Developing musical creativity and empathy through group practices

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Abstract: In contemporary society we need people who think creatively, innovatively, critically, independently, who are able to interact, to communicate. Through systematically developed musical activities, started since childhood, all this can develop naturally and with ease.

This study wishes to relate creativity with empathy and explain the way these can develop in children through musical group activities. The two components interact and inter-condition each other in some way, as empathy contributes to creative performance in the field of music, and creativity supports the manifesting of the empathic capacity at the level of ability ever since the youngest age. The children who participated in the experiment that was carried out improved their ability to relate and communicate, learned to play musical instruments in order to carry out a rhythmical accompaniment, became much more creative and got the courage to express their ideas through music.

Key-words: music, creativity, empathy, behaviour

1. Introduction

The academic understanding of various aspects of music as a scientific object is increasing, and its impact on the development of cognitive capacities gets into the focus of researchers more and more. Ever since the late 19th and the early 20th century there existed more viewpoints referring to the effect music has on humans and on the role its practising under specialised guidance can have on the development of children (Koopman, 2005).

Preparing a personality through education has a complex trajectory, as all psychical processes are trained: cognitive, affective, psycho-motoric and motivational. Music, maybe more than the other study objects, fulfils these conditions. Besides the fact that it operates with all kinds of notions, categories and phenomena, music involves using symbols, artistic means, using signs that address both the cognitive, reason, thinking, and especially affectivity.

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In contemporary society, exposure to music is done through listening and practising, in order to obtain performance. Children and adults listen to music on the radio, TV, internet, at concerts, while they do other activities or in various places and contexts: in the car, at the restaurant etc. In contrast to these, there are children who practise music or even an instrument, but for a brief time, after which they give it up, but also very few children who practise music daily and who choose it as a profession.

We notice that the social environment they live in, their musical education, the burst of information through social media networks and the Internet have great influence on children, fostering their passion for certain music genres. Because the world has progressed and we need people who think creatively, innovatively, critically, independently, who are able to connect, communicate, we, the teachers, have the duty to shape their taste for beauty and value, to develop these children's capacities through music.

2. Previous review studies

Our education system focuses on the abilities to learn or assimilate information, ignoring the emotional intelligence, which is of immense import in our personal destiny. Specialists say that, in the happiest of cases, the IQ contributes about 20% to the factors that determine success in life, which leaves the other 80% prey to other forces. Academic intelligence has very little to do with the emotional life, and it is precisely for this reason I consider that emotional skills are of crucial importance, the ability to manage frustrations, master one's emotions and get along with others, which is acquired during childhood.

The conclusions of researchers handling this issue are very diverse and capture more aspects of these phenomena.

A first opinion claims that those children who have carried out musical activities – practise an instrument, sing in a choir – for a long time since young ages (3 - 4 years) are more creative and have a far richer imagination compared to their colleagues who did not benefit from any musical education (Zhou, 2015:200-206).

Some educators noticed that music can have an effect on cognitive development, on memory, on linguistic skills (Milovanov et al., 2010) or on the social and emotional domain (Elliott, 1995; Gardner, 2004). On the other hand, Bastian (2002) showed that, by using musical instruments or Orff instruments, a considerable development of social skills, of intelligence is noticed, and an increase in the motivation to learn.

Eady and Wilson (2004) studied the effect of music on the pupils' performances and noticed the positive impact on improving the learning skills in basic subjects like mathematics and the native language, and other authors (Franklin, Moore, Yip, Jonides, Rattray, and Moher, 2008) conclude that musicians have far better memory than those who do not practise music.

Meador (1992) presents evidence that creativity (as measured by divergent thinking tests) declines when children enter kindergarten, at around the age of five or six. There would also appear to be a 'break' in creativity at the time of puberty (Albert, 1996).

A study with regard to the enhancement of cognitive task performance is conducted by Koutsoupidou & Hargreaves (2009), who report that improvisation significantly favours the development of creative thinking, of originality.

Engagement with music can enhance self-perceptions, but only if it provides positive learning experiences which are rewarding." (Hallam 2010, 281-282).

