ASSESSMENT OF EXPRESSIVE LANGUAGE IN EARLY CHILDHOOD: A PILOT STUDY AND PERSPECTIVES FOR STANDARDIZATION

Assoc. Prof. Dr. Katerina Shtereva; Assoc. Prof. Dr. Diana Ignatova; Assist. Arpi Masihi; Kristina Spasova
Sofia University "St. Kliment Ohridski"; Faculty of Educational Studies and the Arts, Department of Logopedics

INTRODUCTION

The assessment of expressive language function in preschool-aged children is crucial for the early identification of language difficulties and the prediction of future linguistic and academic development. Expressive language reflects a child's ability to construct and convey meaningful and grammatically accurate utterances, encompassing phonological, morphological, semantic, and pragmatic components. Research indicates that difficulties in expressive language function are often associated with various developmental disorders, such as autism spectrum disorders, semantic-pragmatic disorders, and intellectual disabilities. Moreover, early language deficits can significantly impact the development of literacy and academic skills.

In an international context, numerous standardized diagnostic tools exist; however, in Bulgaria, there is no autonomous model specifically adapted to the characteristics of the Bulgarian language and cultural context.

RESEARCH AIM AND OBJECTIVES

The present study aims to develop and validate a model for assessing the expressive language of Bulgarian children aged 4 to 6 years, providing a reliable tool for measuring key linguistic aspects such as semantics, morphology, and syntax. The specific objectives of the study are:

- To develop an assessment instrument based on scientific literature and educational standards in Bulgaria.
- To identify and analyze key components of expressive language: semantics, morphology, and syntax.
- To validate the model using psychometric methods, including expert evaluations and a pilot study on a small group of children.
- To compare the model with preschool education curricula and standards.
- To refine the instrument based on the results of the pilot study and expert feedback.

METHODOLOGY

The developed assessment model is a comprehensive tool designed to measure key components of expressive language:

Semantic Component – includes tasks for recognizing and naming nouns, verbs, and adjectives, incorporating both commonly used and less frequently encountered words.

Morphological Component – assesses children's ability to apply gender, number, and tense agreement, form diminutives and derived words, and use correct verb forms.

Syntactic Component – evaluates the ability to construct grammatically correct sentences, formulate questions, describe images, and retell short stories.

The validation methodology is based on **psychometric principles** (Creswell, 2014; DeVellis, 2016). The process includes theoretical analysis, evaluation of alignment with educational standards, and expert assessment by 20 specialists—10 practitioners (speech-language pathologists, psychologists, and educators) and 10 researchers from leading universities in Bulgaria. The assessment questionnaire consists of 20 questions divided into three sections: task adequacy, difficulty, homogeneity, and structural validity. **Content validity** is measured using the **Content Validity Index (CVI)**.

The **pilot study** involved **58 children** aged **4 to 6.5 years** (M = 64.28 months – see histogram). Age distribution showed that **22.4% (n=13) of the children were in the second group (4-5 years), 46.6% (n=27) in the third group (5-6 years), and 31.0% (n=18) in the fourth group (6-7 years), with the majority in the third group.** The **gender distribution was uneven**, with **63.8% (n=37) of the participants being girls and 36.2% (n=21) boys.**

The study examines the effects of gender and age on various language indicators using **multiple linear regression analysis, chi-square tests, and ANOVA.**

