

## **REVIEW**

### **For a dissertation**

**For the acquisition of a scientific and educational degree "Doctor"**

**by: Assoc. Prof. Danka Shtereva Nikolova**

**Field of higher education: Pedagogical Sciences.**

**Professional management: 1.2. Pedagogy.**

**Doctoral program: Special Pedagogy.**

**University: Sofia University "St. Kliment Ohridski".**

**Faculty: Faculty of Educational Sciences and Arts.**

**Name of PhD student: Vaia Tzoka**

**Research supervisor: Prof. Dr. Emilia Evgenieva**

**Dissertation topic: "Typology of Music Therapy Activities for the Inclusion of Children with Special Educational Needs"**

#### **Biographical data for the candidate:**

Doctoral candidate Vaia Tzoka was born in Greece. She received her bachelor's degree in the city of Ioannina, after which she completed two master's degrees – related to Psychology and Special educational methodology for the integration of students with disabilities in the period 2006-2013. Since 2020 Vaia is a doctoral student at Sofia University "St. Kliment Ohridski" at the Department of "Special Pedagogy". For her professional improvement in the field of education, Vaia Tzoka successfully completed nine specialized courses at universities in Greece, some of which are on the following topics:

- "Problems in Special Education: Learning Disabilities - Dyslexia"
- "Methodology of Teaching in Philological Sciences"
- "Education Management"
- "Use of Interactive Systems in the Educational Process"
- "Training of Teachers on Working Methods in a Remote Environment"

The doctoral student participated in six training seminars and ten conferences on various topics associated to education in Greece. She has six academical publications in the period 2019-2023, and three of them are on the topic of the dissertation work.

The innovative programs in which Vaia Tzoka participates make a good impression. They are seven in total and were held in the period 2012-2022. A large part of them are related to the problems of culture, art, musical traditions and musical education in Greece.

Her professional realization is related both to the music school in the city of Larisa, where she has been working since 2017, and as the director of the school in Ellassona, where she teaches philological subjects. Vaia Tzoka is married and has four children.

#### **Actuality of the issue:**

In publications in the field of Musicology and Therapeutic activity with music, the questions of musical sensitivity, rhythmic imagination, tonal fantasy and memorization of rhythmic structures, development of musical hearing, as well as problems of music education at various educational levels are often discussed and explored. In the present academic work, the problems are of a different essence.

Vaia Tzoka's doctoral dissertation examines the interesting and complex relation between musical receptivity and phonological awareness in children from general education and those with special educational needs. The work is based on a rich theoretical review and a conducted research.

Despite the large number of tests and specific studies in the field of music that have been created to date, they are only partially affected and argued on the mentioned topic.

From what has been mentioned so far, we can claim that the topic of the dissertation is engaging and modern. Professionally, she brings attention to the possibilities of music and its specific therapeutic impact in the process of phonological awareness and reading, and the research part is valuable in practice - applied plan .

### **Structure and content of the dissertation:**

The proposed dissertation has a total extent of 165 standard pages. It includes an introduction, two main parts - theoretical and research, and each of them contains respectively 4 and 2 chapters, a conclusion, a bibliography of 155 sources, and appendices.

The introduction contains a clear and precise rationale for the need to study the relationship between musical audibility/receptivity and phoneme discrimination in children with typical development and those with special educational needs, referring to preschool age. The doctoral student sets herself the task of clarifying how the auditory processes inherent in both music and language intersect, complement each other and influence the literacy of children, especially those with SEN. The conceptual framework of the PhD covers the various factors that underlie successful music therapy activities in the context of inclusive education in Greece. Referring to the opinions of researchers in music theory, the doctoral candidate comes to the conclusion about the possibilities of an adaptive typology of music therapy activities, which can be carried out at different levels and in different forms , through different techniques and approaches during the specific sessions.

In **the first chapter** of the theoretical part, the doctoral student examines the influence of music on the development of children's personality. Referring to leading authors in the field of music education, Vaia Tzoka emphasizes on the relationship between music and:

- The development of brain functions,
- Motor skills / refers to the musical terms rhythm, synchronization of processes during movement, as well as spatio-temporal perceptions, which correspond to musical perception/
- Academic skills - reading, writing, mathematics.
- Cognitive skills - memory, attention, concentration;

Other main highlights in this chapter are also of interest, namely:

- For the potential opportunities of children and students who have been engaged in various musical activities to develop their better abilities in the field of mathematical knowledge, the perception and processing of different sensory stimuli, the higher concentration of attention and improved memory capacity.