Vanda Weidenbach (Vanda Weidenbach, 1996) points to the fact that the idea must be accepted according to which all humans possess a potential for musical performances. In this approach, musical skills are not exclusively the result of "genetic luck"; on the contrary, their acquiring is achieved through long-term, intense engagement in different musical experiences, partly also due to creativity.

3. Creativity

There is no perfect, precise method by which a teacher can stimulate musical creativity in children yet. But several ideas can lead to an approximation and then a conclusion regarding the manner and paths to follow through which a teacher can get to reach the didactic goal he has set. Since 1937, when the term creativity was introduced into psychology, and until now, the sphere of this concept has expanded and has received new valences.

Broadly, we can consider creativity as a general human phenomenon, the highest form of human activity, and in a strict sense, four aspects of the term creativity were signalled: as a product; as a process; as a generally human potentiality, as a creative ability and as a complex dimension of the personality (Zlate, 1994).

Creative persons possess many distinct traits, and the creative potential existing in all humans can be rendered actual and developed (Popescu 2007, 5).

After decades of research, it has been shown that a high intelligence does not determine artistic creativity, but other factors do.

The first would be imaginative thinking, that is, the capacity-ability to see things in new ways, to recognise relations and build new connections.

The second is motivation, the intrinsic ability to work on something rather for the sheer joy of it than for some external rewards.

The third factor is the expertise-ability to use a wide and very well organised base of knowledg (Seamon and Kenrick, 1992).

Another opinion (J.P. Guilford (1950) considers that the most important ingredient of creativity is convergent, but also divergent thinking, with its characteristics: mental flexibility, originality, fluency and inventiveness. To these

traits, imagination, sensitivity to problems, curiosity, intuition, tolerance for ambiguity, independence (autonomy) etc. were also added (Davis, 1999). On the other hand, motivation, a high energy level, work persistence, the desire to know and accumulate information are specific of creative persons.

Many authors consider that in children creativity can be developed or inhibited. Thus, Meador (1992) thinks that, after getting into kindergarten, children are no longer as creative as until then, and this is a natural consequence of becoming more mature or socialising.

Regarding musical creativity and its relation to convergent and divergent thinking, we insert (Fig.1) an encompassing conceptual model of creative thinking into music (Webster, 2003).

Composition Improvisation Listening **Analysis** Performance THINKING PROCESS **Divergent Thinking** Time Away **Enabling Conditions Enabling Skills** Prepartion Working through Revising, editing, Personal Aptitudes Exploration Motivation, Personality Primitive Gesturals. **Newly Formed ideas** Conceptual Understanding Gender, Maturity Planning Craftsmanship Social/Cultural **Aesthetic Sensivity** Verification Context, Task, Polishing, rehearsal Interpersonal, Past Experience **Convergent Thinking CREATIVE PRODUCTS** Composition Improvisation Performance Listening Analysis

PRODUCT INTENTIONS

Figure 1.1 Model of Creative Thinking in Music
Source: Webster, P.R. (2003). What do you means, "Make my music different?" Encouraging
extensions and revision in children's music composition. in M. Hickey (Ed.) Why and
how to teach music composition: A new horizon for music education, PP 55-65. Reston
VA: MENC, The National Association for Music Education.

Fig.1. Model of creative thinking into music

Thus, composing, performing/improvising and auditory analysis were represented as components of both *Productive Intention* and the *Results of Productive Intention*. At the diagram centre there is the *Thinking Process*, which includes both divergent and

convergent thinking (Guilford). The *Wallas* stages (Preparation, Incubation, Enlightenment, and Verification) connect the divergent to the convergent thinking.

Facilitating Skills and Conditions give birth to the Thinking Process. The skills are formed of abilities, conceptual understanding, aesthetic mastery and sensitivity, and the facilitating conditions include: motivation, the imaginary world of the subconscious, the environment, and the personality.

When the creators begin the musical thinking process, they generally have an idea about composing, performing/improvising or analysis (Productive Intentions). Once the intention is set, the creator uses the necessary skills, which are influenced by the conditions, while the thinking process is taking place (Facilitating Skills and Conditions). The creator goes through various stages at the diagram centre, derived from the Wallas stages, oscillating between divergent and convergent thinking, eventually getting to the finite product.

