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RESEARCH ARTICLE

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NEUROPSYCHOPEDAGOGICAL THERAPY WITHIN THE PERSPECTIVE OF MUSIC THERAPY

Izadora Larissa Cei Lima^{1,*}, Carmem Lúcia Gomes de Araújo Souza², Patrícia do Socorro Coelho Portal³, Rayferson Ytallu Medeiros Viana⁴, Francisca Dérliene Neves de Oliveira⁵, Breno Gabriel Cei Lima⁶, Brenda de Fátima Oliveira de Lima⁷, Jefferson Cardoso Coutinho⁸, Itala Zilda Lima da Silva⁹, Thayse Kelly da Silva Martino¹⁰, Simone Tavares Valente¹¹ and Elzelis Nascimento Souza¹²

¹Pedagogue by Universidade Paulista – UNIP. Postgraduate student in Neuropsychopedagogy at Faculdade Superior de Paragominas – FACESP. Nursing Technician at the CTEM Educational Institution, Undergraduate Student of the Nursing Course at Estácio Castanhal College, Pará, Brazil. ²Pedagogue by Universidade Paulista – UNIP. Postgraduate degree in Neuropsychopedagogy at Faculdade Superior de Paragominas – FACESP. Undergraduate student of the Nursing course at Universidade Paulista – UNIP. Castanhal, Pará, Brazil. ³Nurse. Specialist in Mental Health. Specialist in Obstetrics. Specialist in Auditing in Health Services and Neonatology. Master's Student in Health Management in the Amazon at Santa Casa de Misericórdia. Belem, Pará, Brazil. ⁴Nurse by the Faculty of Piauí CHRISFAPI. Master's student in Education and Health at ICAPI, Castanhal, Pará, Brazil. ⁵Nurse and Pharmacist from Faculdade Estácio. Castanhal, Pará, Brazil. ⁶Psychologist from the Faculty of Macapá - FAMA. Dalmass psychological evaluation post. Macapá, Amapá, Brazil. ⁷Student of the Nursing Course at Faculdade Estácio. Postgraduate student in Nursing at Faculty play. Castanhal, Pará, Brazil. ⁸Graduating from the Pharmacy Course at the University of Amazônia-Unama. Belem, Pará, Brazil. ⁹Student of the Nursing Course at Faculdade Estácio. Postgraduate student in Nursing at Faculty play. Castanhal, Pará, Brazil. ¹⁰Nurse. Specialist in Occupational Nursing by UNINTER. Coordinator of the Undergraduate Nursing Course at Faculdade Estácio Castanhal. To Brazil. ¹¹Nurse by Estácio, Post-Graduate Student in Urgency and Emergency, in Public Health and PSF for Nurses, in Nephrology Nursing at Faculdade Futura. Castanhal, Pará, Brazil. ¹²Nurse by the Faculty -FCAT. Specialization in Adult ICU, Faculdade Integrada da Amazônia, FINAMA. Master's Student in Mental Health, ICAPI. Castanhal, Pará, Brazil.

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*Corresponding author:

Izadora Larissa Cei Lima

ABSTRACT

This research refers to Music and its direct relationship with the Teaching Learning process. This work brings, from the ideas of some authors, the importance of using music pedagogically in school interventions aiming at brain stimulation, so that there is a development in the social, cognitive, physical and psychological spheres. The general objective of this research is in fact to understand the relevance and influence that music has in the teaching-learning process and its neuroanatomical relationship with the subject in training. The study was developed through a bibliographic research, in the qualitative aspect, within a phenomenological scientific standard, which will associate the quality of teaching with systematic neuroanatomical information and progressive and transcendental pedagogical theories.

