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Review

By Assoc. Prof. Dr. Georgi Iliev Petkov, Institute for Population and Human Studies (IPHS) at the Bulgarian Academy of Sciences (BAS)

In connection with the competition announced by the IPHS at BAS for the position of professor in the professional field: 3.2. Psychology (Early Childhood Psychology) for the needs of the "Developmental and Health Psychology" section.

I am submitting this review as a member of the Scientific Jury for the cited competition, based on Order No. RD-6-441/04.09.2024 issued by the Director of the IPHS at BAS, in accordance with Art. 48, Para. 1 of the Rules for the Conditions and Procedures for Holding Academic Positions of "Assistant", "Chief Assistant", "Associate Professor", and "Professor" at IPHS-BAS, and Art. 12, Para. 5 of the Rules for the Conditions and Procedures for Awarding Academic Degrees and Holding Academic Positions at the Bulgarian Academy of Sciences, in accordance with the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Council of Ministers' Regulation for the Implementation of LDASRB. The competition was announced in issue No. 58 of the State Gazette dated 09.07.2024.

1. General Description of the Submitted Materials

As a member of the Scientific Jury for this competition, I received the necessary documents from the candidate: an application for participation in the competition, a CV, a certificate for holding the academic position of "Associate Professor," a certificate of the academic degree "Candidate of Psychological Sciences," lists of publications submitted for the competition, the publications themselves, summaries of the publications in Bulgarian and English, a report on the original scientific contributions, a report on citations, a report on meeting the minimum requirements of BAS for the academic position of "Professor," and other supplementary materials.

According to the Law on the Development of the Academic Staff in the Republic of Bulgaria Article 29 (1), the regulations for applying this law, and the rules for obtaining scientific degrees and holding academic positions at BAS, candidates for the position of "Professor" must meet the following requirements:

Hold a doctoral degree; (2) Have held the academic position of "Associate Professor" for at least two academic years or at least five years; (3) Have published a monograph or equivalent publications in specialized scientific journals, which do not repeat those submitted for the acquisition of the doctoral degree, the degree of "Doctor of Sciences," or for the position of "Associate Professor"; (4) Have presented other original research works, publications, inventions, and other scientific or applied scientific developments or artistic achievements, which are evaluated collectively; (5) Meet the minimum national requirements under Article

2b, Paragraphs 2 and 3, and 5; (6) Have no proven plagiarism or falsification of scientific data in their works.

According to the submitted documents, Assoc. Prof. Dr. Maria Petrova Trifonova meets all these requirements: she has held the academic degree of Candidate of Psychological Sciences, certified in 1990 by the Higher Attestation Commission of the Council of Ministers, acquired in the USSR, has held the position of Associate Professor since 2014, and has submitted 20 selected scientific publications. She has also published a monograph titled "Movement and Exploration of the World by the Child" and five chapters in a collective monograph. Additionally, all requirements of the BAS regulations for obtaining scientific degrees and academic positions have been fulfilled. The submitted publications and the list of citations exceed the required minimum. I have found no plagiarism in her scientific works.

In summary, Assoc. Prof. Dr. Maria Petrova Trifonova meets the legal requirements for the position of "Professor."

2. Brief Biographical and Professional Data of the Candidate

Assoc. Prof. Dr. Maria Trifonova has been working at the Institute of Psychology at BAS since 2003, which was later restructured as part of the Institute for Population and Human Studies. She held the position of Senior Research Associate I Degree from 2003 to 2014, and since 2014, she has been an Associate Professor. From 2015 to the present, she has been the Head of the "Developmental and Health Psychology" section, and since 2022, she has been the Head of the Department of Psychology.

Assoc. Prof. Trifonova has significant teaching experience (15 years at the New Bulgarian University and 3 years at the South-West University "Neofit Rilski"), where she has taught courses in cognitive science and child development. She completed her doctoral dissertation in Moscow, at the Institute of General and Educational Psychology. She has successfully mentored one PhD student and is currently supervising another.

She has experience in several organizations with applied and research activities, including the Institute of General Education "Todor Samodumov," New I – "Earnst & Young," and the Open Education Center.

Assoc. Prof. Trifonova has an impressive track record of project work. Among the projects she has participated in and/or led over the past decade, in collaboration with the Ministry of Education and Science, UNICEF, and others, are:

- Age validation of early childhood development standards;
- Selection of a screening test, training of speech therapists and psychologists, conducting research, and analyzing the results of the activities performed;
- Analysis of teachers' attitudes and evaluation of the quality of the educational environment as baseline information for assessing the impact of a UNICEF and Ministry of Education and Science intervention aimed at promoting inclusive education;

- Support for equal access and personal development;
- Creation of a short form of the screening test for three-year-old children;
- Validation of a screening test for three-year-olds – a short form to identify the risk of developmental and learning difficulties;
- Training of pedagogical specialists from kindergartens for early risk assessment of developmental and learning difficulties in children aged 3 to 3 years and 6 months in kindergartens through screening;
- Active inclusion in the preschool education system.