Creativity can manifest individually, but also collectively, in which case the creative potential of each individual in the group is engaged in every creative endeavour of the group.

Within the group, interactivity can occur, which implies cooperation, but also competition (Ausubel, 1981), which do not take on antithetic forms here, but involve a certain degree of interaction, as opposed to individual behaviour.

In the conditions of fulfilling simple tasks, the group activity is stimulating, generating contagious behaviour and competitive effort; when solving complex tasks, in problem-solving, obtaining the correct solution is facilitated by issuing multiple and varied hypotheses.

Interaction stimulates the effort and engagement of the child and is important for self-discovering one's own capacities and limits, for self-assessment (e.g. the *Wave game, Musical glasses game, instrumental improvisation games*). Likewise, singing together has favourable influences at the level of personality, developing the pupils' abilities to work together, actively participate, cooperate and stimulate each other.

4. Empathy

Empathy, a concept introduced by Theodor Lipps in 1906, was defined as a process of psychological knowledge and self-knowledge, of a projection of one's own affective states on others. This complex psychical phenomenon marks the entire life of a human, constitutes and organises itself ontogenetically as a joint trait of personality, and may take on attitude-type valences.

Empathy involves continuous transformation, manifests in certain conditions, and undergoes quantity and quality evolutions during its building up by triggering cognitive, affective, motivational and basic-physiological-vegetative levels. From this perspective, it can be considered a "multidimensional construct" (Marcus 1997, 17).

The term was taken over and accepted by specialists, who formulated various definitions in specialised literature. If in 1934 empathy was considered as taking on the role of the other (Mead, 1934), 45 years later - effort to see and experience things from the other's perspective (Beck et al., 1979), taking on the other's perspective (Sheafor, Horejsi and Horejsi, 1994), entering inside the other's feelings and experiences (Compton, B. and Gallaway, B., 1999) or a dimension of emotional intelligence (D. Goleman, 2001), in the present context, empathy is an essential condition for effective interpersonal communication, a perfectible phenomenon that can be subjected to guided training (Gârlaşu-Dimitriu 2004, 11). In other views, empathy is expressed as a specifically human need for implicit communication, exactly like language, as there is no normal person who should not possess empathic valences as a premise of the I-other interaction (Gherghinescu, 2002).

The production mechanism of the empathic phenomenon based on imitation, identification, shaping and projection triggers physiological (kinaesthetic and vegetative: postural, motoric, skin galvanic reactions, changes in the heart and breathing rhythm, muscular tension, palm perspiration etc.), cognitive, imaginative and affective processes (http://www.cnaa.md/files/theses/2015/21949/ mihaela_stomff thesis.pdf p. 52).

The empathic capacity is assessed as psycho-physiological potentiality to penetrate into the psychology of others, through which man can know, understand and predict the behaviours of others, a personality trait that facilitates social interaction and performance. As any capacity, it has an innate psycho-physiological potential (neuronal substratum, mirror neurons), but it is also achieved and developed in the process of interpersonal knowledge and, if the person has this goal, through sustained effort. The empathic capacity is outlined gradually based on experience and training, thus reaching an empathic behaviour.

When reaching group musical performance (Caluschi, 2001), empathy plays an important part due to the following factors:

- a) the groups interact, and the creative group will try to impose their ideas without criticising those who didn't manage to find a solution, so it is an attempt at understanding the other's perspective;
- b) creativity methods require substitutive imagination, transposition or identification for generating solutions that are as original as possible;
- c) the functions of empathy, especially the performance function, require creativity in their manifestation.

5. Relationship between empathy and creativity

The connection and interaction between empathy and creativity in musicians was approached in few interdisciplinary studies (Ian Cross, Felicity Laurence, and Tal-Chen Rabinowitch, 2012), and I have not come across the relationship between

empathic behaviour and developing creativity through music in children in any study until now. Therefore, a relationship exists between the two traits, as empathy contributes to creative performance in music, and creativity supports the manifesting of the empathic ability at the level of skill.

