

ENHANCING THE INTERACTION AND COMMUNICATION OF PRESCHOOL CHILDREN THROUGH MUSICAL ACTIVITIES IN GREECE

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Abstract: The purpose of this quantitative research was to investigate the opportunities that kindergarten teachers provide preschool children for the development of formal and informal musical activities and their use in educational activities. A questionnaire was administered and distributed to kindergarten teachers in a small prefecture of Northern Greece. The sample consisted of 37 female kindergarten teachers (mean age 47), 64.9% of whom were appointed and 35.1% were substitute teachers. Descriptive statistics were performed using SPSS (one-way-Anova, the Pearson Chi-Square index, and Cross tabulation). An important finding of this study is that this particular corner rarely contains sound resources or updates and enriches existing pedagogical materials. The results showed that the music corner of the kindergarten class is often available, mainly by the older kindergarten teachers, but it is not easily accessible because it is not close to the height of young children and they are not allowed to visit it whenever they wish. Although most kindergarten teachers participate in young children's musical play, a significant percentage does not seem to systematically strengthen young children's musical communication and musical experimentation and does not observe/record data emerge from this interaction. Our data led us to conclude that preschool teachers use the music corner mainly for guided activities rather than emergent activities, providing children with specific freedom and musical experiences. This is not in line with the goals of the National Curriculum (2021), nor is it in line with modern pedagogy that aims at the all-round development of the child through discovery and exploratory learning.

Key words: Kindergarten teachers, music activities, interaction, communication, preschool children

Introduction

The first years of a child's life are crucial for the development of musical receptivity, according to Stamou (2006), indicating the need for substantial use of musical motivations and experiences in preschool age. Music also builds important communication bridges (Nyome, 2001). Recently, research has focused on the musical development of young children, especially how they communicate through music (Dunne & Kelly, 2000; Hargreaves, McDonald & Miell, 2005). As Vellopoulou et al. (2011) suggest, learning is created as children interact during formal and informal educational activities overall and music activities in particular. During free music activities, children

follow their interest through the sounds around them; they also experiment and explore, provided that they are not directly or indirectly hindered in any way (Karademou, 2003).

Research in the Greek context (Theodoridis, 2019; Bakirtzis & Slaukidis, 2019) shows that preschool teachers misuse guided music activities while at the same time they do not promote interaction and creativity through music. At the same time, Welch (2002) suggested that how preschool teachers enhance the educational environment leads to the offer of stimuli. Music can also activate children's spontaneous participation and strengthen their interaction and meaningful communication (Dogani, 2012).

The aim of previous research was to identify and explore the advantages provided by communication and interaction through music by preschool teachers. As a part of this effort, the present research investigates the utilization of music activities provided by kindergarten teachers to enhance the interaction and communication of preschool children within modern Greek kindergartens.

Review of the literature

Music, according to Malcolm (2006), is a social act of communication between people, while at the same time Savage et al (2015) denote that it is a universal language of humanity. In addition, music, as Floros (2006) suggests, is a special verbal code that functions as a mediator.

The Preschool Curriculum for Kindergarten of the Greek Ministry of Education, Research and Religious Affairs (Ministry of Education, Research and Religion, 2003: 304) refers to music as 'an integral part of our lives. It is an important element of every culture and serves different functions in everyday life. As a unique form of non-verbal communication. Music has the power to affect the way students feel. They think and act and can convey ideas and feelings through selected sounds and symbols. Music therefore can carry strong emotional channels through which its users can express themselves in their interpersonal relationships (Cook, 2001).

Evidently, music is an integral part of education and therefore assists children's interaction (Kyprianos, 2007) and activates their communication skills (Sakellaridis, 2012). According to Dogani (2012), music is either a formal or an informal activity that involves interaction and allows children's free expression and encourages them to work as a team. Music education is an interactive social phenomenon that includes both the role of transmitter and receiver (Malloch & Trevarthen, 2009). Several research studies (Gross, 2010; Hallam, 2020; Kim, 2009) have highlighted the contribution of music to the development of communication skills in both children with typical development and those with special needs.

In her paper, Bilalovic Kulset (2016) comments that many preschool teachers believe that music education should be implemented by specialists (Honing, et al, 2015), a view that seems to affect their confidence in planning and implementing musical activities (Ehrlin & Wallestent, 2014). She emphasizes that this confidence is gained when a preschool teacher decides to expose themselves musically and try to cultivate their skills by using the musical socio-cultural context of their classroom.

