

REVISITING RESEARCH ON GRAMMATICAL GENDER ACQUISITION BY RUSSIAN-SPEAKING CHILDREN WITH DEVELOPMENTAL LANGUAGE DISORDER

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Received May 27, 2019; Revised June 4, 2019; Accepted June 18, 2019

Abstract. Although both Developmental Language Disorder (DLD) and grammatical gender acquisition have been the focus of scientific interest for decades, a few research has been conducted in order to explore how DLD Russian-speaking children acquire this linguistic category. One of the main reasons for this is the difficulty of recruiting DLD children as we still cannot reliably identify these children. Previous studies claim that typically developing children acquire grammatical gender at about 3-4 years of age, but have difficulties with neuter gender up to 6 years of age. This brief report aims at providing the theoretical background of a research in process. The review deals with the issue of grammatical gender acquisition by Russian-speaking children diagnosed with DLD. Specifically, this paper reviews i) the main findings of studies on gender acquisition in typically developing Russian-speaking children, ii) the outcomes of research on how Russian-speaking DLD children make use of grammatical gender.

Keywords: *Developmental Language Disorder (DLD); grammatical gender; acquisition; Russian.*

Огнева Анастасія. Перегляд досліджень щодо опанування граматичного роду російськомовними дітьми із загальним недорозвиненням мовлення.

Анотація. Не дивлячись на те, що загальне недорозвинення мовлення (ЗНМ) та опанування граматичного роду перебувають у центрі наукових досліджень упродовж десятиліть, недостатньо уваги було приділено дослідженню того, як російськомовні діти із ЗНМ опановують цю граматичну категорію. Однією з головних причин цього є труднощі у відборі дітей із ЗНМ, оскільки ми все ще не вміємо добре ідентифікувати таких дітей. У попередніх дослідженнях йдеться про те, що діти, які розвиваються типово опановують граматичний рід приблизно у віці 3–4 років, але мають труднощі з середнім родом аж до 6 років. Метою статті є забезпечення теоретичного підґрунтя дослідження. Статтю присвячено проблемі засвоєння граматичного роду російськомовними дітьми з діагнозом ЗНМ. Зокрема фокус уваги зосереджено на: а) провідних результатах досліджень у галузі опанування категорії роду російськомовними дітьми з типовим розвитком; б) результатах досліджень того, як оперують граматичним родом російськомовні діти із загальним недорозвиненням мовлення.

Ключові слова: *загальне недорозвинення мовлення (ЗНМ), граматичний рід, опанування, російська мова.*

1. Introduction

Developmental Language Disorder (DLD), also known as Specific Language Impairment (SLI)¹, is a diagnosis for children who exhibit difficulties learning their

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East European Journal of Psycholinguistics, 6(1), 58–64. <https://doi.org/10.5281/zenodo.3366013>

native language despite their normal non-verbal IQ, no neurological, physical or mental disabilities (Leonard, 2014). Although linguistic limitations have been reported in all language components (*i.e.* phonology, semantics, pragmatics), the central weakness is the grammar morphology. This problem has been commonly noted across a variety of languages (Leonard, 2014; Bedore and Leonard, 2001; Clahsen, Bartke and Göllner, 1997). For instance, English-speaking children with DLD are reported to have difficulties in verb morphology, specifically, omissions of auxiliary verbs or 3rd person morphemes are observed (*e.g.* **she talk* instead of *she talks* or **mommy cooking* instead of *mommy is cooking*). Previous crosslinguistic studies on gender in DLD mainly focused on gender agreement between the noun and the determiner and were based mainly on elicitation or sentence completion task in French, Spanish, Greek Dutch or Portuguese. Generally, the results of this research showed that DLD children had a higher error rate in their productions, such as omissions, substitutions, etc. (Anderson and Lockowitz, 2009; Anderson and Souto, 2005; Bedore and Leonard, 2001; Jackson-Maldonado and Maldonado, 2017; Orgassa and Weerman, 2008; Roulet-Amiot and Jakubowicz, 2006; Silveira, 2006; Varlokosta and Nerantzini, 2013).

