

REFENCE

By **Camellia Doncheva Hancheva**, Associate Professor in 3.2. (Developmental Psychology), PhD in Psychology; Department of General, Experimental, Developmental and Health Psychology, Faculty of Philosophy, Sofia University "St. Kliment Ohridski "

for academic position "professor" in a professional field 3.2. Psychology, Department "Cognitive Science and Psychology", NBU, announced in SG no. 87/17.10.2023, with candidate Assoc.

Prof. Dr. **Elena Petrova Andonova**.

The review was prepared in accordance with order No. 3-PK-50/30.11.2023, of the Rector of the NBU on the appointment of a scientific jury (SJ) and appointment of reviewers at the first meeting of the SJ.

I. Research activity and results.

1. Evaluation of the monographic volume, scientific and applied contributions of the author.

The monographic work of Dr. Elena Andonova, "Early language development. Grammar", represents a definite contribution in an area - an intersection of psycholinguistics and developmental psychology. The research deepens the understanding of early childhood cognitive and psychosocial development. The book offers a comprehensive overview of the context, aims, methods, analyzes and conclusions of research in this area and presents its own longitudinal study, highlighting the significant impact of language development on understanding of processes of early childhood development through the key research questions related to genetic epistemology. The author presents the methodology and results of long-term work on a new methodology for the early language development of Bulgarian children. It is important to emphasize that this book differs from previous studies in the field, as it uses a larger sample of children, which allows to detect general trends in the language development of Bulgarian children. The objectives of the monograph are clearly formulated, the book includes an extensive overview of theoretical approaches to the acquisition of grammar, representing a contributing point in the systematization of theoretical knowledge. The overview of foreign studies and data analyzes complement the understanding of the grammatical development of Bulgarian children. By addressing the

hypothesis of the inseparability of vocabulary and grammar, the book engages with fundamental theoretical debates in the field, while its cross-linguistic and cross-cultural comparisons offer valuable insights into the universality and variability of language acquisition processes. The contribution of the research in the field of applied science is in the developed methodology and its adapted for the Bulgarian socio-cultural and linguistic context, allowing the screening of children's development and the creation of programs and guidelines for language learning at an early age. The potential benefits of the instrument VERBA-2 is in its proven discriminative abilities and sensitivity to developmental changes and individual differences in the acquisition of grammatical constructions in both neurotypical and neurodivergent children. In the spirit of modern socio-linguistic and cultural-anthropological research, factors from the socio-cultural environment, such as the socio-economic status of the family, are taken into account in the analysis. The monograph is a contribution in an applied field - the development of a new methodological tool, as well as in a theoretical plan - discoveries regarding the relationship between lexical and grammatical development are central to the theoretical understanding of the process of language acquisition. The text not only enriches the understanding of the language development of Bulgarian children, but also provides valuable guidelines for future research in this area. "Early Language Development: Grammar" is a clear contribution to the field of psycholinguistics and developmental psychology with valuable insights into the complexity of early language acquisition processes. Its methodological innovations, theoretical generalizations, and empirical findings make it an indispensable resource for researchers, practitioners, and educators alike.

2. Evaluation of the contributions in other publications

For the period 2004 to 2022, Elena Andonova has 10 English-language publications in databases of scientific information. Most of them are from the last 7 years, in 3 of them he is the first or only author, and for the co-authored publications he is the author leading the empirical research. In refereed and indexed editions, there is also one study published in Italian in 2019. The articles and reports published in peer-reviewed journals are 19 in number from 2014 to 2023. In a substantive aspect, in the last three decades, Elena Andonova researches psychological cognitive mechanisms of language information, focusing initially on lexical and syntactic information in adults. Her research in the field has changed and developed over time, moving to the study of early language development in children. In the field of early language development, Andonova has made

significant progress, creating a toolkit with good psychometric properties, which allows the study of early language development in Bulgarian conditions. Her research includes trajectory and stage analyzes of lexical and grammatical development, as well as cross-cultural and cross-linguistic comparisons. She develops methods for collecting, transcribing and analyzing child-parent communication data that reflect the specific characteristics of Bulgarian language and interaction style of verbal exchange.