Histogram

Mean = 64,28
Std. Dev. = 9,375
N = 58

Frequency / Age_Months
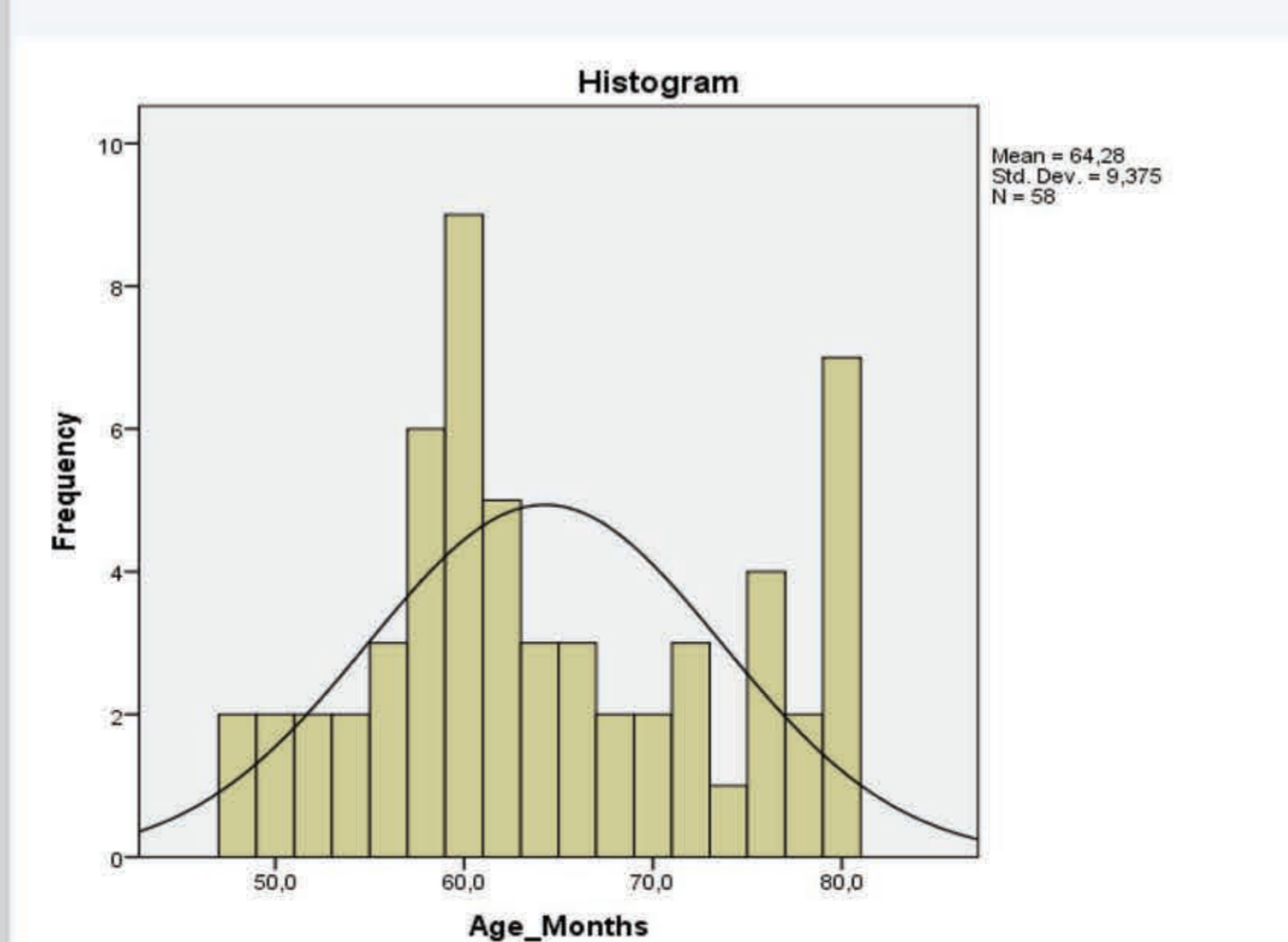
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CRESWELL, J. W., 2014. *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications. 978-1-4129-6557-6.
DEVELLIS, R. F., 2016. *Scale development: Theory and applications* (4th ed.). SAGE Publications. ISBN: 9781544379340

RESEARCH RESULTS

Content Validity of the Test

The assessment using the **Content Validity Index (CVI)** demonstrates a high level of agreement among experts. Practitioners rated the methodology with **S-CVI = 0.91**, while researchers reported greater variability (**S-CVI = 0.70**), particularly in tasks designed for **4-year-old children**. The analysis of task adequacy yielded an average rating of **4.6/5**, while the **logical structure and consistency** of the methodology were rated highly (**4.9/5**). Experts recommended the inclusion of tasks related to **emotional intelligence** and differentiation by age groups.

Test Reliability

The analysis results indicate **high to excellent internal consistency** of the test. The highest reliability was recorded in the **Morphology Level (ML) subtest (α = 0.929)**, followed by **Semantics Level (SL) (α = 0.856)** and **Syntax Level (SL) (α = 0.775)**. The **General Questions (GQ) subtest (α = 0.647)** had the lowest reliability but remained within acceptable limits. Within the morphological categories, the most stable results were observed for **adjectives (α = 0.900), verbs (α = 0.884), and nouns (α = 0.837)**. The **lowest reliability** was found in **verbs (α = 0.396) and personal pronouns (α = 0.363)**, indicating the need for revision.

Impact of Gender and Age on Language Skills

The analysis shows that **age is the most significant predictor**, explaining **between 22% and 36% of the variance** in language skills. The highest R^2 values were recorded for **syntax (36%), semantics (32%), and morphology (33%)**, where **age was the only significant factor**.

Gender also influenced language performance, but in a **limited number of categories**:
- **General Questions (R^2 = 30%, p = 0.000)**
- **Narrative Retelling (R^2 = 36%, p = 0.048)**
- **Morphology of Nouns (R^2 = 22%, p = 0.025)**
In these cases, **girls outperformed boys**.

CONCLUSION

The results of the pilot study confirm the need for further revision and refinement of the test items, particularly in the categories with lower reliability. Age emerges as a key factor in language development, while gender influences performance in specific linguistic areas. To achieve higher validity and standardization, the test should be administered to a **larger and more diverse sample of children**, allowing for the fine-tuning of the assessment tool and its adaptation to individual language characteristics.

This instrument has the potential to enhance **Bulgarian speech-language pathology practice** by providing a **standardized methodology** for assessing **expressive language in preschool-aged children**. Its further development will contribute to **more precise early identification of language difficulties** and the **optimization of interventions in speech-language therapy and educational practice**.