Jerneja Herzog (ed.)

Giftedness as an Educational and Scientific Challenge

Verlag Dr. Kovač

RECOGNIZING AND ENCOURAGING CHILDREN'S MUSICAL GIFTEDNESS – TEACHERS' PERSPECTIVE

BLAŽENKA BAČLIJA SUSIĆ & VESNA SVALINA

CROATIA

Abstract

Starting from the huge potential of gifted individuals for the development of the entire society, the prompt identification and ensuring the development and realization of this potential in gifted children is important. Given the many benefits of music in a child's overall development (Welch et al., 2020) as well as its transfer to other domains (Incognito et al., 2021), all educators should be professionally prepared and have certain competencies in order to support the education and development of gifted children (Hafenstein et al., 2021). The research aimed to examine primary school teachers' opinions according to indicators for identification of students' musical giftedness, competencies, and conditions for their further development. In addition to descriptive, inferential statistics were used in the paper. Research participants were classroom teachers (N=90) from few primary schools in Croatia's capital.

As the best indicator of music giftedness teachers assessed children's interest to create and listen to music. They best estimated their competencies for conducting the activity of listening to music while children's family is considered as the best form of support. It was concluded that along with the development of teachers' music competencies, additional support from school and social environment is needed in identifying and further developing students' musical giftedness.

Keywords: musically talented children, parental support, school education, well-being

Introduction

When studying the phenomenon of musical giftedness, its timely identification by primary school teachers is of utmost importance and

requires certain musical competencies. Although gifted individuals contribute to the development and wealth of the whole society, higher education of future teachers still pays too little attention to education in the area of child giftedness (Olthouse, 2014). A musically educated and creative teacher, with a developed sense of awareness of the importance of music in the child's overall development, will be able to identify and ensure the conditions for the development of a musically gifted child.

Given the specific educational needs that require identification and support within the school system, gifted children also pose special challenges in terms of parenting (Morawska and Sanders, 2009). Starting at a young age, children develop resilient attitudes, beliefs, and expectations about their ability to learn music that has been instilled in them through their interactions with parents (McPherson and Davidson, 2002, 2006). Consequently, teachers need to be sensitive to all forms of children's giftedness, so that they could assist parents, given the specific obstacles, risks, mistakes, and challenges they are faced with (Davis et al., 2010).

Primary school teachers have a crucial role in providing and support of music experiences in everyday teaching practice (Jeanneret and Stevens-Ballenger, 2013; Parliament of Victoria, 2013; Roy, Baker and Hamilton, 2019; Russell-Bowie, 2012) that include conducting music activities such as "singing and/or playing instruments, improvising, composing songs and music, listening and evaluating music as well as responding through movement and other media" (Dinham, 2014, p. 226). Teachers, who are competent in conducting musical activities while working with children, will also be able to recognize their potential musical giftedness during conducting musical activities.

A recent study in the field of art, according to which only 10% of teachers can identify an artistically gifted child (Duh and Lep, 2008; Brajčić and Kuščević, 2020) is confirmed by research indicating teachers' lack of self-confidence, motivation, and knowledge in conducting and teaching artistic activities (Henessy, Rolf, and Chedozy, 2001; Russell-Bowie, 2004).

It is also confirmed by results reported that primary school teachers do not feel enough competent in conducting music activities with children regarding singing and playing instruments (Hallam et al., 2009; Hennessy, 2000; Ruddock and Leong, 2005; Russell-Bowie, 2009; Seddon and Biasutti, 2008; Stunell, 2010; Young, 2009). This issue can be attributed to their minimal education and experience in music (Jeanneret and Stevens-Ballenger, 2013; Parliament of Victoria, 2013), but the basic problem often represents their lack of understanding and undeveloped awareness about the importance of music in child holistic development (Bačlija Sušić, 2018). Additional problem can be a lack of understanding of the value of music and music education by a school, more precisely a leadership team that is often unable to meet the educational needs of musically gifted children. Hence, instead of providing various forms of support for their development within schools, they only, through cooperation with parents, referred the child to some form of additional music education (music schools, music courses, individual lessons, etc.).

