive abilities. Funded by the Heising-Simons Foundation (#2013-26) and the U. S. Department of Education's Institute of Education Sciences (#R305A140126), the study involves a group of students who participated in an earlier short-term longitudinal study of early math skills. Students began the follow-up study in the 2013-14 school year when the majority was in 5th grade, and they are being tracked for four years through their 8th grade year.

The earlier study, also funded by the Institute of Education Sciences (#R305K050157), was a three-year longitudinal three-site scale-up evaluation of a model that involved the implementation of a pre-kindergarten math curriculum, *Building Blocks* (Clements & Sarama, 2006). For more details on this multi-site project, conducted in Tennessee, Massachusetts, and New York, see Hofer, Lipsey, Dong, & Farran (2013). As part of the earlier randomized controlled trial scale-up, 20 public schools and 4 Head Start sites in an urban city in Tennessee were selected to participate, matched according to system and number of preschool classrooms, and randomly assigned to one of two experimental conditions in the 2006-2007 school year. In total, 31 classrooms implemented the math curriculum and 26 practiced business-as-usual instruction. In the 2007-2008 school year, the 57 classrooms contained 945 children, and parental consent was obtained for 792 of those children to participate in the evaluation study. The final analytic sample for the original scale-up study included 771 children, 452 in the treatment group and 319 in the control group, whose parents provided consent and who had at least partial pretest information. Individual assessments of children's achievement were conducted at the beginning and end of the pre-k year and at the end of the two subsequent school years. In addition, teacher ratings, parent questionnaires, and observations of children and classrooms were collected. The analytic sample was 55% female, primarily black (77%), and generally eligible for free or reduced price lunches due to the enrollment requirements of the pre-k programs. Less than 10% of the 771 children were English Language Learners.

In the follow-up study, we were able to locate 628 students who were attending public school in the 2013-14 year in the same district as they attended in pre-k (16 had withdrawn from the study in 1st grade and were not contacted for further participation, 29 had moved out of the state, 53 had moved out of the district, and 45 were not located despite all efforts). Of those 628, we were able to obtain parental consent for 519 (34 parents declined participation and 72 were unable to be reached; 3 additional parents initially agreed to participate but never returned the hard copy of the consent form). That final sample of 519 (317 who were part of the treatment group in pre-k and 202 who had been part of the control group) was 57% female, 79% black, and had a mean age at time of first follow-up assessment of 11.1 years.

In this school district in Tennessee, middle school begins in 5th grade. Of our 519 students who should have been in 5th grade in the 2013-14 school year if they had not been retained or promoted early, 15% were still in 4th grade. The sample students were located in 77 schools in the first year of the follow-up study, including 31 elementary schools, 27 middle schools, 12 charter schools, and 7 Innovation Cluster schools (schools that had been targeted for additional resources to boost low student achievement).

References

Clements, D. & Sarama, J. (June 2006). *Scaling Up TRIAD: Teaching Early Mathematics for Understanding with Trajectories and Technology*, proposal funded by the Institute for Education Sciences.

Hofer, K. G., Lipsey, M. W., Dong, N., & Farran, D. C. (2013). *Results of the Early Math Project – Scale-Up Cross-Site Results (Working Paper).* Nashville, TN: Vanderbilt University, Peabody Research Institute.