

Phonological neighborhood density effect in word production in Russian children: A naming-task study

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Existing studies have demonstrated the influence of phonological neighborhood density (PND) on word production in both typical and clinical populations (Best, 1995; Gordon, 2002; Harley & Brown, 1998). PND refers to the number of words that can be formed from a given word by substituting, adding or deleting one phoneme. Thus, some words have dense neighborhoods, DN (e.g., *pin* – *spin*, *in*, *tin*...), and some words have sparse neighborhoods, SN (e.g., *squirrel*). Importantly, Hansen (2017) reported that children acquire words with DN earlier and faster than words with SN.

Previous research showed that words with DN are produce more accurate and faster than words with SN in both English speaking children (German & Newman, 2004) and adults (Harley & Brown, 1998). Similar results were found for French adults (Dufour & Frauenfelder, 2010), but the opposite PND effect was observed for Spanish adults (Vitevitch & Sommers, 2003; Vitevitch & Stamer, 2006). Therefore, a more detailed study is needed, especially in a language that differs from English.

The goal of the present study is to examine the influence of PND on word production in 4-6-year-old Russian children. We use a classical *naming task* in which participants are shown a display with a picture and are asked to name it. Speed and accuracy of answers are recorded. Our experiment consists of 30 trials (15 pictures correspond to DN-words and 15 pictures – to SN-words) presented in random order. We assume that pictures that are referred to with DN-words will be produced faster than those referred to with SN-words. The data is now being collected.

The expected results will help to understand the influence of PND on word production in Russian children and will help to reveal the mechanisms of early lexical development.

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