Assoc. Prof. Maria Trifonova was awarded a Certificate for Applied Scientific Work by the Institute for Population and Human Studies at BAS in 2018, as well as a Prize for Significant Contribution in the Field of Early Childhood Psychology by the same institute in 2013.

As a former student of Assoc. Prof. Dr. Maria Trifonova at NBU and as a member of the section on Developmental and Health Psychology she leads, I have extensive personal impressions of the candidate. She is an excellent and precise researcher, an engaging lecturer, and a colleague who is highly respected and valued as a professional. She possesses exceptional knowledge and expertise in her areas of scientific interest. She has great authority among teachers, educators, and child development specialists. She devotes significant effort to the development of the section on Developmental and Health Psychology, the Department of Psychology, and the Institute for Population and Human Studies at BAS.

3. General Overview of the Candidate's Scientific Works and Achievements

The total number of scientific publications submitted by Assoc. Prof. Dr. Maria Trifonova for the competition is 20. These include one single-authored monograph and one co-authored monograph, in which she contributed five chapters. Of the presented articles in scientific journals, 16 are in Bulgarian and two are in English. Four of the publications are indexed in globally renowned scientific databases.

The candidate's primary scientific contributions are in the fields of child cognitive, personality-emotional, and mental development; education in schools and kindergartens; professional training of teachers and other pedagogical specialists; parental practices for fostering early childhood development; and the development of standards and tools for assessing child development.

The monograph *"Movement and Exploration of the World by the Child"* skillfully combines deep theoretical analysis with results from original research and practical methodological guidelines. It focuses on the connections between different areas of development, particularly the relationships between motor, cognitive, and socio-emotional components in infants up to one year of age. Developmental cascades represent simultaneous changes in multiple developmental areas and are also influenced by the accumulated interaction of factors from various developmental domains.

For example, during the motor development of infants, several stages can be identified: lifting the head, reaching for and grasping objects, sitting up, crawling, and later walking upright. Each of these can be viewed not only as a separate stage in motor development but also as a cause of subsequent qualitative cognitive changes. Each stage creates new opportunities for the infant to explore the world, which in turn fosters the development of new cognitive schemas. Lifting the head enables active exploration of the environment; grasping objects facilitates manipulation; and sitting and later moving allow for acquiring new perspectives on the world.

In addition to the relationship between motor and cognitive development, the book also traces the characteristics of infants' social connectedness and their interactions with their mothers, familiar, and unfamiliar people. Furthermore, the monograph provides opportunities to support the development of children with difficulties in one or another area, as well as to offer additional support for their strengths.

The monograph *"Movement and Exploration of the World by the Child"* is extremely valuable as a theoretical synthesis of a vast amount of literature, converging around key ideas about the importance of interconnectedness in developmental processes rather than studying them in isolation, and the need for active exploration of the world by the infant rather than passive processing of incoming information. However, the monograph also gathers significant empirical material and derives conclusions from it. Finally, through its conclusions and practical advice, the monograph is a valuable resource for anyone involved in child development, from researchers and professional specialists to parents and caregivers.

Assoc. Prof. Dr. Maria Trifonova is part of the author team for the collective monograph *"Early Screening Assessment and Guidelines for Stimulating the Development of Three-Year-Old Children."* This monograph presents a methodology for evaluating the development of three-year-old children across various domains: cognitive, language, emotional, social, and motor. The book begins with a theoretical analysis of the importance, opportunities, and challenges in assessing children's development. The next chapter outlines the theoretical basis for creating the screening test, which, even in isolation from the rest of the book, represents a valuable theoretical analysis of a vast body of literature. Once again, the topic aligns with Assoc. Prof. Trifonova’s key research focus—namely, the connection between motor, emotional-social, and cognitive development in children, as well as the importance of active exploration of the world for developing rich representations and skills.

The subsequent parts of the book focus on the practical application of the assessment, targeting both pedagogical specialists and parents or caregivers. Special attention is given to the importance of collaborative efforts between educators and parents, as well as creating a stimulating environment for the child’s development.

The book makes a significant contribution both to the theoretical understanding of the principles and challenges of assessing child development and as a methodological tool for its practical implementation.

In addition to the monographs, Assoc. Prof. Dr. Maria Trifonova has presented a substantial amount of scholarly output in the form of articles published in prestigious academic journals.