Music interaction and the exchange of information, ideas, and experiences in musical practice are considered particularly important for children's self-activity and musical development (Dogani, 2016; Dogani, 2012). Musical experiences emerge in preschool classrooms through young children's spontaneous play, even if teachers have not planned a specific/organized music activity (Pérez-Moreno, 2018).

From the above, it can be seen that music education in preschool settings is a superficial, unplanned, and untargeted approach. Preschool children's personal experience and active involvement in learning should be integrated into educational design through play to lead the child to creative discovery learning (Papazaris & Kotsogianni, 2007). Giving preschool children the opportunity for exploration through music also gives them the

opportunity to become researchers and guides of their own learning. The process of multimodal musical expression, through singing, performing, exploring, and composing, enables the child to express and communicate in different ways (Sotiropoulou-Zorbala, 2005).

On the other hand, an important contrast becomes obvious. To what extent are preschool children able to discuss and position themselves concerning the sounds of objects if they have not previously sought them out in their environment, investigated them, and come into experiential contact with them? The failure to realize the importance of sound sources in the environment has been identified in similar research (Tsaligopoulos, Economou & Matsinos, 2014). It is important for teachers to design the material in a way that will attract students; however, this seems to be underestimated or ignored (Raptis, 2015).

Purpose of this study

The purpose of the present research is to investigate the motivations that kindergarten teachers give to preschool children through the use of formal and informal music activities in order for them to communicate and interact with each other within the Greek preschool classroom.

1. Research questions

The research questions that this study seeks to address are as follows: *In what ways do kindergarten teachers use musical activities to enhance preschool children's interaction? How often do kindergarten teachers motivate preschool children to engage in formal and informal musical activities? How do kindergarten teachers enhance preschool children's musical interaction? and How do kindergarten teachers enhance preschool children's musical communication?*

Methodology

A questionnaire was constructed for the purposes of this research and distributed to kindergarten teachers in a small prefecture of Northern Greece. The questionnaire was sent via email to all kindergartens in the area and was completed anonymously and electronically using a Google Drive application. Specifically, an informative email was sent to all public kindergartens in the prefecture to encourage participation in this research through primary management. The kindergarten teachers expressed their willingness to participate. A questionnaire consisting of closed-type questions made specifically for this research was distributed to kindergarten teachers, as previously mentioned.

In detail, the questionnaire consisted of two parts. In part one, kindergarten teachers were asked to answer questions about their demographic characteristics on proportional and categorical scales. In part two, the students were asked to answer five-point Linkert-type questions stating their preference and choice regarding the motivation and use of musical communication and interaction in the preschool classroom. This particular section had four subsections. In the first section, the questions concerned the motivations that kindergarten teachers provide to children with the aim of developing formal and informal musical activities. The second section investigated the degree of enhancement of children's musical communication, while the third section examined the degree of enhancement of their musical interaction. Finally, the fourth section referred to the way and extent to which kindergarten teachers use musical activities for children's musical communication and interaction. 20 days later, the application was closed and no further submissions were accepted. At the same time, the data was automatically saved. At the end of the process, a statistical analysis was performed using SPSS software.

Sample

The sample consisted of 37 female kindergarten teachers from Greek public kindergartens from school units in the small prefecture of Northern Greece, aged 22 to 60 (mean=47 years). Of the participants, 51.4% were

graduates of Higher Education Institutes from a four-year degree course and 43.2% held a master's degree, while only 5.4% were graduates of a two-year course at the school of education. Selective sampling was applied with 64.9% of the kindergarten teachers that were appointed and 35.1% that were substitute teachers, while 67.6% worked in the morning sessions of the kindergarten and 32.4% in the full-day sessions of the kindergarten.

Analysis

The analysis of the data was quantitative and consisted of coding and statistical processing. The dependent and independent variables were separated, and the main categories and subcategories were defined. Finally, the correctness of the data was checked when transferring it from the questionnaire to the processing sheet and then to the statistical analysis software by finding frequencies and any extreme cases (Papanastasiou & Papanastasiou, 2016). Descriptive statistics was initially chosen for the analysis of the data that was in a categorical form. A comparison of averages was followed to establish statistically significant differences through the one-way ANOVA technique and the Pearson Chi-Square index. While we aimed to compare the frequencies of the variables, crosstabs were chosen for categorical variables.

Results

As stated earlier, the present research sought to investigate the use of formal and informal musical activities in modern Greek kindergartens by kindergarten teachers in an effort to enhance young children's interaction and communication skills.

