What is this study about?

This study examined whether playing number board games improved numeracy skills of low-income preschoolers.

It included 136 preschool children from 10 urban Head Start centers. The children ranged in age from four to five-and-a-half years old.

Seventy-two children were randomly selected to play a number board game with a trained experimenter. The other 64 children played a different version of the game using colors instead of numbers.

Numeracy skills were assessed at the end of a two-week period and again nine weeks later.

What did the study authors report?

Children who played the number game had better counting and number identification skills than children who played the color game. Children who played the number game were also better at picking the highest number from a pair of numbers and identifying positions on a number line.

The effects persisted nine weeks after the game sessions ended. Estimated effect sizes at that point ranged from 0.55 to 0.80. These effects did not differ by the age of the preschoolers.

How Board Games Were Used to Teach Numeracy Skills

Game included a board with numbered squares, two game pieces, and a spinner.

Players took turns spinning and moving game pieces around the board.

They read numbers from the board aloud as they moved game pieces.

Children completed four game sessions over a two-week period lasting 15 to 20 minutes each.