In addition to research in the field of language development, Associate Professor Andonova makes important contributions in other areas of child development. She develops instruments for the study of student academic motivation. Her research into the needs of families of children with autism spectrum disorder is relevant to understanding and supporting these families. In the field of spatial communication and cognition, Associate Professor Andonova conducts original experimental research that reveals the relationship between communication and spatial cognition. Her research contributes to the understanding of spatial information processing processes within real dialogue situations and reveals important links between language schemas and strategies and successful task performance. Elena Andonova's research work is characterized by originality and complexity, applying an approach that allows a more detailed understanding of the mechanisms behind the interaction between linguistic and cognitive processes in the processing of linguistic information.

To summarize: the work of Dr. Elena Andonova represents a significant contribution to psycholinguistics, revealing important connections between language structures and cognitive processes, while at the same time emphasizing the influence of cultural and experiential factors on language processing. Her research opens up new perspectives for understanding the interaction between language and cognitive processes and provides valuable scientific data for further research in this area. Associate Professor Dr. Elena Andonova is a distinguished scientist whose contributions in the field of child development and psycholinguistics are essential for the scientific community and practice in the field of education and child development.

3. Citations from other authors.

Andonova has over 37 citations in publications referenced in SCOPUS and dozens of other references and citations in scientific publications.

4. Evaluation of the results of participation in research and projects and application of the obtained results in practice.

The scale for language development of children aged 36-42 months, applied in the Screening-test for three-year-old children, is a tool with significant application in the educational system. This tool not only helps in the early detection of possible difficulties in children's language development, but also provides a basis for individualized and targeted training and support. The wide application of this test in the kindergarten network of the Ministry of Education and Science is a clear indicator of its importance and recognition by the educational community. Also, the tool for measuring the motivation to learn, which is applied in the initiatives of the "Together in Class" Foundation and other Bulgarian schools, is an important resource for understanding and supporting the motivation of students. The application of this tool in schools enables individualized support of students, which leads to better educational results and personality development.

In conclusion, the results of research projects and their practical application in the educational environment, are extremely important for improving the quality of education and the development of children. These tools not only provide valuable data, but also contribute to the creation of better conditions for training and development of young people in Bulgarian education.

II. Learning and teaching activity.

All courses created by Elena Andonova are developed with a complete set of author's materials in "Moodle NBU" and are constantly updated.

Dr Andonova is the supervisor of two successfully defended doctoral dissertations - one supervised independently, the other co-supervised. Elena Andonova continues her supervision of other doctoral students. She is also the supervisor of numerous graduate students for their bachelor's thesis - five in the last 7 years and five master's theses from MP Developmental Psychology. For the past five years, she has participated in over 40 commissions for state exams.

Elena Andonova shows exceptional activity and commitment in organizing scientific and educational events both within the NBU and outside it. Her significant achievements and efforts in these areas are critical to the development of the university and to the academic community. She is the initiator, chairman of the Organizing Committee and member of the Program Committee of three editions of the national conference "Early Child Development: Science and Practice"

(2016, 2019, 2022). Her activity in this context is of particular importance to the scientific and practical community in the field of child development and education. Elena Andonova is the director and organizer of 10 editions of the International Summer School of Cognitive Science in the period 2013-2023, thereby contributing significantly to the enrichment of academic experience and the development of the university's scientific network.

Another aspect of its activity includes the creation and development of a scientific collective and school. Here, three important achievements should be noted: 1) creation of a research area, 2) introduction of a new, unique for Bulgaria, methodology for the study of early language development and 3) new for Bulgaria research area - Spatial cognition and communication. In these three new areas, Associate Professor Andonova has carried out scientific leadership and staff development through a series of externally funded projects, as well as joint research activities and internships of students and doctoral students. These achievements strengthen the profile of NBU as a scientific center and are of exceptional importance for the development of the academic community.

Dr. Andonova is active in working together with students in research projects. Her involvement and encouragement of students to get involved in such projects contributes significantly to their academic development and motivation. Proof of this is the joint publications from the conference of the World Society for Cognitive Science, from other national congress presentations, publications in publications referenced in SCOPUS and publications in Bulgarian scientific journals.

Elena Andonova is an extremely active figure in the scientific and educational sphere both within the NBU and outside it. Her significant achievements and efforts are of crucial importance for the development of the university and for the scientific community in Bulgaria.

2. Work with Erasmus students.

Elena Andonova is the author and lecturer of numerous obligatory, elective and training courses in English in undergraduate (PSYE104, PSYE315, PSYE405, PSYE114) and master's programs (COGM101, COGM016, COGM911). These are courses chosen by Erasmus students, in which they are included as equal participants in the educational process of NBU.