The results were divided into four categories: a) the motivation provided by the kindergarten teachers to young children with the aim of developing formal and informal music activities, b) the degree of strengthening of young children's musical communication, c) the degree of strengthening of their music interaction, and d) the way and extent to which kindergarten teachers use music activities for musical communication and interaction of young children.

The results of the statistical analysis of the survey data are presented below:

Use of music activities to enhance children's motivation

As previously stated, one of the purposes of this study was to examine the motivation that kindergarten teachers provide to children through the daily routine and practice of the classroom to promote the development of formal and informal musical activities in which children participate in guided or free. To answer this question, the teachers were asked to state the frequency of children's engagement with the music corner of the classroom, its accessibility, the type and amount of pedagogical material it contains, and the degree of involvement of children and teachers in its use.

An uneven distribution regarding accessibility was observed as a large percentage of kindergarten teachers (N=40.8%) stated that the music corner is available throughout the school year, in contrast to an equally large percentage (N=37.8%) who stated that it is not. Nevertheless, only 21.6% of the teachers give the children the possibility of access whenever they wish to actively engage in the music corner or not, while at the same time a significant percentage of kindergarten teachers (N=45.9%) declare that the music corner is not at the height of young children and is not accessible daily (N=40.5%). Finally, 67.5% of kindergarten teachers stated that they often or very often participate in the children's musical play, while 62.1% included the children's musical play in their daily routine. One-factor analysis of variance was applied to determine whether the differences between the variables were statistically significant. A significant correlation was found between the age of the teachers and the accessibility of the children to the music corner throughout the time ($F=3.891$, $\text{sig.}=0.017$), but also in daily formal and informal activities ($F=4.068$, $\text{sig.}=0.015$).

Specifically, from tables 1 and 2, it can be seen that older and more experienced kindergarten teachers (51-60 years old) operate more freely, providing students with access, compared to younger ones.

Table 1. Cross tabulation of kindergarteners' age and frequency of music corner accessibility throughout the year (A1)

Frequency		Preschool Teachers' Age				Total
		22-30	31-40	42-50	51-60	
Never	Preschool teachers	0	0	2	0	2
	% within A1	,0%	,0%	100,0%	,0%	100,0%
	% within Age	,0%	,0%	15,4%	,0%	5,4%
Rarely	Preschool teachers	2	1	6	3	12
	% within A1	16,7%	8,3%	50,0%	25,0%	100,0%
	% within Age	50,0%	12,5%	46,2%	25,0%	32,4%
Often	Preschool teachers	1	3	3	1	8
	% within A1	12,5%	37,5%	37,5%	12,5%	100,0%
	% within Age	25,0%	37,5%	23,1%	8,3%	21,6%
Very often	Preschool teachers	1	1	1	2	5
	% within A1	20,0%	20,0%	20,0%	40,0%	100,0%
	% within Age	25,0%	12,5%	7,7%	16,7%	13,5%
Always	Preschool teachers	0	3	1	6	10
	% within A1	,0%	30,0%	10,0%	60,0%	100,0%
	% within Age	,0%	37,5%	7,7%	50,0%	27,0%
Total	Preschool teachers	4	8	13	12	37
	% within A1	10,8%	21,6%	35,1%	32,4%	100,0%
	% within Age	100,0%	100,0%	100,0%	100,0%	100,0%

Table 2. Cross tabulation of kindergarteners' age and frequency of accessibility of the music corner during the day (A3)

Frequency		Preschool Teachers' Age				Total
		22-30	31-40	42-50	51-60	
Never	Preschool teachers	1	0	4	1	6
	% within A3	16,7%	,0%	66,7%	16,7%	100,0%
	% within Age	25,0%	,0%	30,8%	8,3%	16,2%
Rarely	Preschool teachers	1	4	2	1	8
	% within A3	12,5%	50,0%	25,0%	12,5%	100,0%
	% within Age	25,0%	50,0%	15,4%	8,3%	21,6%
Often	νηπιαγωγοί	1	3	4	1	9
	% within A3	11,1%	33,3%	44,4%	11,1%	100,0%
	% within Age	25,0%	37,5%	30,8%	8,3%	24,3%
Very often	Preschool teachers	1	1	2	2	6
	% within A3	16,7%	16,7%	33,3%	33,3%	100,0%
	% within Age	25,0%	12,5%	15,4%	16,7%	16,2%
Always	Preschool teachers	0	0	1	7	8
	% within A3	,0%	,0%	12,5%	87,5%	100,0%
	% within Age	,0%	,0%	7,7%	58,3%	21,6%
Total	Preschool teachers	4	8	13	12	37
	% within A3	10,8%	21,6%	35,1%	32,4%	100,0%
	% within Age	100,0%	100,0%	100,0%	100,0%	100,0%

In table 3 we observe that the Pearson Chi-Square index (χ^2) confirms the statistically significant relationship between the two variables ($p=0.045$).

