

A Music Education Project (MEdEC) to Strengthen the Emotional Competence of Kindergarten Students

By

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Abstract

This qualitative research study described children's abilities to monitor their emotions, regulate their behavior, recognize different emotions, and examine the importance of emotional competence in children's lives. The methodology focused on kindergarten students in Greece and included an overview of the research concerning the relationship between music and emotion. Field observation was the principal means of data collection. Results indicated that throughout the project, students achieved remarkable improvement. While this design was a cognitive approach to studying their emotional life, it did not suggest that the students were capable of applying this knowledge to control their behavior and to improve their relationships with others. The results suggested, however, that the methodology could be an appropriate design from which to explore this idea.

Keywords: Music and emotions, music education in Kindergarten, emotional competence, perception and experience of the emotions

This paper explored the ways music education could contribute to strengthening the emotional competence of kindergarten children. There is a long theoretical exploration about critical issues of this topic, most specifically: (a) the relation between music and emotion, and (b) the constitution and the importance of the emotional competence for children and adults.

The importance of emotional competence in this age is enormous, but there is a lack of related research. Informed by a theoretical survey of the literature, this study presented a project with kindergarten children age 4-6 in Greece. The project aimed to strengthen children's emotional abilities. These included the awareness and monitoring of their emotions, regulating their behavior, recognizing the emotions of others, and improving their relationships with them. This paper presents the educational methods and material of the project and the results after its implementation. It could be useful for future music educational intervention to strengthen children's emotional competence.

Theoretical frame

Music and emotions

One thought about music is that it is related to human emotion, and perhaps this relationship is one of the reasons for our fascination with music as an art form (Budd, 1985). Juslin and Sloboda (2013) wrote of the historical duration of "the most common hypothesis [...] that listeners perceive music as expressive of emotions"(p. 589), and they present a brief survey of the empirical research on this topic. There is a theoretical and philosophical tradition, which refers to the relationship between music and emotion. In this tradition, music has been understood as mimesis of emotions (from Ancient Greece until the theory of "Affektenlehre") or as a symbol of emotions (Cook & Dibben, 2010; Meyer 1956; Langer, 1979; Hunter &

Schellenberg, 2010). There is however a theoretical direction, which posits that music may be expressive of an emotion without being an expression of anyone's emotion, "just as the St Bernard's face is expressive of sadness without being an expression of its own sadness" (Kivy, 1980, p. 300).

One of the most important points in the research is the distinction between how one perceives emotion and the actual arousal or experience of emotions. By listening to music, someone may perceive and recognize an emotion expressed in the music, or they may experience emotion in themselves (Gabrielsson, 2002; Juslin & Sloboda, 2013; Juslin, 2016). In the related literature about the perception, the discussion centers on the concrete musical features which could define the emotions. This distinction between perception and experience is not always obvious, and it usually presupposes the appropriate instruction (Juslin, 2016). "The border between these two alternatives is sometimes blurred, and the relationship between them may vary" (Juslin, 2016, p. 215), because the "[l]isteners might confuse a perceived emotion with what they feel themselves" (Juslin & Sloboda, 2013, p. 602). In this study with children in kindergarten, it was not easy to distinguish between perception and induction of emotions. However, this distinction was an essential point that informed the design of this project.

Regarding the musical expression of emotions, the discussion included the question of which emotions express the music and how that was possible. In this study, I focused on musical features that expressed and communicated emotions, like tempo, harmony, tonality, or pitch (Juslin & Sloboda, 2013; Juslin & Lindström, 2016). A key distinction in the exploration of musical features was between composer-related features (e.g., mode and pitch) and performer-related features (e.g., sound level and timing) (Juslin & Sloboda, 2013).

Regarding the arousal or induction of emotions, many researchers mentioned the importance of individual or situational factors. The most crucial step was a proposal based on mechanisms, which elucidated the induction of emotions and results to the “BRECHEMA framework” (Juslin et al., 2010; Juslin, 2016; Juslin & Lindström, 2016). According to this framework, the mechanisms that contributed to experience emotions from music are the brain stem reflex, rhythmic entrainment, evaluative conditioning, emotional contagion, visual imagery, episodic memory, musical expectancy, and aesthetic judgment. This framework is a complex process involving psychological, physiological, sociological, and personal factors. To this list, Elliott and Silverman (2012) added visual-musical interactions, corporeality, musical personas, and social attachments. When we induce these emotions from music, several of these mechanisms may be active, but in every special case, not all these mechanisms and not at the same level. Also, one should understand every emotional episode as the result of a combination of mechanisms in this particular situation.

Emotional competence

For this study, I prefer the term "emotional competence" instead of the better-known term "emotional intelligence." The first term indicates something that can be partly changed, strengthened, and learned and therefore allowed educational interventions, which unlike emotional intelligence, seem to describe something more fixed and constant (Brasseur et al., 2013).