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INTRODUCTION

The presence of music in the lives of human beings is undeniable. It is present in different situations of human life, in all cultures, in all regions, in all times, that is, music is a universal language. And subjective when aimed at expressing feelings, feeding the soul with soft melodies, or stirring it with pulsating rhythms, it cannot be denied that music, directly or indirectly, is present in the life of human beings, due to its force of expression "it moves with one of the main sources of storage of information, perceptions, learning, memory" MORAES (2017 p 17). With its characteristics, signs, language, and action in the brain, it constitutes a good and indispensable tool for learning and brain stimulation, for the apprehension of contents in school environments. Since Greece, the relationship between music and mind was already observed, of how music acted on the individual, aiming at a more spiritual being, with the awareness that its use should be dosed LOUREIRO (2003), they did not have the knowledge and technology that it exists today, in which results can be obtained from a brain consultation almost immediately, but despite the few resources they had an idea of what the music force was capable of. The search for answers that lead to an understanding of how the brain receives, processes and reacts to musical or sound stimuli, and how schools should prioritize this modality, in what ways it is associated with learning. But, what is music, what is its relationship with teaching? And what is learning? These are issues to be addressed during this work. The goal The general purpose of this research is in fact to understand the relevance and influence that music has in the teaching-learning process and its neuroanatomical relationship with the subject in training. The study was developed through a bibliographic research, in the qualitative aspect, within a phenomenological scientific standard, which will associate the quality of teaching with systematic neuroanatomical information and progressive and transcendental pedagogical theories. Music has a relationship with education, and the pursuit and goal of every education professional (at least that's what is expected) is learning, which generally implies knowledge for their school and social life. The work is referenced in the considerations of some authors in the educational and neuroscience area about the use and benefits that music brings and/or provides when inserted in the most diverse environments (squares, streets, supermarkets, stores, etc...), for entertaining or animating people, and in school spaces aiming to stimulate students (awakening the body) or seeking a sedative effect (slowing down agitation, especially at recess), and also as a tool and pedagogical support with a view to learning.

MUSIC - BRAZIL AND ITS HISTORICITY

The presence of music is registered in the most diverse periods, civilizations, peoples, and each one used it according to their conceptions and purposes. For the Greeks, music, in addition to being considered a divine attribute, had it as an art, a way of being and thinking, the teaching of musical practices started in childhood with singing, they believed in this as a way to educate and also to civilize, whoever had musical knowledge was considered a guardian of a science and a technique, and this knowledge needed to be developed through studies and exercise (LOUREIRO, 2003). The author states that by recognizing the formative value of music, the first concerns with musical pedagogy emerged in the area and, little by little, Mousikêl began to cover everything that concerned the cultivation of intelligence and being musically educated, it did not mean simply playing a musical instrument, but studying in depth all the liberal arts, writing, mathematics, drawing, declamation, physics, geometry, as well as singing in a choir and playing an instrument perfectly, hence the conception of education and its relationship between body and mind, aiming at the preparation and participation in society, and in order to guarantee this education, which was not only the responsibility of the State, there were music educators, who within the office were valued as the masters they were (LOUREIRO, 2003). Also according to Loureiro, unlike the Greeks who had this more sensitive relationship, emotional in the search for balance, the Romans had a culture more focused on wars, where sensitivity,

emotions barely surfaced, because they were trained, "educated" to be rude, the to battle. The change in this scenario comes after the takeover of Greece by the Romans influenced by artistic manifestations that existed among the Greeks when it was taken by the Roman invasion, from then on musical education gained ground among the Romans, treated by them as science, as a scientific knowledge, sought more theoretical knowledge than practical knowledge. Due to this factor, the integrated idea of "music and mind" and "music and body" is broken (LOUREIRO, 2003). In the mid-1500s amidst the transformations that were taking place in Europe, more precisely in Italy with the Renaissance, the Portuguese arrived here in Brazil, in search of mineral and/or other riches that could satisfy the wishes of the crown. Our colonizers came with the intention of conquering, exploring, catechizing, bringing with them some traces of European culture and customs, and in this medium, music with European characteristics and purposes totally different from what was practiced here. Like this? There, music was to entertain the court, at its parties, while the indigenous people used it in their rituals, so as in other peoples and tribes, it should be noted that there were already musical manifestations among the indigenous people, but according to Loureiro.

For the Jesuits, the artistic manifestations of the natives were nothing more than magic rituals. Frightened by its pagan character, the Ignatians worked hard to eliminate it. With the plainsong and the records (...) the Jesuits managed to destroy the spontaneous and natural music of the natives, causing it to gradually lose its characteristics (LOUREIRO 2003, p.44).