Table 3. Results of the Chi-Square test for the factors of age of kindergarten teachers and frequency of accessibility to the music corner.

	Value	df	Sig.
Pearson Chi-Square	21,422(a)	12	,045
Likelihood Ratio	22,849	12	,029
Linear-by-Linear Association	5,919	1	,015
N of Valid Cases	37		

A statistically significant difference was also found between the kindergarten teachers' working relationship and the inclusion of young children's musical improvisations in the educational planning ($F=2.386$, $\text{sig.}=0.014$). In other words, it seems that the substitute kindergarten teachers give more importance to these emerging musical elements than the permanent ones, as most of them state that they use these musical elements from rarely to very often (table 4).

Table 4. Table of cross-tabulation of kindergarten teachers' working relationships and frequency of integration of musical improvisations in the educational program (A10)

Frequency	Employment nature		Total
	Permanent	Supply	
Never	Preschool teachers	0	0
	% within A10	.0%	.0%
	% within Employment nature	.0%	.0%
Rarely	Preschool teachers	8	10
	% within A10	80.0%	100.0%
	% within Employment nature	33.3%	27.0%
Often	Preschool teachers	9	12
	% within A10	75.0%	100.0%
	% within Employment nature	37.5%	32.4%
Very often	Preschool teachers	7	11
	% within A10	63.6%	100.0%
	% within Employment nature	29.2%	29.7%
Always	Preschool teachers	0	4
	% within A10	.0%	100.0%
	% within Employment nature	.0%	10.8%
Total	Preschool teachers	24	37
	% within A10	64.9%	100.0%
	% within Employment nature	100.0%	100.0%

In this case, the relationship of the variables proves to be statistically significant ($p=0.030$) (table 5).

Table 5. Results of the chi-square test for the factors of kindergarten teachers' working relationship and frequency of inclusion of musical improvisation in the educational planning

	Value	of	Sig.
Pearson Chi-Square	8.938(a)	3	.030
Likelihood Ratio	10.048	3	.018

Linear-by-Linear Association	5.734	1	.017
N of Valid Cases	37		

Degree of enhancement of children's communication through music

Kindergarten teachers were asked to indicate the frequency of motivating children during both formal and informal musical activities. The results showed that for formal musical activities (a) and informal ones (b) the kindergarten teachers often or very often give young children the opportunity to work in groups ($N_a=73\%$; $N_b=67.5\%$), to exchange ideas ($N=67.5\%$, $N=70.2\%$), to function spontaneously ($N_a=72.9\%$, $N_b=64.8\%$), to express themselves in any way they wish ($N_a=62.1\%$, $N_b=64.8\%$) and to deviate from the way of occupation established for the specific corner when they consider it useful or necessary for the needs of their game ($N_a=64.9\%$, $N_b=54\%$). On the other hand, it is worth mentioning that there is a percentage of kindergarten teachers that reaches 30% who seem to not reinforce musical communication at all or rarely.

Degree of enhancement of children's musical interaction

Kindergarten teachers were asked to indicate the frequency of encouraging children to collaborate musically in small or large groups. The results provided an insight that kindergarten teachers often ($N=48.6\%$) encourage young children to play music in groups during free play, whereas a significant percentage ($N=29.7\%$) states that they rarely do so. On the other hand, it seems that young children are never ($N=29.7\%$) or rarely ($N=43.2\%$) motivated to record their musical improvisations through any device, although often ($N=51.4\%$) group experimentation with sonorous sources is encouraged during free play. End. rarely ($N=35.1\%$), often ($N=27\%$) and very often ($N=29.7\%$) seem to encourage young children to share ideas about their free musical improvisations, while rarely ($N=27\%$), often ($N=35.1\%$) and very often ($N=21.6\%$) to convey these findings to the plenary with the aim of using them in the educational program.

Use of musical activities for communication and interaction among children

Kindergarten teachers were asked to state the frequency of instructional strategies. It was observed that kindergarten teachers rarely ($N=35.1\%$), often ($N=27\%$), or very often ($N=24.3\%$) strengthened the free musical coexistence of young children through the continuous enrichment of the class and of the music corner with corresponding educational material. At the same time, the majority ($N=75.6\%$) do not observe and/or systematically record data derived from children's musical co-existence. Finally, as far as the use of elements that come from the musical coexistence of children is concerned, the placements of the kindergarten teachers seem to be divided in the frequencies rarely, often, and very often with most of them maintaining a moderate frequency both in the design ($N=32.4\%$), as for the planning ($N=29.7\%$) and the implementation ($N=37.8\%$) of the educational activity.