The discussion about emotional abilities is a relatively new one. There were many aspects of the discussion in several former theories, e.g., in Gardner's (1983; 1999) theory about multiple intelligence. Salovey and Mayer (1990) made some of the first efforts to conceptualize the term “emotional intelligence” systematically. This term gained popularity with the publication of

Emotional Intelligence" Why can it matter more than IQ by Daniel Goleman in 1995 (Parker et al., 2009). In the discussion about emotional intelligence, there are two basic models to distinguish: The ability model, from Salovey and Mayer (1990), which defines this form of intelligence as abilities in combination with information, which one may use in many fields of life (Salovey & Mayer, 1990). The other model is the trait model, which associates emotional intelligence with traits of the personality (Petrides & Furnham, 2000; 2001; Petrides, 2010). There are correspondingly several measurement-efforts: Mayer-Salovey-Caruso (1999) Emotional Intelligence Test (MSCEIT), which measures abilities, based on the construction of the IQ Test and the tests of Petrides and his colleagues, which research emotional intelligence in terms of personality (Petrides, 2011). The most famous measurement instrument is the Bar-on test (2006).

The primary abilities that constitute emotional competence are:

- the emotional awareness: the ability to label the owns emotions and the emotions of others,
- the emotional expression: the ability to convey an emotion verbally or through some other demonstrative way,
- the emotional regulation: the ability to manage and respond to emotional experiences in ways that society expects and accepts (Juslin& Sloboda, 2011; Meila, 2017).

In a more conceivable schema, emotional competence should also be understood as the combination of abilities to deal with intrapersonal and interpersonal emotional episodes: Self-awareness, self-management, responsible decision management, and social-awareness and relationship skills. The three first abilities construct personal competence (intrapersonal abilities), while the two latter build social competence (Bradberry & Greaves, 2009; Payton et

al., 2008). Saarni (1997; 1999) is one of the first theorists who focused on emotional competence, and she argued that it includes eight abilities. They are (1) awareness of one's own emotions; (2) ability to understand others' emotions; (3) ability to use the vocabulary of emotion and expression; (4) capacity for empathic involvement; (5) ability to differentiate the emotional experience from external emotion expression; (6) adaptive coping with aversive emotions and distressing circumstances; (7) awareness of emotional communication within relationships, and (8) capacity for emotional self-efficacy (Saarikallio, 2019). Sophie Brasseur et al. (2013) took into account the theoretical directions and distinguished three levels by emotional competence: knowledge, abilities, and traits. Halberstadt, Denham, and Dunsmore (2001) talked about affective social competence, which included three basic components: sending affective messages, receiving affective messages, and experiencing affect. We could also suggest that emotional competence includes the ability to identify and to understand emotion, to express these emotions in socially acceptable ways, and to regulate the emotions or to use these to improve reflections or actions (Brasseur, 2013).

Denham et al. (2002; 2003; 2012; 2013), highlight the importance of emotional competence for children ages 4-6 for social relationships and their development in the future. "Preschoolers who can apply emotion knowledge in emotionally charged situations have an advantage in peer interactions: they are more prosocially responsive to their peers, and rated as more likeable by peers, and more socially skilled and less aggressive by teachers" (Denham et al. 2012, p. 138). Teachers also understand the adverse effects in the classroom when a student cannot understand their emotions and cannot regulate their behavior. There is, however, a lack of research in the design of systematic educational programs, which could contribute to strengthening emotional competence in kindergarten, especially in the frame of music education.

Music Education for Emotional Competence: the MEdEC-project

Purpose and research questions

Based on the theoretical framework, the purpose of the project was to design and implement sessions that explore the possibilities that music offers to perceive and to arouse emotions.

Research question 1: Can music strengthen the emotional competence of children? Sub-questions queried:

Is it possible to:

- (a) strengthen the awareness of one's own emotions?
- (b) regulate these emotions?
- (c) strengthen the awareness of the emotions of others?
- (d) regulate behavior to improve relationships with others?

Research question 2: Is there a distinction between perception and arousal or experience of emotions by music and what are the pedagogical possibilities?

(a) Using music, is it possible to distinguish perception and arousal of emotions by music?

(b) How might one use this distinction for the project?

This question is particularly germane to kindergarten children. The theory of mechanisms, which elucidates the arousal of emotions, takes into account the multidimensional nature of music, which can at the same time correspond to the educational needs and difficulties of the children ages 4-6.

(c) Might the playful use of music and musical activities (such as dancing and moving according to music, combining music with stories, theater or drawing, playing musical instruments and singing, improvising music, discussing music and mixing all these in different

combinations), strengthen the abilities which constitute emotional competence? In addition, might they contribute positively to intrapersonal and interpersonal relationships among the students?

Design of the project

With the assistance of two postgraduate students, the author designed the MEdEC-project. During the summer semester 2016-17, two groups (Total n=29) of kindergarten children ages 4-6, from the city of Ioannina, met for 35-40 minutes each week for eight meetings.

We designed several activities in which we classified each of the aims into four general theoretical axes: (a) awareness of the own emotions, (b) regulation of the own emotions, (c) awareness of the emotions of the others, (d) regulation of the behavior and improvement of the relations with the others.