3. Student survey ratings.

Dr. Elena Andonova has received the average grade from student surveys for student satisfaction for the last ten semesters 4.36 (out of a maximum of 5.00) according to information from the director of the Center for Quality and Assessment. This is a decidedly positive assessment, indirectly indicative of the good balance of intellectual challenge, practical skills and applicability of the courses offered.

III. Administrative and public activity.

1. Participation in collective management bodies of the NBU.

Associate Professor Dr. Elena Andonova is an active participant in various management bodies and commissions of the NBU. Participation as a member of the Curriculum Fund Commission at the Master's Faculty and the Accreditation Commission demonstrates her commitment to the improvement of curricula and the quality of education at the university.

The membership in the Faculty Council and the Academic Council of the NBU, as well as the participation in the Program Council, emphasize the important role of Associate Professor Andonova in the process of making strategic and administrative decisions at the university. As director of master's programs and head of the Cognitive Science Research Center, clearly demonstrate leadership qualities and organizational skills. Her efforts to develop the master's programs and the scientific potential of the university are valuable for the institution and for the students. She was elected Head of the Department of Cognitive Science and Psychology in the period 2016-2020 and made important contribution to the organization and functioning of the faculty during her mandate.

2. Public activity.

The achievements of Associate Professor Dr. Elena Andonova in the development and dissemination of cognitive science ideas through various national and international organizations and associations are impressive. Her membership in two of the most prestigious organizations in the field of cognitive science - the Cognitive Science Society and the European Society for Cognitive Psychology - clearly testifies to her professionalism and recognition in the community of cognitive scientists. For six years, she was in the board of the World Society for Cognitive Science, a position of responsibility highlighting her commitment and influential role in the development of the field. As part of promoting scientific ideas to a specialized and wider

community, Elena Andonova gives public lectures and invited talks at prestigious universities and institutions in Europe, including the Institute of General Linguistics in Berlin, the Universities of Lyon and Trento, the Max-Planck Institute in Nijmegen and the University of Vienna. These lectures represent not only an opportunity to share knowledge and scientific discoveries, but also to establish international scientific contacts and cooperation, and are recognition of expertise and authority in the field. Prof. Andonova's public lecture at NBU, 2022, on the topic "Early language development in a family and social context" is indicative of the commitment to the development of education and society, as well as the ability to present complex scientific concepts in a way that engages the audience.

3. Attracting students to the program.

Associate Professor Dr. Elena Andonova has an active role in the creation of a successfully launched new program and in participating in a project that has attracted significant external funds for the NBU.

Prof. Andonova had the initiative in the creation of a bachelor's program in Psychology in English. Participating in this endeavor, together with colleagues from the department, not only demonstrates her great commitment and competence in the development of foreign language study programs, but also highlights her ability to create innovative educational programs that attract foreign students. Participation in the development of program documentation and its presentation in an English language brochure demonstrates professionalism and commitment to quality education, as well as the ability to communicate effectively with a variety of audiences.

Andonova participates in a project financed under the Fifth Framework Agreement, EUROCOG. Attracting significant external funding of EUR 250,000 is an impressive achievement and testifies to the high professional competence of all involved. A project of this scale not only strengthens the reputation of the institution, but also contributes to the development of the scientific community and science in general.

IV. Personal impressions of the candidate.

As a part of the professional community dealing with early childhood development, I have direct impressions from conference appearances and scientific publications of Elena Andonova. Her presence at scientific forums is a guarantee of fruitful exchange of ideas, lively discussion and

enrichment of perspectives. As part of an editorial board, I have had the opportunity to get acquainted with scientific texts, impressive with their informativeness, precision of speech and correctness of data interpretation.

Conclusion: The scientific achievements of Prof. Dr. Elena Andonova are impressive and testify to her high professionalism, commitment and ability to achieve exceptional results in the field of academic activity and scientific research. She is an uncompromising researcher and stimulating discutant, connecting different areas of scientific knowledge and translating the latest achievements of academic theory into the language of practice. Her active position and participation in the administrative management of the academic institution and the public resonance of her research activities contribute to the development of education and science in Bulgaria.

With an emphatic positive assessment of the candidate's academic activity in a competition for the academic position of "professor" in professional direction 3.2. Psychology, Department of "Cognitive Science and Psychology", I propose Assoc. Prof. Dr. Elena Andonova to be elected for a full professor by the academic council.

February 10, 2024



/assoc prof PhD Camellia Hancheva/