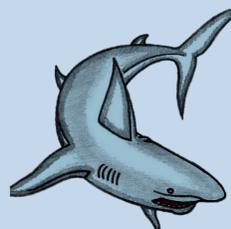


Introduction

- Phonological neighbourhood density refers to the number of words that can be formed from a given word by substituting, adding or deleting one phoneme.
- According to the Neighbourhood Activation Model, words in the mental lexicon are organized by phonological similarity (Luce & Pisoni, 1998).
- A word with many similar sounding neighbours, such as *bat* (*rat, mat, fat, pat...*), has a dense neighbourhood, whereas a word with few or without neighbors, like *squirrel*, is said to have a sparse neighbourhood.
- Words with sparse neighbourhood are perceived more accurately and faster than words with dense neighbourhood (Metsala, 1997; Yates et al., 2008).
- Words with dense neighbourhood tend to be accessed more easily than words with sparse neighbourhood in word production (Harley & Brown, 1998; Vitevitch, 2002).

Method

- **Participants:** From thirty to forty 4-6-year-old Russian children will be invited to participate in the present study.
- **Stimuli:** Thirty child-friendly color pictures (15 of which illustrated words with dense neighbourhoods and 15 – words with sparse neighbourhoods).



- **Procedure:** Classical naming-task paradigm in which children are shown a display with a picture and are asked to name it. Speed and accuracy will be recorded.

Hypothesis

- Words with high phonological neighbourhood density will be produced more quickly and accurately than words with low phonological neighbourhood density.