The dramaturgical axis was a fantastic journey of a pirate ship traveling to several islands (actually emotion-islands). According to our theoretical approach, we tried to find different ways music could arouse and affect the emotions and could help the students to recognize these emotions in themselves and in others. The musical activities were suited to the age of the students, and we classified them in the following types:

- Singing
- Free or synchronized movement; moving and dancing to music;
- Playing music instruments;
- Listening to music or sounds;
- Listening to live performance of musical instruments;
- Listening to the narration of a story with the accompaniment of musical elements;
- Theater fragments with the accompaniment of musical elements

- Drawing to music; and,
- Discussing the emotions during the sessions of the program, or in the past.

This classification offers a systematic overview, but almost all musical activities included elements from more than one of these categories. Another basic trend in this project was the effort to use a wide variety of musical genres. We should mention that the choice of many musical pieces we have used was not easy. This problem frequently appears in the relevant literature, and, e.g., relative to the musical expression of emotions there "are not perfectly reliable indicators of the intended expression" (Juslin& Sloboda, 2013, p. 592). In some cases, while designing our meetings, the three educators had long discussions about some musical examples we had chosen.

Methodology

This project was an effort to design and apply music educational materials, which could contribute to the growth of kindergarten student's emotional competence. We conceived this project as a pilot study and collected data through participant observation, observational researcher notes, and video recordings of the sessions. In every session, the three educators-researchers noted and discussed the most important findings. In many discussions, we invited the children's teachers to participate and contribute their opinions and insights.

The first double session was intentionally not recorded. After the parents granted permission for us to record their children on video, we recorded the next sessions with a fixed video-camera in the classroom. In every session, there were two recordings for Group A and Group B, respectively. Because of a technical problem, it was not possible to record Session 3, Group B (3B). The duration of the video recorded material was:

Session 2 (A: 34:30, B: 32:25)

Session 3 (A: 32:00, B: -)

Session 4 (A: 32:11, B: 33:10)

Session 5 (A: 44:20, B: 39:30)

Session 6 (A: 47:07, B: 48:30)

Session 7 (A: 38:00, B: 37:00)

Session 8 (A: 28:30, B: 24:30)

The total duration of video material was 7 hours and 50 minutes.

The author of the paper systematically analyzed the material of video recordings. In Appendix A, there is the formula that explained the systematic observation and structure of the material. For the systematic observation, we structured the video-material in 3-minute fragments.

The main topics which constituted the observations keys were:

- We formulated the achievement of the four main directions into research questions;
- Verbal or non-verbal reactions and expressions of emotions; and
- Primary perception or primary experience of the emotions, or both of them.

To ensure the reliability of the video observation, we asked a competent teacher of theatre also to observe the videos and confirm our findings. We used the following formula to claim reliability:

Number of times two observers agree X 100

Number of possible opportunities to agree

We divided every 3-minute fragment into two parts. In addition, in a 3-minute fragment, the maximum times the two observers could agree were 2. The problem was that the key events were not equally frequent in these fragments. In most of the cases in the measuring of inter-rater reliability, we achieved a high percentage (near or > 90). A low percentage was measured in

several fragments of the sessions (especially in sessions 4 and 6: 0,77 and 0,72) and in regards to the third observation key. It was also difficult in many cases for the two observers to distinguish between primary experience and/or primary perception of the emotions. In these cases, the result was < 90 (Cohen, Manion & Morrison, 2007).

Presentation of the Data

Student Experiences

Song of the Pirates

Aim: To strengthen the feeling of safety, continuity, and to belong to the team.

- Title of the Song: The Song of the Pirates (accompanied with characteristic movements):
The text was about the life of the pirates.

Procedure:

- Students sang the song in a circle. While signing, they added movements (e.g., they row, they drink wine, they laugh, they wear typical pirate-clothes, they dance, and they sing).
- Next, they applied a counting-out rhyme to find who would be captain and assistant captain. With the counting-out rhyme, we found a fairway to identify the two leading figures in every session. Learning to give and to accept commands was an important skill for children to learn. The children selected as captain or assistant were out in the counting-out rhyme in the next session. During the project, all the children had the chance to play this leading role.
- The rowing in the ship: The rowing in the ship was an activity for the synchronization of the group. In the first three sessions, we made this with rhythmic voice commands, and in the next sessions, we used music from different genres, e.g., classical, pop, traditional, (see Appendix B: 1, 2). In some sessions, we introduced some alternative synchronized

movements, like climbing the sails of the boat. This synchronization at the beginning reinforced bonding and communication in the group. We repeated this routine at the end of every session.

- There was an additional song we taught for students to get to know each other, but we did not repeat this because the children already knew each other although it was helpful for us at the beginning to know the names of the children.
- In every session and after these activities, we had some easy music challenges for the students. We will not present all these in this paper, except they are related to our topic.

Results: The activities helped the students become comfortable in the sessions, and to feel like a member of a team. The students could sing the song without a problem after the second session, and they accompanied it with intense movements. The leading role of captain and assistant captain helped many students to have more self-esteem and to be proud, as they understood that they could be a leader in the classroom. At the same time, they also learned to follow directions. The counting-out rhyme also helped to have a feeling of justice in the group.