The musical manifestations that took place in indigenous parties, seen by the colonizers were the essence of music in its pure expression, the Indians were not concerned with technique, style, a pattern that would please some audience, but only with exuding their joy, (whether for the birth of a child, a hunt, a fishing or a blessed harvest), in thanks to the gods. This fact did not please the Portuguese, especially the Jesuit priests who fought and managed to put an end to these rituals, directing the music of indigenous people to the interests of the church. of the "Schools of Reading and Writing", this is perhaps the beginning of the union "music and school". According to SerafimLeite cited by Loureiro (2003), in 1759, Music together with theater was an extremely strategic methodology to attract Indians as children to the evangelization process, this new form of teaching was the first application of playfulness in Brazil, to which the Teaching Learning process (judged correct by the Jesuits) had very effective when the obligation ceased to exist and was replaced by pleasure in learning. In 1822, in the midst of the independence movement and from the need to imprint a juridical aspect to the new nation, D. Pedro I calls for a Constituent Assembly and Education enters into debate, occupying a prominent place. It is noteworthy that music at that time was taught as a complement to the curricular contents in the social discipline and for the acquisition of technical knowledge and with religious interests, that is, to sing and/or play in churches, as I was the one with the knowledge, and who transmitted this teaching (LOUREIRO 2003). So, as far as musical education is concerned, if you can say so, it was very restricted to these places and by the report of some authors only the children of those wealthier gentlemen had the privilege of this knowledge, hence why say that music always was elite. Music education needed to expand and reach other people, a larger audience, that is, reach schools. And the importance attributed to music in the education of the ruling classes led them to found, in 1841, the Musical Conservatory of Rio de Janeiro, the first major School of Music in Brazil (LOUREIRO Idem). According to the CNE/CEB, it was only after 1854, with Decree No. 1331 in the midst of the Imperial Regime, that the first definitions of legislation for the teaching of music in schools were presented. Initially restricted to the Federal District (Rio de Janeiro at the time), influencing other educational centers throughout Brazil, between 1850 and 1889. In the years that followed, already in Republican Brazil through Decree No. 981 (1890), the first aspirations for music in schools. Teaching was not yet systematized, but the teaching of music and musical practice was incorporated in the school context in several places. From the 1930s to the 1960s, Orfeônico Song came into play,

based on the proposal of Villa Lobos, where it achieved legitimacy with Decrees nº 19.890/1931; No. 24,794/1934; No. 4.913/1942. The CNE/CEB, in its opinion nº 12/2013, when outlining national guidelines to institutionalize the teaching of music in Basic Education, takes a special look at the Music content. As evidenced by the approval of Law 11.769/2008, amending law 9,394/1996, Art. 26, paragraph 6, is established that “The visual arts, dance, music, theater are languages that will constitute the curricular component”, therefore music is mandatory content, but not exclusive. The teaching of music, or better, of Arts in general in schools, has in its history a “neglected” period, in the sense of expanding this teaching, because art itself is creativity, it is to expose feelings, it is expression, there is a language that needs to be developed. And for this development to take place, it must be a curricular component, and the “struggle” for this to happen comes from a long time ago. The LDB (Law of Guidelines and Bases of Education) No. 4.024/61, when bringing new definitions to national education, did not emphasize orpheonic singing in schools, unlike other legislation documents, there were no references to music education (BRASIL, 2013).

From 1971 to 1980 in law nº 5.692/71 comes the definition of Artistic Education, consolidating itself in the polyvalent teaching of the Arts, that is, it encompassed everything related to Art, weakening the presence of music as a curricular component. The opinion of CFE nº 540/71 mentioned the ways of teaching Music prior to Law nº 5.692/71, which was limited to the scope of musical theory or choral singing. Between 1980 and 1990, Postgraduate Studies in Music were created in Brazil, strengthening research in music education, generating pioneering studies on music teaching in schools. In 1987, the National Association for Research in Postgraduate Studies in Music (ANPPOM) was created, expanding the debate on the teaching of arts in different areas, even in this period (1991), the Brazilian Association of Music Education (ABEM) emerged, which dialogues, discusses, and debates actions on the teaching of music at school (Idem).

According to that same document, in mid-2006 and 2008, the “I Want Music at School” Campaign, seeking to raise awareness and show the need for Music content, mobilized public authorities and civil society so that Law 11.769/ 2008, which deals precisely with the mandatory teaching of Music content, without being exclusive, that is, it is not necessary to have or create a discipline.

What is clear in this report is the search for organized society, for one of the great artistic expressions included in the school environment or curriculum, in an institutionalized, technical way, aimed at socio-cognitive development while bringing creation, expression, movement, rhythm which are and are in the experience of these students, and to stimulate in them the creative, improvised and expressive side that Music can provide.

HISTORICITY AND CONCEPT OF MUSIC THERAPY

Music as an artistic expression stimulates reflection, has a strong power of expression, and this affects the emotions, the feeling, the way of acting at certain times. We are surrounded by sounds (musical or not), of the most diverse types and everywhere, whether in the supermarket, in the streets, at school, in squares, and, at one time or another, we are led to be enchanted, we become paralyzed, inebriated with the sounds of chords, melody, lyrics and/or rhythm, which magically surrounds you. Sometimes we don't notice these actions, but, surreptitiously, it binds us to its chords of sound. Music has different concepts, for Loureiro (2003), the term originates from the Greek word *mousiké*, and together with poetry and dance it was designated the art of muses, and rhythm (defined here as a metric agent, of the intonation and speech control), a common feature of the three arts merged into one. The word music here expresses itself artistically, technically...