However, it is often the case that, due to financial constraints, only parents of children from more affluent families can afford to buy instruments or pay for music lessons, while children from families of lower socio-economic status do not have these opportunities. Unlike in most, especially developed countries in the world, where private music schools are predominant, in the Republic of Croatia there is a special system of music education that is funded by the State with minimal parent participation (Bačlija Sušić, 2017). By attending music schools, unlike primary schools, students are allowed to engage in music much more intensively through playing an instrument in instrumental classes, developing their rhythmic and intonation skills in solfeggio classes, and singing in choirs or playing instruments in an orchestra (Svalina, 2015).

The Importance of the Environment for the Development of Musical Giftedness

Observing the social and emotional challenges of gifted students in the context of their environment (Robinson, Reis, Neihart, and Moon 2002;

Pereira-Fradin and Dubois, 2007) as two main components of learning environment pointed out family and teacher (Robinson, Reis, Neihart, and Moon 2002). Given the prominent role, brothers and sisters, as well as special events in the child's life, are factors that also may affect their later development (McPherson, 2006). Pointing that "an effective advocate is an informed advocate", Smutny (2001, p. 64) believes that a parent can become a successful advocate for their child who will know how to communicate with the school. This is especially the case with musicians who grow up in environments where listening to music and passion for music are highly developed, so their early perception of rhythm, melody, and timbre serves to facilitate their later musical education. Furthermore, parents who love music contribute to the musical achievements of their children just as much as parents who are musicians (Howe and Davidson, 2003; Sosniak, 1990). Observing parents as "logistical support" at home, they are the main associates of teachers, especially in cases where a gifted child attends additional, extracurricular musical activities (Bogunović, Radoš, and Tošković, 2006).

The impact of the environment on children's musical giftedness and talent according to Bogunović (2008) can be manifested in three possible ways. Firstly, it is based on the child's passive use of genetic material and a musically favourable environment when living in a family that provides musical influence (professional musicians, musically educated family members, presence of musical instruments, listening to parents' instrumenttal performances). Secondly, there can be a connection between the innate and the acquired, when children who love music experience environmental influence to a higher extent than children who are not interested in music. Thirdly, there can be an active connection between the innate and the acquired, when the child actively selects from what is offered in the environment.

The indicators of giftedness will be shown if the environment believes in the existence of a child's capacity for a specific area (Freeman, 2000; Gagné,

2000; Author, 2011) and is ready to invest efforts in their maximum development and possibilities for receiving a quality education. However, perception of the support of environment from the students' perspective is also a significant factor in the development of their giftedness. It refers to the extent to which students see their environment, including their schools, families, and peers, as friendly and supportive of their giftedness, and therefore believe that their effort will be appreciated (Siegle, 2013; Siegle and McCoach, 2005). Such positive perception also contributes to the development of intrinsic student motivation (Winton, 2013), academic performance (Rubenstein, Siegle, Reis, Mccoach, and Burton, 2012), and the development of desirable approaches to learning. This is particularly important because not all people respond equally to the influences of their environment. While some are more easily adapted and their potential develops despite unfavorable conditions, others may live under adverse conditions and work hard but, despite their efforts, the development of their giftedness ends up being suppressed. Hence, the personal traits of an individual should also be considered as an important factor in the development of giftedness, or as a mediating factor between genetic potential and environment (Čudina-Obradović, 1991).

Identification of Musical Giftedness in Schools

Failure to recognize any form of giftedness timely and adequately, in addition to lacking support and inadequate treatment, can result in various forms of unacceptable and even antisocial behavior later in life, further leading to loss of potential for the individual and whole society (Morawska and Sanders, 2009). Given that in-service teachers consider that they have few opportunities for professional development, especially when it comes to focusing on and providing support to students with highly expressed abilities in certain areas and students with special needs (Farkas and Duffett, 2008), the complexity of the phenomenon of

giftedness causes the task of adapting the school system to gifted children to be extremely complex and long-lasting (Cvetković-Lay, 2010).