The rhythmical synchronization (e.g., by rowing) helped in every session to strengthen the sense of belonging to a team. Most students synchronized their movements to our instructions to music, but all did not do the same movements (e.g., the students did not always row in the same direction). With these activities, the students could understand the structure of every session, and they gained a feeling of the duration of time.

Summary: The activities seemed to achieve the main aim of strengthening the feeling of belonging to a team, and the children had a better sense of the structure of the sessions.

First station: The Island of the Bad King

(Group A: n=14; Group B: n=13)

Aim: To understand the emotions of others, and to be aware of their own emotions.

Procedure: On this island, there was a king who could not understand how the people felt in his country. With the children, we agreed that we should help him understand what his subjects felt. The children understood that this could help the king to be a better ruler. With music and the appropriate sounds of the voice, we helped the king to see and to listen to several expressions of emotion. We discussed with the children if the king could be better after all this.

Results:

Verbal: The students could speak about and recognize the different emotions of the others, and they could express what they felt on their bodies. In most cases, students described appropriate behaviors that different emotions evoked. They could make the appropriate sounds to express happiness, sadness, anger, and fear. They could also match sounds with emotions when they had only to listen to these sounds. During the discussion about the king and the people in his country, students could understand why the awareness of other's emotions could help foster better relationships.

Nonverbal: When we asked students to make the sounds of the emotions, they always accompanied these sounds with intense bodily movements. The gestures and facial expressions were more intense when they wanted to show anger or fear. When they had to be motionless, it was very exciting for the other students to observe the faces and bodies. For many students, it was difficult to stay motionless or not to laugh. Generally, they seemed to enjoy it because many unconscious things became more conscious.

Summary: The first session aimed to understand the emotions of others and to be aware of their own emotions. We achieved this with satisfactory results.

Second station: The Island of Fear

(Group A: n=12: Group B: n=10)

Aim: For students to be aware of their feelings, emotions, and regulate their behavior relative to the emotion of fear.

Procedure: We told the students that on this island, we had to move according to the music we heard. We listened to happy, sad, angry, and scary music, and students had to move according to the music, without our commands. After the scary music, we said that the people on this island were very scared of everything. We decided to help the people to regulate their fear. We found the people, and we discussed fear. In our discussion, we agreed that most of us had been scared many times. Then we read Anna Casalis' book "Topo Tip. Che paura, mamma". During the narration, we used two musical motives and played them on the accordion. The first one accompanied the moments of fear, and the second one accompanied the resolution and the relief. We discussed the story with the children and how the perception of our bodily reactions change when we are afraid. In addition, students improvised with Orff instruments sounds that represented their fears.

Results:

Verbal: We thought that for the students, it was very important to speak publicly about fear. The students said that darkness, ghosts, insects, spiders, snakes, or to be alone caused them to be afraid and experience the emotion of fear. From the story, they did not seem to react to the fear of the older children, perhaps because, in kindergarten, they did not have much contact with

older students. We discussed fear, which sometimes has no real external causes, and we agreed that in many cases, fear could be useful because it can protect us from something dangerous. For some students, that was revelatory knowing that the other students and the teachers also feel fear.

Non-verbal: Live music aroused intense emotions, and the students expressed these bodily.

During the narration, they listened to music and expressed fear mainly with facial mimic and typical movements of fear, like nails biting. Most intense in the story was the episode with the monster in the darkness. The solution and relief motive were fast and rhythmic, and some students synchronized their movements to the music (they moved their head or their foot, but not all the time). Live music helped during the narration to feel fear and the revealing of fear, and helped the following discussion and the awareness about the emotions. The combination of music and narration contributed to the abilities of students to recognize their own emotions. Regarding moving to the music at the beginning, for sadness, students moved slowly and mimicked wiping tears. Students expressed happiness by running in the room without intense facial changes. For some students, it was difficult to distinguish between angry and scary music.

Summary: We achieved the main aim of being aware of the emotion of fear. The public discussion about fear and the combination of the story with the music seemed to be a way to control fear and to regulate behavior.

Third station: the island of anger

(Group A: n=13; Group B: n=12)

Aim: For students to be aware of their own emotion and the emotions of others, to regulate and control the behavior

Procedure: On this island, the children met Margarita, a very angry girl. As we asked why, we listened to a song from Mikis Theodorakis about Margarita (See Appendix B: 11).

Margarita could not read and felt very angry, because her classmates laughed at her. We added movement (e.g., she kicks the foot down) as we sang the song. With the children, we discussed a solution to help her. The children proposed we help her to read the text and tried the song again, this time with a new verse. Margarita felt much better, and she thanked us for our help.

Results:

Verbal: The students could understand why Margarita was angry, and they criticized the behavior of the classmates toward Margarita. When asked about events in their own lives that caused anger, most of them described their experiences with siblings or with their parents, especially when the parents forbid something. They were able to discuss and make suggestions relative to how they can calm anger, but only for Margaritas' case. They did not say anything that they could do about their own feelings of anger, but only what some of their parents do in these situations.