In more detail, a statistically significant correlation, from the dispersion analysis, was observed between the working relationship with the use of elements from the musical coexistence of children in educational planning ($F=7.579$, $\text{sig.}=0.009$), the implementation of corresponding programs ($F=4.430$, $\text{sig.}=0.043$) and its reinforcement through the continuous enrichment of the classroom and the music corner with pedagogical material.

Substitute kindergarten teachers seem to give more importance to these elements and use them always ($N=23.1\%$) and very often ($N=30.8\%$) compared with permanent kindergarten teachers (0% and 12.5% respectively) (table 6).

Table 6. Cross-tabulation of kindergarten teachers' working relationships and frequency of planning activities based on elements emerging from children's musical co-existence (D3)

Frequency	Nature of Employment		Total	
	Permanent positions	Supply Teachers		
Never	Kindergarten teachers	4	1	5
	% within D3	80.0%	20.0%	100.0%
	% within Nature of employment	16.7%	7.7%	13.5%
Rarely	Kindergarten teachers	8	2	10
	% within D3	80.0%	20.0%	100.0%
	% within Nature of employment	33.3%	15.4%	27.0%
Often	Kindergarten teachers	9	3	12
	% within D3	75.0%	25.0%	100.0%
	% within Nature of employment	37.5%	23.1%	32.4%
Very often	Kindergarten teachers	3	4	7
	% within D3	42.9%	57.1%	100.0%
	% within Nature of employment	12.5%	30.8%	18.9%
Always	Kindergarten teachers	0	3	3
	% within D3	.0%	100.0%	100.0%
	% within Nature of employment	.0%	23.1%	8.1%
Total	Kindergarten teachers	24	13	37
	% within D3	64.9%	35.1%	100.0%
	% within Nature of employment	100.0%	100.0%	100.0%

With this enrichment, the type of kindergarten daily session in which the kindergarten teachers work seems to be statistically significantly associated ($F=5.236$, $\text{sig.}=0.028$).

Specifically, it was observed that more often in full-day classes (always=33.3%, very often=58.3%) than in morning classes (rarely=40%, never=36%), emphasis is placed on the provision and renewal of educational material with the aim of strengthening young children's free musical coexistence (table 7).

Table 7. Cross-tabulation of the type of kindergarten section and frequency of reinforcement of children's free musical coexistence through classroom and corner enrichment (D5)

Frequency	Nursery section		Σύνολο	
	Half-day	Full-day		
Never	Kindergarten teachers	2	0	2
	% within D5	100.0%	.0%	100.0%
	% within Nature of employment	8.0%	.0%	5.4%
Rarely	Kindergarten teachers	10	3	13
	% within D5	76.9%	23.1%	100.0%
	% within Nature of employment	40.0%	25.0%	35.1%
Often	Kindergarten teachers	9	1	10
	% within D5	90.0%	10.0%	100.0%
	% within Nature of employment	36.0%	8.3%	27.0%
Very often	Kindergarten teachers	2	7	9
	% within D5	22.2%	77.8%	100.0%
	% within Nature of employment	8.0%	58.3%	24.3%
Always	Kindergarten teachers	2	1	3

	% within D5	66.7%	33.3%	100.0%
	% within Nature of employment	8.0%	8.3%	8.0%
Total	Kindergarten teachers	25	12	37
	% within D5	67.6%	32.4%	100.0%
	% within Nature of employment	100.0%	100.0%	100.0%

Finally, the significance of this relationship is also confirmed by the χ^2 index ($p=0.016$).

Discussion

According to the literature, the preschool classroom is an ideal setting for musical encounters and the creation of musical experiences among students (Young & Gillen, 2010; Barret, 2009). The results of this study showed that the music corner of the Greek preschool classroom is most frequently available, especially by preschool teachers who are of age. However, the musical instrument corner is not easily accessible because it is not located at a low height and children are not allowed to visit it whenever they wish. These findings agree with other research that indicates that although teachers are aware of the pedagogical value of the musical instrument corner, they do not use it frequently (Dogani, 2012) and do not enhance its accessibility by children themselves (Raptis, 2015). Similarly, research in preschool schools in Turkey revealed that most classrooms lack a music corner and/or musical materials (Kılıç, Topalak & Yazıcı, 2017; Karaküçük, 2008; Köksoy and Taş, 2005).