Hafenstein et al. (2021) hightlight *The Global Principles for Professional Learning in Gifted Education* and its ten principles as great contribution and guidance for teachers facing the problem of implementing support for gifted children in their classrooms. In order to additionally ephasize this problem, *The World Council for Gifted and Talented Children* stated that "although we all rely on the contributions of gifted and talented adults, educators worldwide receive little information about how to educate gifted and talented children. The new decade has provided stark reminders of the need for the world's most able minds to be well-educated" (Hafenstein et al., 2021, p. 2). It is also pointed out that due to the insufficient teachers' professional training and consequently lack of konwledge, they are unable to promptly identify and to ensure the acceleration or specialized gifted programs for gifted children (Van Tassel-Baska et al., 2021). The ten *Global Principles for Professional Learning in Gifted Education: Tiered Content; Evidence-Based; Holistic; Broad; Equitable; Comprehensive; Integral; Ongoing; Sustainable; and Empowering* can support educators, policymakers, and professional learning specialists "in the development of professional learning programs in gifted education" (Hafenstein et al., 2021, p. 1).

The early recognition of musical giftedness is of particular importance because it may appear earlier than giftedness in other fields and it is easier to observe in younger children when the influence of the medium and learning is limited (Gagné, 2004). Accordingly, working with gifted students requires teachers who will show investment in students' success in learning (Siegle et al., 2014) including their competencies and their better preparedness to meet the needs of gifted students as well as their additional education (Brigandi et al., 2018; Dimitriadis, 2016; Goodnough, 2001; Plunkett and Kronborg, 2011). Furthermore, only teachers who are additionally trained to work with the gifted, who nurture the affective and

cognitive development in students, who group gifted students into homogeneous groups, involve parents in working with the gifted and develop cooperation between parents and project mentors (Brigandi et al., 2018), will be able to identify and encourage further development of musical skills and knowledge in musically gifted students.

One of the particularly important roles in the monitoring of the gifted student's development within schools has school counselors or psychologists who oversee and direct their development during school attendance. Concerning the identification of gifted students in schools, in addition to different procedures (polling, ranking) or measuring instruments (e.g., achievement tests or ability tests) used by a school psychologist, the engaging of students, teachers, and parents, as well as other experts as evaluators are also significant. Given the dynamics and changes in the child's physical, social and cognitive development, a complete image of the child's giftedness should include behavioral and pragmatic attitudes in various classroom situations, information collected from parents, and various subjects created by the child (artwork, sketches, inventions, shapes created by matching Legos, written or accented stories, etc.) (Smutny, von Fremd, and Artabasy, 2008). Moreover, schools can opt for the implementation of curriculum enrichment programs, differentiation within the classroom, acceleration, or work in special schools (Walker, 2007). Differentiation within the class-room implies the inclusion of gifted students in working with their classmates, by adapting the workload to the individual needs of students. Differentiation is possible in the area of content, by changing the topic or activity, or by varying how certain content is taught allowing students to independently select and design methods for solving a problem. The acceleration implies early departure to school, skipping one or more grades in a particular school subject or entire grade, or completion of two grades in one school year.As one of the most effective strategies for working with gifted children, which should start as early as preschool age, is the integration of

enriched curriculums for gifted children in regular classes (Cvetković-Lay, 2010). Curriculum enrichment programs used to expand or replace regular school programs can be implemented while engaging mentors and specially trained teachers or professionals from the community. Given different criteria for identifying a child's musical giftedness, Čudina-Obradović (1991) under the indicators of musical giftedness, simultaneously considers the following signs of musical abilities: showing interest in sounds in the environment; listening to music attentively and calmly; participating in musical activities happily; seeking opportunities for creating and listening to music; showing signs of comfort, joy, and other emotions when listening to music; tempo changes; giving descriptions by using sound and melody; incidental learning of melodies – while doing something else; noticing the simultaneous sounds of different instruments in orchestral performance; easy memorization and reproduction of parts or the whole melody; precise reproduction of individual tones and precise reproduction of melodies. In addition to strong musical memory, inherent understanding of the musical structure, including harmony, rhythm, melody, and musical form, as the key indicator of musically gifted students Davis et al. (2010) considers children's sensitivity to music, manifested in their intuitive knowledge of musical parameters, their way of talking about music as well as their intense responses while listening to music or expressing unusual and creative observations.