Non-verbal: The students had to express anger. The facial mimic was intense (e.g., furrow browns, tight mouth) and was accompanied by powerful body movements (they found some of them in the verse of the song, like kicking). The music of the song, however, was light and melodic, so that the students recognized anger, but the music did not seem to arouse this emotion in them. The song contained something humorous and ironic. It was a good motive for discussion or for thinking about situations in which the students were angry, but the music and the text could not arouse anger. This outcome seems to match outcomes from the related literature, according to which “[o]ther emotions (e.g., angry) were more likely to be perceived in music than felt” (Juslin & Sloboda, 2013, p. 602). The movements mentioned in the lyrics helped the students to approach the experience of anger.

Summary: The main aim was for students to be aware of anger in themselves and also about anger in others seemed to be partly achieved. They had good tips to control anger and the behavior, but only for the others, at a cognitive level. Actually, they did not say anything about what they had done or could have done to control their own anger, so we did not achieve the aim to strengthen the ability to control their behavior.

Fourth station: the island of the fairy

(Group A: n=13, Group B: n=13)

Aim: For students to regulate their own emotions.

Procedure: We told the children the following story: On this island, there lived a beautiful bird who could sing very nicely. However, an evil witch took the bird's beautiful wings, and left only the bird's long nails and beautiful voice. Soon, the bird transformed into a fairy. A young professional musician and singer, dressed in a fairy costume, visited the students and, using her long nails, played the kanun (a Mid-Eastern string instrument). The musician explained that when she was sad, she played slow music, and when she was happy, she played music in a faster tempo. The fairy played a sad and a happy song, and with the children we discussed their feelings.

Results:

Verbal: The students understood that the fairy could express herself with the music. The fairy said that with music and lyrics, she could communicate her emotions to others. The songs were traditional Greek tunes, and the students recognized the emotions, but they did not always understand the lyrics.

Non-verbal: The students were fascinated with the beautiful singing and playing from the fairy. The students had never seen or heard a kanun, and they remained seated, still, and quiet throughout the session.

Summary: The students seemed to understand that one may use music intentionally to regulate their own emotions, which was one of the main aims in this session. We cannot suggest that they will certainly do it. They were fascinated by the music, but it was difficult to combine this with concrete emotions.

Fifth station: the island of cry and laugh

(Group A: n=14, Group B: n=13)

Aim: For the students to be aware of the emotions of the others

Procedure: On this island, the people laugh and cry all the time. With songs and guitar, we told a story and we played a simple pantomime of a very sad girl who lost her teddy-bear, and of her friend who brought it back. Two groups of children discussed the feelings evoked in this story and "composed" the appropriate music for each situation. One group used two prepared metallophones (the first in Dur and the other in Moll) and several other Orff instruments. They chose which instruments would suit each situation, and they decided the rhythms and the dynamic of their musical compositions. The other group had to wait to hear the story with the music, and then we played the story one more time with the music. A musician accompanied the same story with the guitar. After that, we discussed music in films or in a television series. The musician played a large traditional percussion instrument (ntaouli), and the children spoke about their emotions.

Results:

Verbal: The students had the chance to discuss the musical features that were appropriate to sadness or happiness. They enjoyed the pantomime story and the music-making. The first feature was rhythmic, and they decided to play slowly for sadness and quickly for happiness. Then they had to choose between a Dur and a Moll metallophone. We played simple motives on the two metallophones, and they decided that Moll is more appropriate for sadness and Dur for happiness. It was difficult to play together, and they needed help from the researchers (we played at the beginning with body percussion and then with the Orff instruments). Students did not play a melody; rather, they played ascending and descending prepared scales.

Many students seemed to understand in our discussion that music is important in films or in TV series, and they suggested many lovely examples. Also, they named concrete films and series and could sing short melodies from many of them.

Non-verbal: We observed nonverbal expressions from both groups. In one group, there were intense facial and bodily reactions when, in the pantomime-performance, the friend finds the teddy-bear and brings it back. The more intense bodily reaction for the students was in jumping, clapping, and exclamations. Body movements accompanied the happy music but were not synchronized to music. It was difficult for one team to play the music they wanted, primarily because of the synchronization. It was easier to synchronize movements to the sad music because perhaps they played it slowly. Both groups made several bodily reactions, aroused from the music and the theater performance. The pantomime story was easy to understand, and with intense emotional fluctuations so that the students had the motive to make the music. It helped them to understand the function of music in films and TV series.

Summary: The main aim to be aware of the emotions of the others, and this session satisfactorily achieved the goal. Music was also a means to demonstrate this awareness.