The results of the present research revealed that kindergarten teachers hardly utilize the multiple possibilities of the music corner, while at the same time they focus only on the collection of musical instruments. In particular, it appears that sound sources such as pipes, cans, and other objects are largely absent. Also noticeable is the absence of musical examples. Thus, we observe significant omissions in the structure and material of the music corner in preschool settings, as the provided material is neither qualitatively nor quantitatively sufficient (Rentziou & Sakellariou, 2014).

A music interest center that aims to motivate children in musical explorations and stimulate them for independent learning cannot bear shortcomings in material and the absence of socio-cultural elements related to the children's culture. According to Germanos (2006), corners that lack "open" materials that can provide children with opportunities for multimodal use and exploration lead to a gradual decline in their interest as these corners do not stimulate their imagination and creative engagement. Furthermore, when standardization is followed in the structure of the interest center and children are left to engage in specific, one-dimensional and entrenched ways, its dynamic dimension is significantly reduced (Germanos, 2011).

Our data led us to conclude that preschool teachers use the music corner mainly for guided activities rather than emergent activities, providing children with specific freedom and musical experiences. This is not in line with the goals of the AP (2021), nor is it in line with modern pedagogy that aims at the all-round development of the child through discovery and exploratory learning. Instead, it is argued that the space should evoke opportunities for users to engage with and creatively interact with the materials to cater for their innate curiosity and meet their educational needs (Parnell & Procter, 2011). Preschool teachers should include musical experiences in children's daily routines to provide them with rich learning experiences (Kemple, Batey, & Hartle, 2004). Rajan (2017) states that music is often encountered in the classroom in the form of occasional song performance (Gillespie & Glider, 2010) and is rarely incorporated into the daily learning culture of the classroom (Colwell, 2008).

On the other hand, an important contrast becomes obvious. To what extent are preschool children able to discuss and position themselves concerning the sounds of objects if they have not previously sought them out in their environment, investigated them, and come into experiential contact with them? An important finding of this study

is that this particular corner rarely contains sound resources or updates and enriches existing pedagogical materials. The failure to realize the important contribution of sound sources in the environment has been identified in similar research (Tsaligopoulos, Economou & Matsinos, 2014). It is important for teachers to design the material in a way that will attract students, but in reality, it seems to be underestimated or ignored (Raptis, 2015). Finally, although most teachers participate in preschool children's musical play, a significant percentage do not seem to systematically enhance children's musical communication and experimentation and do not observe/record data emerge from this interaction. Similarly, (Bilalovic Kulset, 2016) highlights that teachers often do not use music to develop different forms of communication, but insist on taking on responsibility roles in order to manage the classroom. In the same vein, Nome (2020) argues that during children's action, 'any sound, even the simplest, can trigger musical communication, and therefore preschool teachers should observe preschool children's musical actions with care to highlight its implications. This contrasts with the fact that musical action is an integral part of children's everyday life (Temmerman, 2000; Pérez-Moreno, 2018) and musical experimentation, both individual and group, functions as a learning tool (Dogani, 2016). Students should be empowered to self-act musically, experiment, and guide their own learning (Konstantinidou & Sakellariou, 2018) in the context of an experiential-group collaborative approach (Dogani, 2016), as music provides important motivation for effective interaction (Erickson, 2009).

Conclusion

The purpose of this research was to investigate the opportunities that kindergarten teachers provide preschool children for the development of formal and informal musical activities and their use in educational activities. An important finding of this study is that this particular corner rarely contains sound resources or updates and enriches existing pedagogical materials. The results showed that the music corner of the kindergarten class is often available, mainly by the older kindergarten teachers, but it is not easily accessible because it is not close to the height of young children and they are not allowed to visit it whenever they wish. These findings coincide with other research that indicates that although kindergarten teachers know the pedagogical value of the music corner, they do not use it often (Dogani, 2012) and do not strengthen its access (Raptis, 2015).

It is observed that this particular corner rarely contains sound sources or renews and enriches its already existing pedagogical material. The inability to realise the significant contribution of environmental sound sources has been found in similar research (Tsaligopoulos, Oikonomou & Matsinos, 2014). It is important that kindergarten teachers structure the material in a way that will appeal to young children, but in fact, they underestimate or ignore it (Raptis, 2015). It also appeared that more emphasis is placed on the use of this material in the full-day classes than in the morning classes, while such a differentiation is not found in the findings of a related work by Renziou and Sakellariou (2014), even though the pedagogical material there also appeared to be unsatisfactory qualitatively and quantitatively.