The connection of the present academical work with the research part is best expressed in chapter 1.5.2. - "Music therapy approach in education". The therapeutic sessions with music described in detail /the author's experiments are cited exactly/ in different periods of time, ranging from 1945 to the present day, prove the positive influence on different groups of studied persons in the areas: phonological memory and similarity, listening and understanding of text; listening and reading; music and use of symbols; music and mathematical operations. In the conclusion, a summary table of all the research presented so far regarding the effects of music in the various areas of human development is presented .

In this chapter, the doctoral student shows her reasoning skills, generalizations and possibilities for good theoretical analysis of well-chosen sources in the field of experimental musicology .

**The second chapter** is devoted to musical receptivity as a unique characteristic of each individual related to his general intelligence. Here the candidate cites Edwin Gordon (2007), who categorizes 8 types of musical receptivity and 6 main stages in which it occurs. As a positive aspect of this chapter, I must note the extensive review and analysis of existing, published and approved author's music tests in the period 1919-1989. They cover various specific areas in the field of measuring an individual's general musicality as well as his musical receptivity. Here, the PhD student emphasizes the contribution of Edwin Gordon, who developed five tests of musical sensitivity and receptivity. She analyzes their specific characteristic: they are based on the different age of the child /starts from 3-4 years old/, they are divided into two main models - melodic and rhythmic and are often used in educational practice due to their easy application, short duration and high level of validity. Vaya Tzoka's conclusion is that they are applicable to normal children and to those with SEN.

The doctoral student makes a natural and logical connection with **the third chapter** of the dissertation work, dedicated to phonological awareness, as a general term. It includes many skills and concepts related to the process of understanding of the basic structural elements of the word , the ability to recognize and manipulate sounds. In paragraph 3.2. the doctoral student clarifies the levels and stages of this process, referring to authoritative scientific studies. The term is discussed in the direct connection with the reading process as a cognitive function of symbol recognition and their mental understanding / paragraph 3.4./.

In support of the hypothesis of a causal relationship between phonological awareness and reading learning in paragraph 3.4.1. studies in Sweden, Germany and Greece are cited. Directly related to the topic is section 3.5 "Phonological awareness and special educational needs", in which the doctoral student refers to research conducted with children with dyslexia, with mild and moderate intellectual disabilities.

**Fourth chapter** focuses on the relationship between music and reading. A theoretical review of research in this area on the relationship between the musical elements 'tone and rhythm' with reading and phonological awareness is presented. In paragraph 4.1.1, emphasis is placed on author's, experimental studies and establishment of the relationship between rhythm and intonation in music and recognition of words in speech; the perception of tonality and auditory stimuli with the effective discrimination of sound in a word and the understanding of language structures. In this section of the dissertation, studies aimed at people with disabilities are also studied. The problems diagnosed with them, related to difficulties in reading and spelling, are in a key relationship with the ability for musical-auditory processing, tonality and rhythm, especially in children with dyslexia. The fourth chapter ends with paragraphs 4.2 to 4.5., which are related to the objectives of the quantitative and qualitative research and the tasks set in them. It is quite logical that they should be assigned/redirected to the research part, i.e. to the fifth chapter .

**The second part** - the research approach begins **with the fifth chapter**. It presented the research methodology. The purpose of the first part of the research - the quantitative one - is clearly formulated.

The number of children examined here is 94, who are divided into two groups - 44 are with typical development, and 51 are with SEN, respectively diagnosed with: learning difficulties, behavioral problems, mild mental deficiency, attention deficit hyperactivity disorder (ADHD). Their age is in the range of 5-9 years and covers children of pre-school and

primary school age from the state educational institutions in Greece. The main tools for data collection are: a demographic questionnaire, a test for music receptivity; instrument – test assessment for phonemic awareness; psychometric test related to reading ability. All of them meet the set research objectives.