Methodology and methods

Research Problem, Aim and Hypothesis

The research problem was focused on primary school teachers' experience and their competencies regarding recognition and further encouragement of children's musical giftedness in their educational practice. The research aims to examine teachers' opinions on indicators for recognizing child–

ren's musical talents and self-assessment of their competencies, as well as their opinions on school support, social and family environment and the age of participants. Following the above research problem and aim, the following hypotheses were posed:

H1 – Regarding the signs of musical giftedness defined by Čudina-Obradović (1991), the participants will particularly emphasize easy memorization and reproduction of parts of the melody or the whole melody.

H2 – Participants will differ from each other, at a statistically significant level, concerning the self-assessment of their competencies for identifying students' musical giftedness in relation to their age.

H3 – Participants will differ from each other, at a statistically significant level, about their perspective on the forms of support in the encouragement and development of musical skills and knowledge in musically gifted students in relation to their age.

Sample

The research conducted on a convenience sample consisted of 90 classroom teachers (88 female teachers and 2 male teachers) employed in Zagreb's primary schools. With respects to age, most teachers were age 44-54 (45), whereas the smallest number of them were age 33-43 (9). Teachers had an average of 23.7 years of service (Table 1) while half of them (51 or 56.7%) stated that they played a musical instrument and 23 teachers (25.5%) that they had undergone additional music training.

Table 1. Distribution of teachers according to age and years of service

Teachers									
Age					Years of service				
22-32	33-43	44-54	55-65	Total	Up to 10	11-21	22-32	33 and over	Total
17	9	45	19	90	15	12	48	15	90

Instrument and statistical analysis

For the prupose of this research, an anonymous questionnaire was created based on the framework of the concept of musical giftedness and talent Čudina-Obradović (1991). Statements in the questionnaire were grouped into the following subscales: competencies for identifying the musical giftedness of students; competencies for the further encouragement and development of musical giftedness; and conditions for the encouragement and development of musical skills and knowledge of musically gifted students. In completing the first subscale, teachers expressed their opinions by circling the offered answers like "yes" or "no" and in completing the second and third subscales they gave their answers on a five-point Likert scale.

The basic descriptive parameters were calculated, and certain procedures of inferential statistics were also used. Statistical data processing was carried out with the help of the SPSS Statistics V26 software package. The nonparametric Kruskal-Wallis H-test was used to calculate the differences between the individual age groups of participants. The statistical significance was set at the level of .05.

Results

Given the offered indicators of a child's musical giftedness (Čudina-Obradović, 1991), the greatest agreement participants expressed for the following four proposed indicators: search for opportunities to create and listen to music (97.78%); easy memorization and playing of parts of the melody or the whole melody (93.33%); giving descriptions by using sound and melody (92.22%), and very precise reproduction of individual tones (91.11%) (Table 2). This means that the research did not confirm the first hypothesis (H1), according to which it was assumed that teachers would most often emphasize easy memorization and reproduction of parts of the melody or the whole melody as an indicator. Although they are still the

majority according to percentages, a smaller number of teachers cited the following "indicators" of children's musical giftedness: noticing the simultaneous sound of different instruments in orchestral performance (88.89%); very precise reproduction of melody (87.78%); reaction to rhythm and tempo (85.56%); happy participation in musical activities (84.44%); casual melody learning – while doing something else (84.44%); showing interest in the sounds in the environment (72.22%); showing signs of comfort, joy, and other emotions when listening to music (68.89%); calming down to the sound of music (53.33%), and listening attentively and calmly to music (52.22%).