Sixth station: island of the colors

(Group A: n = 15, Group B: n = 13)

Aim: For the students to be aware of their own emotions

Procedure: With the students, we read the book "The palette of colors" by Era Moulaki, a story about a young girl who met a painter and learned that she could express her emotions with color and drawing. During the story, we asked the children to tell us secretly which color was appropriate for each of the emotions expressed in the story. These included anger, fear, happiness, and sadness. We played music on an accordion, while the students had to choose a color and paint something. Then, the children sat in small groups around a table and listened to two long pieces of music. One piece was happy, and the other was sad. Each piece lasted about 10 minutes. They drew in smaller groups on big common papers, and at the end, we discussed the many and different opportunities the experience offered to express their feelings.

Results:

Verbal: The students said to us secretly which color they think suits to several emotions. There were many suggestions, and there was no consensus. Many paintings for angry were extensive and those for sadness were small.

Non-verbal: The most important in this activity was not what they drew, but how they did it. When drawing individually, and the main emotion was angry, the drawing movements were abrupt and intense. When drawing collectively and for a longer time, they drew some topics that make them happy (like a Christmas-tree, flowers, balloons, or hearts). For sadness, all the students drew humans (one or many) with sad faces (especially accentuated was the mouth) and

with tears. When they had more time to draw, they were more absorbed, especially by listening to sad music. During the longer time painting, many students also wanted to see what the other classmates drew.

Summary: We achieved the main aim for students to be aware of their own emotions. Drawing for short and long times helped them to clarify their emotions because of the music.

Seventh station: the island of happiness

(Group A: n =13, Group B: n = 10)

Aim: For students to accept diversity and to regulate relationships with others and to be aware of their own emotions.

Procedure: On this island, we saw a puppet theater present a story about the beauty of the difference between two protagonists represented by a low bar and a high bar on a xylophone. After the story, the children on the island wanted to leave, but a bad witch had stolen their rows. They tried to use their sails, but there was no wind. They listened to a song to appeal to the wind, and then they sang another short song to further appeal to the wind. Then they had to close their eyes and hold ribbons in their hands. They had to concentrate and listen to a music piece by Manos Hatzidakis (Appendix B: 12). With a fan and at the appropriate point of the music, we tried to give the sense of the wind, which saved them and perhaps evoked the sense of happiness.

Results:

Verbal: The students said that they liked the music when all the xylophone bars played together, because before, as they said, the music was boring. As we were on the ship, the students did not seem to understand that the situation without wind on the sea was dangerous. When we tried to bring the wind to the ship, the students were very impressed with the fan effect. Some students did not understand how it happened, but we did not reveal the trick. In Group A, the students did

not see the fan, and they asked how it could be possible. The questions were persistent, and it was difficult and unethical for us not to tell them the truth. We revealed the fan, we noticed that the fan with the song helped them to call to the wind.

Nonverbal: The students demonstrated high concentration during the show. They were relatively still and reacted to what they saw with laughter, exclamation, and facial expressions. Most of them did not want to be disturbed. After that, on the ship, the children made many intense bodily movements, they were impatient, and they wanted to feel the wind. When they listened to the music, some of them, especially the girls in Group A, tried to understand what happened when they saw ribbons from the fan blowing in the wind. They moved their bodies and hands with the ribbons according to the music. Some of the students seemed to enjoy the feeling of wind with the music. Many of them were unable to understand how it was possible.

Summary: The main aim was to understand the importance of diversity, which could be fundamental to regulating relationships with others. This aim seemed to be achieved, primarily on the cognition level. We achieved the aim of awareness of their own emotions.

Eighth session: the treasure hunt

(Group A: n =14, Group B: n = 11)

Aim: For students to be aware of their own emotions and the emotions of others. An informal evaluation of the project was also a goal of this session.

Procedure: In this last session, we organized a treasure hunt. The children listened to several pieces of music or several sounds, which were characteristic for each one of the islands we had already seen, and they had to remember and name some related emotions from every island. Then, in the school's garden, they had to find the appropriate symbol-object for every island, which we had previously hidden. With all these symbols, they could build a map, and

they could find a way to the secret treasure in the garden. This last session functioned as a recapitulation and evaluation of the whole project.

Results:

Verbal: It was not difficult for the children to remember the musical fragments from each island, and to recognize the appropriate emotions. In general, there were multiple discussions, and the students in both groups worked together and to find all the symbols. The students could name all the emotions they have approached during the project. Compared to the first meeting, it was much easier for the students to speak about their emotions, to label them, or to recognize them. Some of the students could give all the right answers and be very excited. At least in the treasure chest, they found two papers with the words “emotions” and “music”. We discussed with the children how emotions and music were related and worthwhile to recognize. The students were not anxious to take part in this discussion. Instead, they wanted to celebrate with chocolates and bonbons.

Nonverbal: The last session took place in the garden, and the students had many places where they could move. In groups of three, the children tried to find the right symbols. The movements and facial expressions showed excitement when they found the symbols and the treasure. Just as a team found a symbol, they were very proud. In many cases, they synchronized their movements to the music, e.g., while they listened to the music of the island of happiness. In this session, most movements were not primarily emotional reactions to music, but of the excitement from looking for the symbols and finding them.

Summary: We achieved the main aim to be aware of their emotions and the emotions of the others. As an informal evaluation of the project, this session provided several useful results.