The process of working on this part of the experiment has a duration of one academic term in the period 2021-2022. The tests were conducted in public schools in the prefectures of Larissa and Magnesia. To conduct the research, standardized testing conditions are provided: a quiet and peaceful environment, a sound system and all the necessary technical means. The exact procedure for conducting the main test and the subtests for phoneme discrimination and PMMA - a musical audibility test with two components musical-tonal and rhythmic - is described. The statistical analysis of the data includes the use of the statistical package SPSS 23.0, t- tests to compare means, ANOVA analysis of variance and correlation coefficient of Pearson . About uniforms in general 8 tables give an accurate idea of the results obtained during the conducted research. I will summarize that the application of the above-mentioned statistical tools is appropriate and the comparison of the data on the achievements of the two groups of children / and subgroups with SEN/ according to the specified parameters of the test shows that the obtained results are statistically significant in terms of phonemic discrimination, as in the tonal and rhythmic part of the conducted research .

The doctoral student makes a natural and logical connection with the second section of the research part in the dissertation work with the qualitative research, which is aimed at teachers . They are 15 participants in the age range of 31-50 years and precisely described educational qualification and employment status /p.126-127/. The conducted interviews and the 8 questions structured in them are generally aimed at educational practices with children with SEN, as well as the possibility of including music therapy in the education system of Greece. The interviewees unanimously share its advantages in the processes of communication, learning / reading, mathematics, etc./, for developing and improving the emotional, mental, social and cognitive properties of the child's personality / for children with typical development and those with SEN/, for the need from the specialized training of music therapists.

Summary: Well-constructed research part and conducted interviews with the teachers enrich the dissertation work and prove the effectiveness of the music therapy techniques used.

### **Scientific theoretical and practical contributions**

1. Extensive theoretical review and analysis of existing concepts and approaches in the field of music, as well as its auxiliary, therapeutic functions in the process of phonological awareness and mastering reading, applied to normal students and to those with SEN .

2. For the uniqueness and specifics of the study, the following tools are used: a demographic questionnaire, a test for assessing musical receptivity; phonemic awareness and phonemic discrimination test; psychometric test related to reading ability. They could be used as 'models' for future research in musicology, applied linguistics and speech therapy. In this sense, the dissertation has a practical-applied character .

3. The PhD student promotes the idea of creating and including a special program for music therapy activities in the education system of Greece, which is not yet well developed and which would be effective and adaptable in the interconnected process music-phonological awareness-reading, as in students with SEN , as well as those in the norm.

### **Abstract**

The abstract covers 41 standard pages. It reflects the structure of the work and legitimately presents all chapters of the developed dissertation.

### **Publications on the topic of the dissertation**

The scientific publications presented by Dr. Vaia Tzoka are three in total. The period is from October 2021 to the end of 2022. They are thematically related to the dissertation work and present separate stages of it. Two of them have been published in the proceedings of the 2021 and 2022 "International Conference for the Promotion of Educational Innovations" held in the prefecture of Larissa, Greece. The third is published in the collection of FNIO "Education and Arts: Traditions and Perspectives" - 2022.

As number and content meet the requirements for the author's admission to defense .

### **Personal impressions**

I have no personal impressions of doctoral candidate Vaia Tzoka.

### **Notes of a substantive nature:**

The work would win if in the theoretical part - first and second chapter the place of the concept of the musical pedagogical approach should also be determined Orff-Schulwerk , as a creative way of working with children, combining rhythm, speech, music, movement , as well as logorhythms, the possibilities of which are directly related to the development goals.

### **Question:**

1. Based on your research experience, please share what genres of music you use in the mentioned musical sensitivity, rhythm, tempo tests.

### **Conclusion:**

In general, the presented thesis proves that the doctoral candidate Vaia Tzoka has theoretical and practical knowledge in the field in which she works. The presented theoretical analyzes and research methodology meet the specific requirements for such scientific work. They demonstrate the doctoral student's personal interest and professional commitment to the topic.

I give my positive assessment of the discussed work of Vaia Tzoka, the presented abstract, general conclusions and recommendations for practice.

Everything described in my review gives me the reason to propose to the RESPECTED SCIENTIFIC JURY TO AWARD VAYA TZOKA THE EDUCATIONAL AND SCIENTIFIC DEGREE "DOCTOR ", in the field of higher education - Pedagogy, professional direction Pedagogical Sciences, Doctoral program "Special Pedagogy".

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Sofia

Author of the opinion : .....

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