Table 2. Statements chosen by teachers regarding the "indicators" of children's musical giftedness

	f	%
The child's search for opportunities to create and listen to music	88	97.78
Easy memorization and reproduction of parts of or whole melodies	84	93.33
Descriptions by sound and melody	83	92.22
Very precise reproduction of melodies	82	91.11
Observation of the simultaneous sounding of different instruments in orchestral performance	80	88.89
Very precise reproduction of melodies	79	87.78
Reaction with motion to rhythm and changes in tempo	77	85.56
Learning a melody while doing something else	76	84.44
Happy participation in musical activities	76	84.44
Showing interest in the sounds in the surroundings	65	72.22
Showing signs of pleasure, joy, and other emotions when listening to music	62	68.89
The child is calmed by sounds or music	48	53.33
The child listens attentively and quietly	47	52.22

We also asked teachers to assess, on a five-point scale, their competencies for the further encouragement and development of musical abilities in musically gifted children, with regard to the the following musical activities: learning a song or counting rhymes; learning children's singing games;

playing the Orff instruments; playing melodic, and/or harmonic instruments; actively listening to music; spontaneously improvising music; composing shorter compositions (melodies with text and/or instrumental compositions). The average values (Figure 1) show that teachers best assessed their competencies for the further encouragement and development of musical abilities in the activities of active listening to music (M = 4.32; SD = 0.80), learning counting rhymes (M = 4.28; SD = 0.75) and teaching children's singing games (M = 4.21; SD = 0.73). They assessed their competencies for the further encouragement and development of musical abilities of children as very good in the activities of teaching songs (M = 4.09; SD = 0.86) and spontaneous musical improvisation (M = 3.90; SD = 0.99). Teachers assessed their competencies in playing the Orff instruments (M = 3.67; SD = 1.23) and composing shorter compositions (M = 3.26; SD = 1.30) as somewhat underdeveloped. As the least developed, participants assessed their competencies for the further encouragement and development of musical abilities of gifted children in the activity of playing melodic and/or harmonic instruments (M = 2.89; SD = 1.29). More scatter was observed in the answers concerning those activities in which teachers felt less competent.

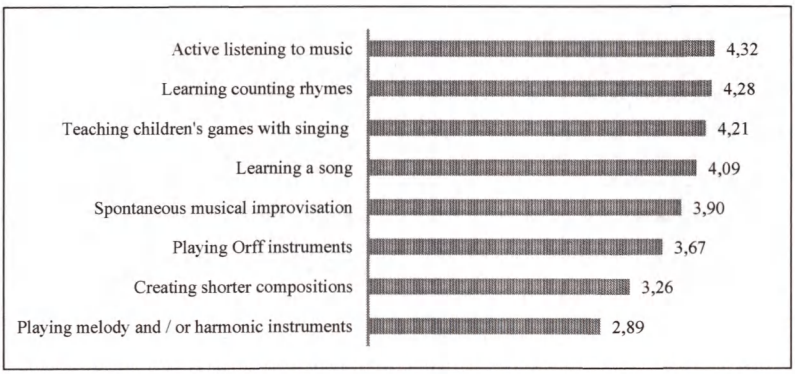

Figure 1. Evaluation of competencies for the further encouragement and development of musical abilities of musically gifted children with regard to specific musical activities – average values of teacher assessments (M)

We divided the teachers into four groups according to their age: teachers age 22-32 (A), 33-43 (B), 44-54 (C), and 55-65 (D). Their self-assessments of competencies for the further encouragement and development of musical abilities in musically gifted students were then compared. As can be seen in Table 3, the youngest teachers (age 22-32) assessed their competencies for carrying out six out of eight music activities as the best developed. These were the following activities: active listening to music (M = 4.59; SD = 0.51), teaching children's singing games (M = 4.53; SD = 0.51), learning a song (M = 4.41; SD = .51), playing Orff instruments (M = 4.29; SD = 0.85), composing shorter compositions (melodies with lyrics and/or instrumental compositions) (M = 3.41; SD = 0.87), and playing melodic and/or harmonic instruments (M = 3.65; SD = 1.00).