Russian is a language with a rich morphology system. All nouns are distinguished between three grammatical genders: masculine, feminine and neuter. Gender agreement is expressed in some pronouns, numerals, participles, demonstratives, verbs in past tense, and adjectives. Gender agreement marking in Russian is illustrated in example (1)².

- (1) a. *krasn-yj kover-Ø ležal-Ø na polu*
 red._M rug_(M) lie._{PST.M} on floor
 ‘a red rug is on the floor’
 b. *krasna-ja knig-a ležal-a na stole*
 red._F book_(F) lie._{PST.F} on table
 ‘a red book is on the table’
 c. *krasno-je veščestv-o byl-o v butylke*
 red._N substance_(N) be._{PST.N} in bottle
 ‘red substance was in the bottle’

According to Corbett (1991), Russian has a fairly regular declension-gender correspondence, so grammatical gender of the majority of the nouns is highly predictable from their phonological shape in nominative singular. Thus, nouns ending in non-palatalised consonants are masculine (*stul* ‘chair’), nouns ending in stressed /a/ are feminine (*butylka* ‘bottle’), and nouns ending in stressed /o/ are neuter (*okno* ‘window’). However, some nouns have opaque forms in nominative singular. For example, nouns ending in palatalised consonants can be both masculine and feminine (*den* ‘day.M’, *len* ‘laziness.F’). Other opaque nouns are

¹ The name of this diagnosis has been a matter of debates. Previously, Specific Language Impairment was the most commonly used. However, since it has been questioned due to controversy, in 2017, during CATALISE Consortium a recommendation for the use of the term Developmental Language Disorder was proposed (Bishop, 2017).

² The abbreviations used in glosses are the following: M masculine, F feminine, N neuter, PST past tense.

those that end in unstressed vowels. Due to a vowel reduction process, both unstressed /a/ and /o/ are pronounced as /ə/, as in /knigə/ ‘book.F’ and /oblakə/ ‘cloud.N’ (Mitrofanova et al., 2018).

Thus, during language acquisition process, children need to learn how to correctly assign gender to every new word they learn and also how to establish the agreement between the nouns and the dependent items in a sentence. Are DLD children able to extract the regularities provided in their native language and make use of them? In the following sections we will provide the main findings with typically developing and DLD children.

2. Methodology

This paper uses a descriptive approach, providing a brief theoretical review on the state-of-the-art of grammatical gender acquisition in Russian-speaking children with typical language development and those diagnosed with DLD. The works included in this review were chosen according to the availability and their relevance for the topic.

3. The study

3.1. Grammatical gender acquisition in typically developing children

Previous research on grammatical gender in typically developing Russian speaking children include several longitudinal and experimental studies (Gvozdev, 1961; Popova, 1973; Ceitlin, 2005; 2009; Rodina and Westeergard, 2012; Mitrofanova et al., 2018 *inter alia*). One of the first observations that had been made is that the masculine-feminine distinction appears quite early in child speech, at about 2 years of age (Gvozdev, 1961; Ceitlin, 2005; 2009). Ceitlin (2005) also mentions that children possibly start to distinguish between two main groups of nouns: those that end in –a, and those that end in a consonant. It is reported that approximately at 2;0, children go through a stage of overgeneralized use of feminine gender. Specifically, Gvozdev (1961) reports examples as **mal'čik letela tuda* ‘boy_(M) fly_{.PST.F} there’ and **mal'čik legla* ‘boy_(M) lied_{.PST.F} down’. Experimental research by Popova (1973) also provides evidence for feminine gender overgeneralization stage.

