

## CERM-ESA Master's Programme

### THE EFFECT OF USING A SIX BRICK DUPLO BLOCK GUIDED PLAY APPROACH ON PRE-SCHOOL LEARNERS' VISUAL PERCEPTUAL ABILITIES

#### Introduction

One aspect of child development is the development of a variety of perceptual skills during the crucial early learning years, especially visual perception, which plays a fundamental role in determining a young learner's ability to successfully complete written and numeric tasks (Clutten, 2009). Visual perception is the brain's ability to organize and interpret what is seen (Deiner, 2005). Learners require opportunities and activities to help them develop visual perception. One of the ways that learners can acquire visual perception is through play with 6 Brick Duplo Blocks.

#### Research question

*Does guided play using the 6 Brick Duplo Block approach have an effect on pre-school learner's visual perception abilities?*

#### Methodology

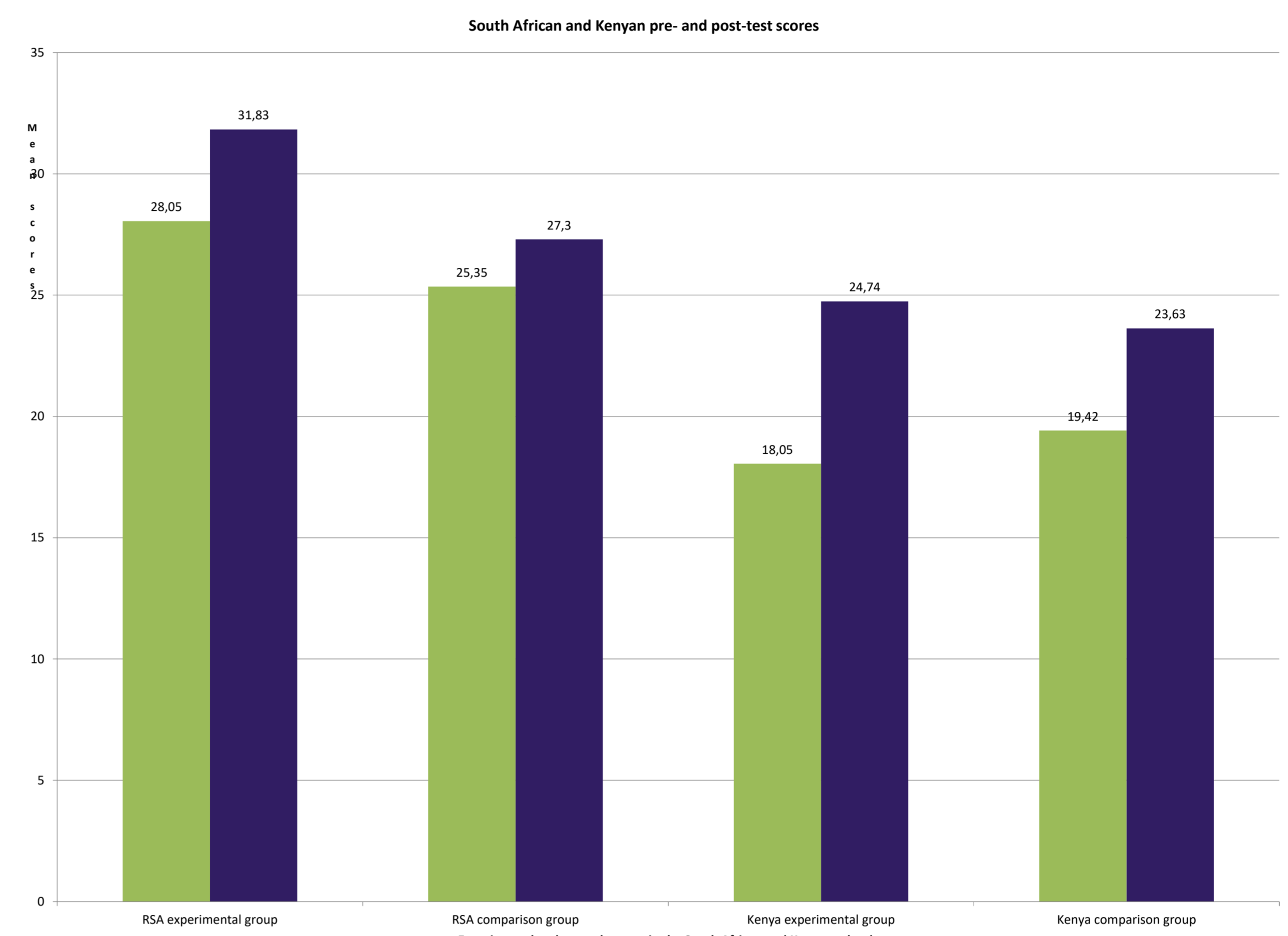
The study utilised a quasi-experimental design with pre-post-testing and experimental and comparison groups. However, the experimental and comparison groupings were not randomly chosen (existing classes were used). During intervention process observations were done and finally teacher interviews were conducted.

#### Findings

Quantitative data were obtained from the Visual Perception Aspect test (VPAT)



The distribution of the scores suggest that the scores are normally distributed. The data were generated as matched pairs. There was also improvement from pre-post tests.



#### Qualitative findings

*"The learners enjoyed the 6 Brick sessions" "could remind the teacher to do 6 Bricks""They loved it. They got excited every time I told them its 6 brick time."*

#### Recommendations

Results from this study suggest a need for curriculum developers to reconsider the Piaget's stages of cognitive development under the Piagetian theory in order to design appropriate instructional materials that promote learners' visual perceptual growth and development.



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Jemutai, S. (2017). *The effect of using a Six Brick Duplo Block guided play approach on pre-school learners' visual perceptual abilities* Unpublished Masters Dissertation, Nelson Mandela University: Port Elizabeth.

#### Conclusion

The data generated via the Visual Perceptual Aspect Test in this study revealed that guided play using the 6 Brick Duplo Block approach had a statistically significant positive effect in terms of accelerating the development of pre-school learner's visual perception abilities. Individual interviews with teachers and open ended classroom observations by the researcher, juxtaposed with the literature on Early Childhood Development, suggest that the development of cognitive, social, emotional and physical abilities was enhanced through the guided play sessions.