To determine whether there were differences in the self-assessments of competencies for the further encouragement and development of musical abilities in musically gifted children with respect to the age of the participants, a nonparametric Kruskal-Wallis H-test was conducted, determining the difference between three or more independent groups (Table 3). A statistically significant difference was obtained for the variable learning songs (H = 12.857; p = 0.005) in favor of participants age 44-54. Further calculation discovered that a significant difference at the level of 0.05 occurred between the first and second (H = 7.229, p = 0.007), the second and third (H = 8.810, p = 0.003), and the third and fourth group (H = 5.008, p = 0.025). Thus, the youngest teachers (age 22-32) and teachers age 44-54 assessed their competencies for learning songs statistically significantly better than teachers age 34-44 and 55-65. A statistically significant difference was also obtained for the variable learning children's singing games (H = 12.341; p = 0.006), in favor of teachers age 22-32. Further calculation showed that a statistically significant difference occurred between the first and second (H = 5.793, p = .016), the second and third (H = 3.982, p = .046), the third and fourth (H = 6.230, p = .013), and the first and fourth group (H = 8.495, p = .004). So, in this case, the youngest

teachers (age 22–32) and teachers age 44–54 assessed their competencies for conducting the activities which included children's singing games statistically significantly better than teachers age 34–44 and 55–65. For the activity playing melodic and/or harmonic instruments, the difference was found at the limit of significance in favor of the youngest teachers (H = 7.624; p = .054). Since for the remaining musical activities the differences were not significant at the 0.05 level, it can be concluded that the second hypothesis (H2) was not confirmed.

Table 3. Differences in participants' assessments of their own competencies for the further encouragement and development of musical abilities in musically gifted children with respect to their age – Kruskal-Wallis H-test

Teacher competencies / Musical activities	Age	N	M	SD	*H*	*p*
Active listening to music	22-32	17	4.59	0.51	5.653	0.13
	33-43	10	3.8	0.92		
	44-54	44	4.36	0.75		
	55-65	19	4.26	0.99		
Adoption/repetition or learning songs	22-32	17	4.47	0.51	12.857	0.005
	33-43	10	3.6	0.84		
	44-54	44	4.48	0.66		
	55-65	19	4	0.82		
Adoption/repetition or teaching children's singing games	22-32	17	4.53	0.51	12.341	0.006
	33-43	10	3.8	0.79		
	44-54	44	4.34	0.71		
	55-65	19	3.84	0.69		
Adoption/repetition or learning a song	22-32	17	4.41	0.51	5.835	0.12
	33-43	10	3.6	0.84		
	44-54	44	4.11	0.95		
	55-65	19	4	0.82		
Spontaneous musical improvisation	22-32	17	3.94	0.75	2.157	0.541
	33-43	10	3.7	1.34		
	44-54	44	4.05	0.94		
	55-65	19	3.63	1.12		
Playing Orff	22-32	17	4.29	0.85	6.81	0.078

We also asked the teachers to assess the extent to which conditions were provided for the encouragement and development of musical skills and

knowledge in musically gifted children in primary schools in which they were employed, in the social environment and student families. The results shown in Figure 2 demonstrate that teachers did not consider these conditions to be satisfactory. Teachers were most satisfied with the conditions provided in the families (M = 3.93; SD = 0.87), somewhat less satisfied with the conditions provided in the social environment (M = 3.47; SD = 0.94), and least satisfied with the conditions provided in primary school (M = 3.47; SD = 0.87). = 3.39; SD = 0.92).

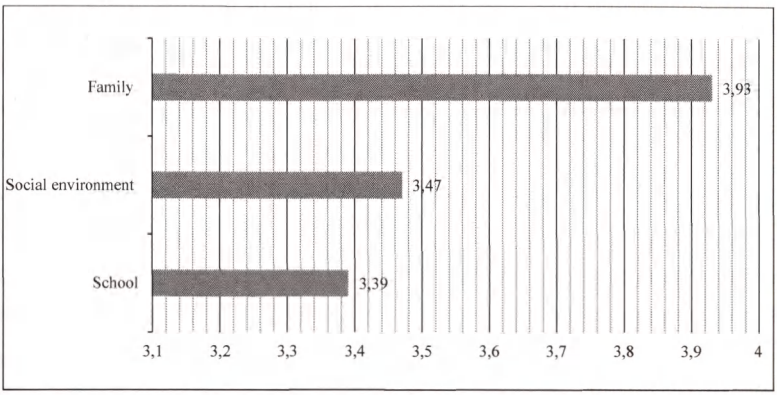

Figure 2. Conditions for the encouragement and development of musical skills and knowledge in musically gifted students in the school, social environment and family – average values of teacher assessments (M)