One line of research focuses on the educational environment in kindergartens. Empirical studies have shown the importance of teachers' professional experience for the quality of education, the influence of the location of kindergartens, as well as the negative impact of having too many children in a group. Assoc. Prof. Trifonova has also provided a deep theoretical analysis of the aspects of the educational environment, including in a cross-cultural context, and examined components of educational quality and methodological issues related to evaluation. Her publications highlight some problematic aspects of the educational environment in kindergartens, such as the insufficient application of an individualized approach to children and insufficient efforts toward shaping attitudes in children and overcoming stereotypes.

In terms of teachers' individualized approaches toward children, Assoc. Prof. Trifonova has published findings from research focused specifically on play in kindergartens and teachers' differing understandings of the role of play.

A significant aspect of her work is examining the impact of the educational environment on children at risk of developmental problems and their opportunities for inclusive education. Factors such as the location of kindergartens, the number of groups, and teachers' professional training, both in general and specifically for working with children with developmental difficulties, have been emphasized.

In other studies, Assoc. Prof. Trifonova has tracked the role of aligning educational goals with empirically established developmental patterns in children. She has also published findings on various teachers' attitudes, particularly concerning a draft regulation on preschool education.

The main themes of Assoc. Prof. Dr. Maria Trifonova's monographs, namely the relationship between motor and cognitive development in children, are further developed in her journal publications. She has studied the role of imitating actions observed by children for their language development. Children's reproduction of movements reflects both their motor development and socio-emotional skills and mediates the indirect effect of motor skills on various aspects of their language development. In another publication, Assoc. Prof. Trifonova examines the relationship between the activity of play interactions between mother and child and the success of children's imitative actions, which in turn influence their language development.

Assoc. Prof. Trifonova also conducts research and publishes on children's conceptual changes. Specifically, she studies the factors and mechanisms by which children around the age of 4-5 years change their understanding of the concepts of living and non-living. Initially, children's schemes are focused on observable movement—moving things are alive, and stationary things are not. From this perspective, for example, the sun is alive, and plants are not. At a later stage, children's concepts of living and non-living become centered on the idea of metabolism—living things eat, breathe, etc., and as a result, they move, reproduce, etc. The transition from these initial naive to more developed concepts of living and non-living is a key area of research for Assoc. Prof. Trifonova.

Another topic of Assoc. Prof. Trifonova's research is the assessment of child development. She is the author of a screening test for three-year-old children and has thoroughly investigated

its psychometric properties. A shorter version of the test has also been proposed. The reliability and validity of the test, both overall and for specific scales, have been examined. Another test developed by Assoc. Prof. Trifonova and her colleagues assesses manifestations of emotional-behavioral problems, known as the emotional Stroop test, which covers a broader age range. The "Strengths and Difficulties Questionnaire," also for children of a wide age range, represents the initial stage of adapting a widely used international tool for assessing child development. Publications from more recent studies address age-specific characteristics in relation to Developmental Standards. Empirical data has also shown that nearly one-third of parents underestimate their children's motor skills and fail to provide sufficient conditions for developing gross motor skills.

In summary, Assoc. Prof. Dr. Maria Trifonova actively contributes to the field of early childhood psychology and successfully publishes her results in prestigious journals and valuable monographs.

4. Reflection of the Candidate's Work in Other Authors' Publications

Assoc. Prof. Dr. Maria Trifonova has provided a report on citations of her scientific publications. The total number of recorded citations is 28 across 13 of her works. According to the Rules for the Application of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the total score for these citations is 275 points, which is nearly three times the required minimum.

Assoc. Prof. Dr. Maria Trifonova is undoubtedly a recognized scholar in the field of child development, both within the academic community and among parents and professionals in the education system.

The number of recorded citations exceeds the requirements for holding the position of Associate Professor at Sofia University.

5. Critical Remarks and Recommendations

Assoc. Prof. Dr. Maria Trifonova has the potential to supervise more PhD students and would be extremely beneficial for young scholars in this area.

6. Conclusion

Based on all the aforementioned facts and in accordance with the legal requirements and regulations, I give a positive assessment of the materials presented by Assoc. Prof. Dr. Maria Trifonova. Since the candidate has submitted all the required documents, which fully meet the requirements of the Law on the Development of the Academic Staff and other relevant regulations, and given the high quality of the submitted materials and their full alignment with the theme of this competition, I strongly recommend to the esteemed jury and the Scientific Council of the Institute for Population and Human Studies (IPHS) to

select Assoc. Prof. Dr. Maria Trifonova for the position of "Professor" at IPHS - BAS in the professional field: 3.2. Psychology (Early Childhood Psychology).

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Review Prepared by: /Assoc. Prof. Dr. Georgi Petkov/