The art of manifesting the various affections of our soul through sound, composed of melody (combination of successive sounds given one after another), harmony (combination of simultaneous

sounds given at once, forming a chord) and rhythm (combination of values). (MACHADO, 1997, p. 01)

Basic concept, since when it comes to music there are other factors and characteristics to be observed. For Med (1996 p.4) it is “the art of combining sounds simultaneously and successively, with order, balance and proportion within time”. For Schafer (2011, p.23), in his book *O Ouvido Pensante*, after instigating some students with various sound situations, in the search for the definition of what music would be, a consensus was reached (in the context in which they were analyzing) of that “Music is an organization of sounds (rhythm, melody, etc...) with the intention of being heard”. Without pretending to define or conceptualize it, what is certain is that we are connected in a spiritual and supernatural way to the musical waves.

THE INFLUENCE OF MUSIC THERAPY AND SUBJECT DEVELOPMENT

Music, among the many ways in which it is presented and used, is that of being used as a pedagogical resource, a very effective means of learning, because through the sound of speech, the rhythm of words, the content is assimilated, which facilitates the memorization of the subject, which is sometimes considered difficult, the educator lacks to use this important pedagogical tool that is Music, which for Favaretto (2012, p.12), “is an indispensable requirement for the presence of art in education, despite questions about the role of music in the school environment, and about the formative value of art”, that is, how artistic expressions influence human development. Contributing to this thought, Araújo emphasizes that “music tends to reorganize the personality as a whole, as it influences the affective, intellectual spheres. The existential potential of music on people can make or develop through musical language, in this regard Ferreira (2007) says that. “Verbal communication is par excellence the first on the human communicative scale; it is also no less true that, when music is an ally, it gains strength, due to the more intense support and penetration that the transmission of its original message acquires.” It must be agreed that speaking is the biggest and best way to communicate, but joining with music, because of its structure, it becomes an excellent support in the act of teaching, for the simple fact that music has an essential characteristic, its apprehension and memorization, without having to force, press, just a melody that is to the liking, a rhythm of the students' experience, in the context in which they are inserted, any subject can be used and transmitted through music.

In fact, music and language are based on sound. The same sound aspects are present in music and in spoken language. While the sound source of music are the instruments - wind, string, percussion, in oral language this source is the larynx, and the organs of the phonoarticulating system are the modifiers and amplifiers of the original sounds, when the air column vibrates the vocal chords. Music and language, moreover, have in common the fact that they are expressed in written symbols that allow the elaboration of their respective compositions (ARAÚJO 1981 p.4).

The speech is based on a rhythm, on an intonation that makes those who listen to us have an idea to perceive by the tone of voice if we are asking, to exclaim, and in the scores to understand the message we want to convey, characterized by the fact of being expressed by the symbology that are peculiar to them, needing to be understood, interpreted and expressed, so the brain and/or mental functions are searched through memory for the means to reach a satisfactory level of learning. What does scientific research in some sectors reveal about brain functions and actions? According to Saraiva and Pereira (2010, p.145), “research in the areas of Psycholinguistics and Neurosciences increasingly show the relationship between music and the brain”.

In a study at the University of North Texas, they found that brain waves and musical construction share common patterns. From the analysis of songs - taking into account, among other factors, harmony, timbre, rhythm, tone and melody - and examinations with

electroencephalography, it was possible to state that the structures, in both cases (brain waves and musical construction), they are self-organizing and that, probably, the construction of the music is a reflection of the construction of the composer's mind. It is as if music were a reflection of this functioning (SARAIVA and PEREIRA 2010, p.145).

This statement collaborates with the idea that music is good for the brain, consequently benefiting the body. And it brings a complement to the music teaching that existed before, and this musical absence that exists in some schools, even with the advancement of technology and science. Also revealing that his return is necessary in this new educational scenario.

It is important to emphasize that, from the 50s to the 70s, music was part of the curriculum of the vast majority of schools as a formal subject, although there was no clear understanding of its influence on human cognition. Today, with technology and the development of brain studies, it would be essential for music to return to the classroom, especially in early childhood education, given its importance for cognitive development (SARAIVA and PEREIRA 2010, p.145).