The Kruskal-Wallis H-test was applied to check whether the differences in teachers' opinions about the conditions for the encouragement and development of musical skills and knowledge in musically gifted students in the school, social environment, and family were statistically significant. When it comes to the social environment and school, the highest assessments were given by the youngest teachers (22-32), and when it comes to the role of the family, the highest assessments were given by teachers aged 44-54 (Table 4). In neither case were the differences statistically significant.

Therefore, it can be concluded that the third hypothesis (H3) was not confirmed.

Table 4. Differences in participants' views on the forms of support in the encouragement and development of musical skills and knowledge in musically gifted children, in relation to the participants' age – Kruskal-Wallis H-test

Forms of support in the encouragement and development of musical skills and knowledge in musically gifted students	Age	N	M	SD	*H*	*p*
The social environment encourages and supports the development of musical skills and knowledge in musically gifted children.	22-32	17	3.59	1.06	1.093	0.779
	33-43	10	3.2	1.03		
	44-54	44	3.5	0.85		
	55-65	19	3.42	1.02		
The family of a music-loving child encourages and supports the development of musical skills and knowledge in the musically gifted child.	22-32	17	3.82	0.64	1.187	0.756
	33-43	10	3.7	1.34		
	44-54	44	4.02	0.82		
	55-65	19	3.95	0.91		
The institution where you are employed encourages and supports the identification and further guidance and development of musical skills and knowledge in musically gifted children.	22-32	17	3.71	0.99	3.62	0.306
	33-43	10	2.9	0.99		
	44-54	44	3.32	0.91		
	55-65	19	3.53	0.77		

Discussion

Different ways of understanding the indicators of musical giftedness by teachers can be attributed to various approaches in the conceptualization of the indicators of a child's musical giftedness. While according to

Croatian psychologist Čudina Obradović (1991), the indicators of musical giftedness were equalized with the indicators of child's musical abilities (interest in sound, attentively listening to music; pleasure in participating in musical activities, sensitivity to tempo changes, etc.), Davis et al. (2010) considered sensitivity to music as signs of musical giftedness, which implies their intuitive knowledge of musical parameters, strong musical memory, children's way of talking about music, etc.

The results of the research which examined the way of identification musically gifted students conducted with primary school teachers in Croatia (Osijek-Baranja County) also show participant's different understanding of the concept of musical giftedness (interest in music activities, fast-tracking of songs taught in class, rhythm performance skills, skillful playing of percussion or melodic instruments, and quick reactions to the recognition of musical components when listening music) (Sukop, Metić, and Svalina, 2016).

When assessing their competencies for the further encouragement and development of musical abilities in musically gifted children regarding the different musical activities, the teachers best estimate their competencies in the activities of active listening to music, learning counting rhymes, and teaching children's singing games while slightly weaker assess their competencies in activities of teaching songs and spontaneous musical improvisation.

In conducted research in Croatia, both teachers and preschool teachers highly value their musical competencies for conducting music listening activities with children (Bačlija Sušić, 2018; Svalina and Sukop, 2021). Regardless of the results above, the lowest interest of school children in this activity was identified, which requires further development of teachers' competencies. Teachers, however, believe that there are no sufficient possibilities for further development of their music competencies and their methodological knowledge within their lifelong learning (Svalina and Sukop, 2021).

Competencies for the further encouragement and development of musical abilities of gifted children in the activity of playing melodic and/or harmonic instruments were estimated as most underdeveloped, although dispersion obtained in these results can be explained that some participants assess their competencies as good. These results are also confirmed by other conducted research on this issue (Hallam et al., 2009; Hennessy, 2000; Ruddock and Leong, 2005; Russell-Bowie, 2009; Seddon and Biasutti, 2008; Stunell, 2010; Young, 2009).