Acquisition of neuter gender is reported to be more difficult for children. Ceitlin (2005) claims that in child speech neuter nouns are almost absent. Instead, children often substitute neuter gender by feminine. For example, **jaicka drugaja* instead of *jaičko drugoje* ‘other egg’ (Gvozdev, 1961) or **moja mesta* instead of *mojo mesto* ‘my place’ (Ceitlin, 2005).

Thus, in previous research it is argued that children start acquiring grammatical gender using formal cues, *i.e.* the ending provided in the noun. In the course of acquisition, this formal criterion is replaced by rules based on the semantic properties of a noun. Nonetheless, an elicited production study by Rodina with “irregular nouns” (*e.g.* males’ names ending in –a, like Vanya, hybrid nouns, like *plaksa* ‘crybaby’, etc.) has provided interesting outcomes (Rodina, 2008; Rodina and Westeergard, 2012). According to this study, children are sensitive to both

formal and non-formal cues in gender agreement task from early on (Rodina and Westeergard, 2012, p. 1101). Semantic knowledge for irregular masculine nouns ending in –a emerges quite early, approximately at 2;6-3;0. The most challenging nouns were the women’s names ending in –ok/ik (*e.g.*, *Lenok*), in this case, children were reported to acquire semantics at about 5-6 years of age.

A recent experimental study explored the sensitivity of Russian-speaking children to gender cues (Mitrofanova et al., 2018). In the first task with real words, the correct answer rate was quite high (the highest result was 100% in a condition of masculine nouns ending in consonants, whereas the lowest was 84% in a condition of feminine nouns ending in palatalised consonants). In the second task with pseudo words, children established correctly the agreement with feminine nouns (ending in –a) in 93%, with masculine nouns (ending in consonants) in 88%, and with neuter nouns (ending in a stresses –o) in 75%. When children were exposed to non-transparent nouns (feminine / neuter or feminine / masculine), they tended to choose feminine gender in 83% in the first case and 78% in the second case.

3.2. Grammatical gender acquisition in DLD children

Previously we have briefly explored grammatical gender acquisition process in typically developing children. Considering the fact, DLD children exhibit problems with morphology, it is predicted grammatical gender may be a potential aspect of limitation.

In an experimental study by Rakhlin and colleagues (2014), although children diagnosed with DLD show deficit in the accuracy of gender assignment, they did not differ from typically developing children as for the sensitivity to agreement features. In fact, as for the gender agreement sensitivity, the results were mixed. The authors argue that DLD children seem to have gender and gender agreement knowledge at an implicit level but are impaired during the explicit performance (Rakhlin et al., 2014, p.18).

Another evidence was provided by Tribushinina and Dubinkina (2012) and Tribushinina et al. (2018). Specifically, the scholars explored adjective production and gender agreement in DLD children. They have found out that DLD children had difficulties with adjective agreement. Apart from that children had deficits with the use of degree markers for adjectives (this is explained by the problems with inflectional morphology). They also made more semantic substitutions than typically developing children (*e.g.*, *dlinny* ‘long’ instead of *širokij* ‘wide’). A particular difficulty was observed for the agreement inflection and affixal negations (*e.g.* *neglubokij* ‘not-deep’).

4. Conclusions

The aim of this paper was to provide a theoretical background on the issue of grammatical gender acquisition in DLD Russian-speaking children. As observed, studies with typically developing children are quite numerous and have shed light on how grammatical gender is acquired and used. Still, little is known about how DLD children make use of grammatical gender, what cues they use in order to

assign gender to a novel noun and what are the developmental phases of gender acquisition. The current available studies do not exploit the full range of issues on gender acquisition by DLD children. Moreover, research by Rakhlin et al. (2014) explored DLD children aged 7;2-15;10, who may have already been receiving treatment for a long time, thus their results may be argued on this basis.

Acknowledgements

This research is funded by Consellería de Cultura, Educación e Ordenación Universitaria, Xunta de Galicia (Axudas á etapa predoutoral), grant number ED481A-2017/279.

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