Discussion

Conclusions

Through this project, we achieved a more comprehensive understanding of how kindergarten students connect music to emotion.

Our first research question about the possibilities to strengthen the emotional competence of kindergarten children using several musical activities gave rise to many important conclusions. During the meetings in the project, the children had many chances to reflect and to discuss their emotions, to share their emotional experiences, to be aware of their own emotions, and to recognize the emotions of the others (Saarni, 1999; Bradberry & Greaves, 2009). The many ways we applied the theory of mechanisms (Juslin et al. 2010; Juslin & Lindström, 2016; Juslin 2016) and the highlighted the multidimensional nature of music, aroused emotions, and at the same time helped students to recognize and label them. In the informal evaluation of the project, we concluded that most students could remember the main emotions in all the "islands" of the project. In this last session, speaking about emotions, even about emotions like fear or sadness, was more evident and easier in comparison to the first sessions. Likewise, several nonverbal reactions of the students showed that most of them could recognize the emotion we highlighted during the activities, that they had intense memories of their experiences with these emotions. This experience made them excited. Most of them could tell us what happened on the islands, identify the emotions, and suggest techniques to regulate their behavior. In the field of awareness, recognizing and labeling the emotions and discussing and looking for the appropriate behavior, we concluded that they achieved improvement (research questions 1a, 1b, 1c), (Halberstadt et al., 2001; Denham et al., 2002; Bradberry & Greaves, 2009; Payton et al., 2008). This more cognitive approach of their emotional life does not mean that they are capable of

applying this knowledge, or controlling their behavior and improving the relationship with the others (research question 1d). The students also seemed to understand that they can use various kinds of music to regulate their emotions, to accompany daily activities, and to achieve personal goals, something that was always and still is a usual practice for many people in our days (Juslin & Sloboda, 2013; DeNora, 2000).

During the project, we observed intense bodily reactions to anger and fear. Joy was expressed very often with intense movements in the room (especially with the gambol as an accompaniment to music). Sadness was always expressed with slow movements and facial gestures, sometimes with expressions of appropriate behaviors, like wiping the tears. Verbally, the children could speak very easily about anger, which could mean that it is an emotion about which they speak (perhaps with the parents; it is not random, that they used phrases of the parents). In some cases, there were disagreements about how they perceived a musical piece emotionally, especially in some examples between anger and fear, or anger and sadness. Perhaps there are similar or common musical features in these cases, or the awareness of an emotion induces another one (someone becomes sad because she/he was angry).

Regarding our second research question and concerning the key-distinction between the perception of emotions and experience of emotions (Gabrielsson, 2002), it is difficult to present definitive conclusions. This distinction cannot be absolute and precise, and for the researchers, it was, in many cases, challenging to make regarding this particular assumption (Juslin & Sloboda, 2013; Juslin, 2016). An additional barrier comes as well from the age of the children. From the observational notices and the analysis of the video material of the sessions, we could suggest a relation between:

- verbal reactions/expressions of emotions and the primary perception of the emotions

- non-verbal reactions/expressions of emotions and the primary experience of the emotions.

We could suggest that many of the verbal reactions we observed tended toward a cognitive approach to perceiving and recognizing emotions, without necessarily experiencing them, or they highlighted a cognitive moment, after experiencing an emotion. The non-verbal reactions, bodily movements, facial gestures, and gestures, often referred primarily to experienced emotions. In many cases, the children had to move to the music they listened to according to our instructions. In other cases, the nonverbal reactions were more spontaneous. In this last instance, we could assume that the children actually experienced a specific emotion. Regarding the categorization of the musical activities and based on our observation, we could argue that musical activities in which the main direction was bodily movement, dancing, singing, playing instruments, or listening to live performance could better contribute to experience emotions. Discussing emotions, combining music with narration, drawing with music, or accompanying theater with music could lead to a better perception and understanding of emotions.

Most of the activities in the project certainly belong to more than one category of the aforementioned musical activities. For example, we read the “Topo tip story” about fear, and the children listened to live music. In this way, they could combine the experience of fear and decrease of fear (achieved primarily through the appropriate live music) with a kind of perception and awareness of their emotions (reinforced through the concreteness of the story and the discussion). In this example, live music contributed to strengthening emotions like fear, while the story helped to recognize the concrete emotions and their changes, their symptoms, and their

causes. According to Saarikallio (2019), music has the potential "of bringing these non-verbal levels of experience into dialogue with conscious reflection and meaning-making" (pg. 5).

The results of the study might also be the impetus to design a similar music education project in the future. The combination of music with the concreteness of a story (e.g., in the form of narration or lyrics), theater or drawing could help the children to experience some strong emotions and be aware of these emotions. It would also help the children to recognize these by others or to correlate them with similar emotions in the past. In this instance, the children could have the means to take a form of "cognitive distance" and to understand their emotions, to try to regulate their behaviors, to set these in a socially accepted way, and to improve their relations with others.