According to the participants' age, findings indicate the differences in favor of the youngest teachers in the self-assessments of competencies for the further encouragement and development of musical abilities in musically gifted children in activities learning songs, singing games and playing melodic and/or harmonic instruments. Obtained results are confirmed by results that showed that younger teachers considered themselves to be more competent in conducting these activities (Svalina, 2015). Moreover, from the aspect of music giftedness, results indicated that younger teachers generally made more efforts to encourage and use different programs, methods, and forms of work, care for the gifted and talented students and participate in their identification (Nikčević-Milković, Jerković, and Rukavina, 2016).

Most teachers also considered inadequate conditions for the encouragement and development of musical skills and knowledge in musically gifted students in the school, social environment, and family, while simultaneously they better-estimated conditions provided by families than school circumstances. Given the important role of the school psychologist in the assessment of child giftedness, it is important to provide them with the necessary time and flexibility to work with gifted students (Tolar, 2016) to contribute to the enrichment of their experiences as well as to encourage such students to attend school (Gentry, 2006).

Regarding the support of social environment and school in relation to the participants' age, the highest assessments were given by the youngest tea-

chers (22-32), who expect support from the institution and environment, while due to the role of the family, the highest assessments were given by teachers aged 44-54. It can be attributed to many years of work experience at older teachers that are based on their better establishment of contact, cooperation, and understanding with parents when it comes to the development of the child's musical giftedness.

Furthermore, developed awareness of the significant role of the families of musically gifted children in encouraging, supporting, and developing their musical skills and knowledge by participants age 44-54, can be interpreted in the way that they are possibly at the peak of their careers. Given the prominent role of parents in child's success in music (McPherson and Zimmerman, 2002), it is important to develop their flexible, resilient attitudes and expectations related to children's potential to learn music (McPherson and Davidson, 2002, 2006). Finally, as a fundamental factor in creating a musically rich environment, it is important to involve all adults, regardless of their level of expertise, to participate, enjoy music and become fully integrated into its creation, at home, as well as in preschool and school life (Pound and Harrison, 2002).

Conclusion

Due to the important role of a well-educated and dedicated teacher in the timely identification and development of the child's music giftedness, a gifted child should be a professional challenge for any teacher. A competent teacher, who recognizes the student's giftedness and does not feel "threatened" by it, rejoices and happily encourages the development of the student's trait is the greatest gift we can give to a gifted student (Gross, 2006). Moreover, such teachers will have no misconceptions about gifted students and their beliefs, and their attitudes will further influence their motivation to work with such students (Matheis, Kronborg, Schmitt, and Preckel, 2017).

Therefore, it is important for teachers to constantly develop their music competencies and at the same time their competencies in identifying and further developing children's musical giftedness. An emotionally secure learning and social environment along with the implementation of a challenging curriculum within the school, together with an adequate parents "logistical support" (Bogunović, Radoš, and Tošković, 2006), will represent a special contribution to the development of musically gifted children.

Additionally, given the opportunities that are provided for musically gifted students by a special state-funded system of music education in the Republic of Croatia, a musically competent teacher who can identify student's musical giftedness promptly, have to refer such students to music education within music schools. Taking such an approach represents a special contribution to the development of students' musical potential which then benefits the development of cultural awareness of the whole society.

Limitations

Different ways of understanding and defining the meaning of musical giftedness in the concept of individual authors may influence the limited use of these findings, although this research encourages further questioning of this phenomena. The study has a limitation gender-wise and the results may be different due to more female teacher point of view. Also, Zagreb is the capital city of Croatia which provides much more diverse opportunities for musical activities and practice in general, so this can be considered a plus factor for easier and more effective family support, than in smaller communities.

We find no conflict of interest related to this research.

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Contacts:
Blaženka Bačlija Susić, PhD.: blazenkabs@gmail.com
Vesna Svalina, PhD.: vsvalina@foozos.hr