Finally, although most kindergarten teachers participate in young children's musical play, a significant percentage does not seem to systematically strengthen young children's musical communication and musical experimentation and does not observe/record data emerge from this interaction. This is in contrast with the literature that presents musical practice as an integral part of children's daily life (Temmerman, 2000) and musical experiments, individual and group, function as learning tools (Dogani, 2016). Young children should have autonomy in the musical process and be given the opportunity to guide their learning (Konstantinidou & Sakellariou, 2018), through free personal choice (Dogani, 2012) and the experiential - team-collaborative approach (Dogani, 2016).

The cooperative role of the teacher (Micha, 2016) and his degree of "openness" helps children feel safe and interact (Sangiorgio, 2015).

Further discussion

Some new research questions that emerged from the results of this research concern the investigation of the factors that shape the frequency of young children's use of musical coexistence, the detection of the motivations that lead kindergarten teachers to promote the implementation of formal and informal musical activities, the detection of difficulties that they face in their effort to enhance musical interaction, and the investigation of their degree of readiness to highlight and use musical communication.

References

- Bakirtzis, K., & Slaukidis, G. (2019). The animating of groups and its applications. In Th. Raptis & D. Koniari (Eds.), *Music Education and society: New challenges, new orientations*. Proceedings of the 8th Conference of E.E.M.E. Thessaloniki: E.E.M.E.
- Barret, M. (2009) Sounding lives in and through music: A narrative inquiry of the 'everyday' musical engagement of a young child. *Journal of Early Childhood Research*, 7(2), 115–134.
- Bilalovic Kulset, N. (2016). "It's you—not the music": musical skills in group interventions in multicultural kindergartens. *Nordisk musikkpedagogisk forskning. Årbok*, 17, 137–166.
- Colwell, C. M. (2008). Integration of music and core academic objectives in the K–12 curriculum: Perceptions of music and classroom teachers. *Update: Applications of Research in Music Education*, 26(2), 33–41.
- Cook, T.D. & Reichardt, C.S. (1979). *Qualitative and quantitative methods in evaluation research*. Sage Publications.
- DEPPS-APS. (2003). Interdisciplinary single curriculum framework and detailed curricula of compulsory education. Athens: YPEPTH-PI, Official Gazette 304B/13-03-2003. 304. Available on the website <http://www.pischools.gr/programs/depps/>
- Dogani, K. (2012). *Music in preschool education - Child-teacher interaction*. Athens: Gutenberg.
- Dogani, K. (2016) Discovering young children's free musical play. In: R. Wright (Ed.), *21st century music education: informal learning and non-formal teaching approaches in school and community contexts* (433-450). Toronto: Biennial Book Series.
- Dunne, J., & Kelly, J. (2002). Introduction: Changing perspectives on childhoods. In: J. Dunne & J. Kelly (Eds.) *Childhood and its discontents*. Dublin: The Liffey Press, 1-30.
- Ehrlin, A., & Wallerstedt, C. (2014). Preschool teachers' skills in teaching music: two steps forward one step back. *Early Child Development and Care*, 184(12), 1800–1811. doi:10.1080/03004430.2014.884086
- Floros, K. (2006). *Man, love and music*. Athens: Nefeli.