Implications for music education practice and policy

The project offered kindergarten students many opportunities to think and to speak about their emotions. One cannot argue that it is easy or simple to induce emotions and to help a child at this age to regulate their emotions and behavior through music. As we have seen in the theory of mechanisms, there are several factors (biological, cultural, individual) that can induce emotions, and it is difficult to manage all these. Kaschub (2002) argued that "it is the broad cultural experiences of a person and the person's unique individual experiences that shape their response to music" (p. 12). Every person can react to emotions differently, according to their experiences. It is also worth mentioning that the use of music where the aim is to induce emotions has an ethical dimension. This dimension is true not only within an educational framework but also outside such a setting. It also has to be used very carefully after dialogue and critical reflection with clearly defined aims, which puts the child in the center of interest. It

should also help future citizens to be aware of the power of music in many fields of their everyday life (marketing, politics). Otherwise, there is always the danger of manipulation.

This danger is not the only problem with implementing the project. As we have seen, during the program, we focused only on the basic emotions (joy or happiness, sadness, anger, fear, and surprise). It would be useful but difficult in our research to observe and to discuss more complex emotions and feelings. Furthermore, while all children could speak freely about their emotions, there were no wrong emotions, but sometimes wrong behaviors because of emotions. We should actually be very thoughtful because the socially expected and accepted ways of expressing emotions should not lead to a kind of emotional conformity. Also, the social expectations in our project should not prevail over the emotional life of the individual (Kaschub, 2002).

At least we should mention a practical difficulty. During the project, there were constraints. Sometimes we were three or four educators, and we used many materials (e.g., in session 7 of the project), which could make the implementation of the program difficult to accomplish. In every effort to design a similar project, one should consider implementing these practical parameters.

This study represents an effort to use the potentiality of music in such a way as to reinforce the emotional competence of the children. One should consider this research as a proposal for music education policy, which takes into account the emotional and social needs of kindergarten children and also considers music as something meaningful for their future life. We note that we distinguish this study from Reimer's paradigm of aesthetic music education (Reimer, 1970; 1989; 2003). Music in school is not a contemplation of abstract forms, which symbolize and correspond – because of its nature – to emotional life (Elliott & Silverman, 2012).

The main idea is to highlight the multidimensional nature of music and the wide variety of musical activities, which could contribute to the strengthening emotional competence. Our proposal is consistent in part with the aesthetic paradigm as it relates to the importance of music to the growth of emotional competence. Where our proposal differs is that it takes into account the modern scientific developments in this field and considers music, its nature, and its relation to emotions as something much more manifold.

In the future, this study could be useful as a basis to design a long term music educational project and to measure more concrete results of the intervention, taking into account the difficulties of the age. One could consider the axis of perception – induction of emotions and awareness and regulation of one's own emotions and the emotions of others through the study of verbal and nonverbal emotional expressions and reactions of the students. Perhaps the most important point for future projects is to invent playful and imaginative ways, which utilize the emotional capacity of music, and which are consistent with the needs and the interests of the children of this age.

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Appendix A

Observations – formula

Datum:**Session:**..... **Group:** **N:**

EC Aims:

awareness of own emotions

regulation of own emotion

awareness of the emotions of others

regulation of the behavior and improvement of the relations with the others

Musical activities (e.g., singing, playing music instruments, moving and dancing, etc.)

Verbal Reactions (time in video material)

(00:00 - 03:00) -----

(03:00 -06:00) -----

Nonverbal reactions (time in video material)

(0:00 - 3:00) -----

(03:00 -06:00)-----

Primarily Perception of emotions: -----

Primarily Experience of emotions: -----

Perception and experience of emotions: -----

Appendix B

Routines

- Prokofiev, Dance of the knights (1)
<https://www.youtube.com/watch?v=bBsKplb2E6Q>
- Muse, Starlight (2)
https://www.youtube.com/watch?v=Pgum6OT_VH8

Joy:

- Bobby McFerrin - Don't Worry Be Happy (3)
<https://www.youtube.com/watch?v=d-diB65scQU>
- Tarantella nalopetana (4)
<https://www.youtube.com/watch?v=U-xsosv6uM0>

Sadness:

- Yann Tiersen - I Saw Daddy Today (5)
<https://www.youtube.com/watch?v=DfWA4A39vAc>
- Clint Mansell-Requiem for a dream (Piano cover) (6)
<https://www.youtube.com/watch?v=l8zoqWa9RsE>

Fear:

- Mussorgsky: Night of the bare mountain (7)
<https://www.youtube.com/watch?v=zR2P-5J-2MA>
- The Untold - Lucifers Waltz (8)
<https://www.youtube.com/watch?v=ikl-QYQ252Q>

Anger:

- Stravinsky: Le sacre du printemps (9)
<https://www.youtube.com/watch?v=5UJOaGIhG7A> (from 3:40)
- Iron Maiden – The Trooper (10)
<https://www.youtube.com/watch?v=2G5rfPISlwo>
- Mikis Theodorakis – Margarita (11)
https://www.youtube.com/watch?v=FgYDgL_brf4
- Manos Chatzidakis – the concert (12)
<https://www.youtube.com/watch?v=k2GeWHZBUiY>

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