The inter-conditioning of creativity and empathy at the level of both personality and behaviour is achieved through the following elements: (Caluschi, 2001)

- Both mental phenomena have each a potential of predispositions, constituted as a
 necessary basis (with a hereditary programme), on which the future empathic or
 creative behaviour is built. In manifesting the two mental traits, the affectivecognitive rapport is different.
- Both are considered to be personality features, traits.
- Both phenomena manifest as processes.
- Both processes are finalised with a different product.
- They are related to intelligence.
- They are correlated to motivation.
- They are in a certain relationship with affectivity.
- Empathy is reversely proportional to aggressiveness.
- Both can be trained.

This parallel confirms the idea that the two traits interact, and empathy contributes to creative performance in many domains of activity, including music, and creativity supports the manifesting of the empathic ability at the level of skill.

Starting from these theories, I carried out an experiment through which I monitored the development of creativity and empathic behaviour in children aged between 5 and 8 years who wished to study music and learn how to play an instrument.

The experimental group consisted of 10 subjects with musical abilities who carried out musical activities over a period of 6 months, twice a week, except for the winter holidays.

During the period dedicated to the activities I monitored the development of the children's abilities through group musical games, choir singing, playing musical instruments (xylophone, jingle bells, triangle, maracas etc.) for making rhythmical accompaniments.

The games proposed envisaged especially the development of creativity through teamwork. They used with priority:

- games for developing the sense of rhythm, but also of improvising (We make up a rhythm; The Magician, Rhythmical Bingo)
- games for developing the sense of melody, but also of improvisation (Moment music, Up-and-down, I am a little composer)

In the beginning of the experiment, the children were tested to see what the level of their musical development is. I used tests for highlighting the sense of rhythm, of melody and the capacity to improvise starting from a given theme.

The children in the experimental group did not know each other and had not had the opportunity to relate before. For this reason, in the first sessions, the children manifested fear, reserve in playing the instruments, and in the improvisation exercises proposed they did not have the courage to express themselves. That is why, during the first 3 weeks, I used games that proposed to reproduce rhythm or melodic formulae, and the music instruments were used rather by imitation. After this period, I divided the children into two groups, according to the affinities created among them.

After this time, the first attempts at creation appeared, initially manifesting themselves in only 3 children, and after a 2-month period, all children succeeded in creating a rhythm formula or a short melody through repeating, grouping and concatenating motifs. Their ideas are generally repeated by the group or they use cells from already known songs in the fragments they create. When they forgot the lyrics of a known song, they did not manage to remember the melody either. If they began to sing a song in a key and they were not aided by the accompaniment, the key was frequently changed during the stanzas.

I noticed that in the group where the empathic bond among the children was strong, when they worked or improvised together, the ideas they generated were like *sparks* that triggered other ideas.

The children were differently interested in the music instruments, but when they had to work in the group, they communicated and cooperated in order to get the tasks done.

The children who participated in the group activities had to pay attention to each other and adapt their rhythm to be able to synchronise themselves with the others, thus developing their abilities to work together. Belonging to a group gave them a feeling of confidence, security, mutual stimulation, and thus the fear of failure disappeared. At the same time they manifested an empathic behaviour and tolerance towards the opinions of the others.

In the last week I evaluated the children's sense of rhythm, melody and especially their ability to improvise. All children knew how to handle a music instrument, adapt a rhythmical accompaniment to a song, and improvise on a simple theme.

6. Conclusions

In conclusion, through teamwork, based on a well-designed strategy, children manage to communicate easier, collaborate, create by playing, without turning the creation into a goal in itself.

The foundations of empathy are laid in early childhood, and using empathy, as well as rendering it more mature, are done as a consequence of socially acquired experience, which validates the anticipations for the person related to the reference framework of the other, as social experience is a necessary condition for the evolution and maturation of empathic behaviour.

In children, the empathic capacity through manifestation at individual level contributes to:

- knowing, understanding and predicting the behaviour of others;
- facilitating interpersonal communication;
- facilitating social adaptation through elaborating the individual's own behaviour strategy by adapting one's own aspirations and expectations to the expectations and behaviour of the others;
- developing creativity and reaching performance.

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