- Gillespie, C. W., & Glider, K. R. (2010). Preschool teachers' use of music to scaffold children's learning and behaviour. *Early Child Development and Care*, 180, 799–808.
- Hallam, S. (2010). The power of music: Its impact on the intellectual, social and personal development of children and young people. *International Journal of Music Education*, 28, 3, 269–289.
- Hargreaves, D. J., McDonald, R., & Miell, D. (2005). How do people communicate using music? In: D. Miell, R. Macdonald, & D.J. Hargreaves (Eds.), *Musical communication*. Oxford: Oxford University Press, 1-26.
- Honing, H., Ten Cate, C., Peretz, I., & Trehub, S. (2015). Without it no music: cognition, biology and evolution of musicality Introduction. *Philosophical Transactions of the Royal Society B-Biological Sciences*, 370(1664), 5–12. doi:10.1098/rstb.2014.0088
- Karadimou-Liatsou, P. (2003). Music education in the 20th century. The most important views on the preschool age. Athens: Orpheus - S. & M. Nikolaidis.
- Karaküçük, A. S. (2008). Assessment of physical/spatial conditions in preschool education institutions: Sivas City sample. Cumhuriyet University, Journal of Social Sciences, 32(2), 307-320.
- Kılıç, I., Topalak, S., & Yazıcı, T. (2017). A study of the difficulties that preschool teachers' experience in performance of musical activities in terms of various variables. *Journal of Human Sciences*, 14(1), 441-456.
- Kim, Y. Stormont, M., & Espinosa, L. (2009). Contributing factors to South Korean early childhood educators' strategies for addressing children's challenging behaviours'. *Journal of Early Intervention*, 31, 227-249.
- Köksoy, M. A., & Taş, M. A. (2005). Determination of thoughts of preschool teachers in preschool institutions about preschool music education (Niğde City sample). Gazi University, Faculty of Education in Kırşehir, 6(1), 31-40.
- Konstantinidou, Z. & Sakellariou, S. (2019). Music with boxes. Teaching music in early years through the emerging activities of a teaching lesson plan. In Raptis, T. & Koniari D. (Editors). *Music Education and Society: new challenges, new directions*. 8th Conference proceedings of E.E.M.E., p. 212–222.
- Kyprianos P. (2007). *Child, Family, Society: History of Preschool Life from the Beginning to the Present Day*. Athens: Gutenberg
- Malloch, S., & Trevarthen, C. (Eds.) (2009). *Communicative Musicality. Exploring the Basis of Human Companionship*. Oxford: Oxford University Press.
- Micha, P. (2016). Characteristics and reactions of preschool children in the context of musical awakening. In M. Kokkidou & Z. Dionysiou (Eds.), *Musical Literacy: Formal and Informal Forms of Music Teaching-Learning* (324-337), Thessaloniki: E.E.M.E.

- Nome, D. (2020). Social life among toddlers in kindergarten as communicative musicality. *Psychology of Music*, 48(4), 598–608.
- Nyome, S. (2001). Heritage: The viewpoint of an African committed to intercultural exchanges. *International Journal of Music Education*, 37, 64–66.
- Pérez–Moreno, J. (2018). Making music in early childhood: A study of the formats of participation. *B. J. Music Education*, 35 (2), 117–132.
- Rajan, R. S. (2017). Preschool Teachers’ Use of Music in the Classroom: A Survey of Park District Preschool Programs. *Journal of Music Teacher Education*, 27(1) 89–102.
- Raptis, Th. (2015). Music Pedagogy, a Systematic Approach with Applications for Early Childhood Education. Athens: Edition Orpheus.
- Renziou, K., & Sakellariou, M. (2014). Space as a Pedagogical Field in Preschool Learning Environments: Planning & Organization. Athens: Pedio.
- Sakellaridis, G. (2012). The music close to the human: In the school, the family, the school. Athens: Grigori.
- Savage, P., Brown, S., Sakai, E., & Currie, T. (2015). Statistical universals reveal the structures and functions of human music. *Proceedings of the National Academy of Sciences* 112, 29, 8987–8992.
- Stamou, L. (2006). Important research findings on musical development during infancy and childhood: The need to reorient educational policy. At L. Kartasidou & -L. Stamou, Music pedagogy, Music Education in Special Education, Music Therapy: Contemporary trends and perspectives (pp. 35-43). Thessaloniki: University of Macedonia Publications.
- Temmerman, N. (2000). An investigation of the music activity preferences of preschool children. *British Journal of Music Education*, 17, 1, 51-60.
- Theodoridis, N. (2019). Play and music. In L. Stamou (Ed.), Dialectic and avant-garde in music pedagogy. Thessaloniki: E.E.M.E
- Tsaligopoulos, A., Economou, X., & Matsinos, I. (2014). Audio walk as a tool for information, assessment, training. In K. Paparrigopoulos and I. Etmektsoglou (Eds.), 3rd Conference on Acoustic Ecology: Acoustic Ecology and Education (78-86). Athens: Hellenic Society of Acoustic Ecology.
- Vellopoulou, A., Gliau, N., Didachou, E., Kontopoulou, A., Birbilis, M., & Papandreou, M. (2011). New Study Programs: Scientific field: Preschool - First School Age. Athena. Pedagogical Institute.
- Welch, G.F.(2002). Early childhood musical development. In: L. Bresler & C.M. Thomson (Eds.) *The arts in children’s lives*. Netherlands: Kluwer Academic Publishers, 113-128

Young, S. & Gillen, J. (2010) Musicality. In J. Gillen & C. A. Cameron (Eds.), *International Perspectives on Early Childhood Research: A Day in the Life* (pp. 59–76). London: Palgrave Macmillan.