The music factor cannot be left out as a support in the teaching-learning process, and in the development of brain connections the authors have also highlighted the fact that the music that made up the curriculum, although there was no knowledge and guidance for these cognitive factors, was absent of the school environment. It is necessary to reestablish the use of music as an aid and educational resource in classrooms. For Kater (2012, p.56), "certainly, the presence of music at school would make the school happier, more sensitive, more human and more intelligent", the author adjectives the school due to the musical activity that takes place there, therefore, music already contributes to the change in the school environment, which will influence the lives of its students and why not say it for teachers as well.

MUSIC THERAPY IN THE TEACHING LEARNING PROCESS

Music, among the many ways in which it is presented and used, is that of being used as a pedagogical resource, a very effective means of learning, because through the sound of speech, the rhythm of words, the content is assimilated, which facilitates the memorization of the subject, which is sometimes considered difficult, the educator lacks to use this important pedagogical tool that is Music, which for Favaretto (2012, p.12), "is an indispensable requirement for the presence of art in education, despite questions about the role of music in the school environment, and about the formative value of art", that is, how artistic expressions influence human development. Araújo emphasizes that "music tends to reorganize personality as a whole, as it influences the affective, intellectual, sensorimotor and socialization spheres" (ARAÚJO 1981, p.2).

It must be agreed that speaking is the biggest and best way to communicate, but joining with music, because of its structure, it becomes an excellent support in the act of teaching, for the simple fact that music has an essential characteristic, its apprehension and memorization, without having to force, press, just a melody that is to the liking, a rhythm of the students' experience, in the context in which they are inserted, any subject can be used and transmitted through music. Our speech is based on the "articulation and sound necessary for the production of the word" (ARAÚJO 1981 p.4).

And complements that:

In fact, music and language are based on sound. The same sound aspects are present in music and in spoken language. While the sound source of music are the instruments - wind, string, percussion, in oral language this source is the larynx, and the organs of the phonoarticulating system are the modifiers and amplifiers of the original sounds, when the air column vibrates the vocal chords. Music

and language, moreover, have in common the fact that they are expressed in written symbols that allow the elaboration of their respective compositions (ARAÚJO 1981 p.4). Music, in addition to being a means of expression and a form of knowledge accessible to babies and young children and promoting social integration and the development of expression, balance and self-esteem, also brings benefits for cognitive development, such as improved performance of students and better development of memory and logical, mathematical and abstract reasoning.

The musical experience structurally modifies the human brain, acting in music requires several skills, music is good for the brain, consequently benefiting the body. And it brings a complement to the music teaching that existed before, and this musical absence that exists in some schools, even with the advancement of technology and science. Also revealing that his return is necessary in this new educational scenario.

It is important to emphasize that, from the 50s to the 70s, music was part of the curriculum of the vast majority of schools as a formal subject, although there was no clear understanding of its influence on human cognition. Today, with technology and the development of brain studies, it would be essential for music to return to the classroom, especially in early childhood education, given its importance for cognitive development (SARAIVA and PEREIRA 2010, p.145).

If we take into account the advances in these areas, we cannot leave aside the music factor as a support in the teaching-learning process, and in the development of brain connections, the authors have also highlighted the fact that the music that made up the curriculum was lacking in the knowledge and direction for these cognitive factors to be absent from the school environment. It is necessary to reestablish the use of music as an aid and educational resource in classrooms. For Kater (2012, p.56), "certainly, the presence of music at school would make the school happier, more sensitive, more human and more intelligent", the author adjectives the school due to the musical activity that takes place there, therefore, music already contributes to the change in the school environment, what will influence the lives of its students and why not say it in the teachers?

MUSIC THERAPY AND COGNITIVE DEVELOPMENT

The search and objective of every education professional, (at least that is what is expected), is learning, which generally implies knowledge for their school and social life. "And the individual is always in constant learning, whether intentional or not" (LAKOMY 2008, p.16), according to Melo and Urbanetz (2008, p.105), "it is in the success of the teaching-learning relationship, more specifically, in the latter that all didactics gains meaning". Therefore, learning activities can count on an ally in this process, as the presence of music in the school environment changes the behavior of students, depending on the rhythmic style, it can make them calmer or more agitated and knowing how to dose or balance, at appropriate times one gets to control their mode of action, how would this happen? Well, in times when they were agitated, music with a calmer aspect or rhythm is played, inducing the brain to react to actions in order to delay impulses, otherwise a more agitated rhythm does a reverse action, that is, early on when they arrive at school when they hear the sounds of more rhythmic music, giving the brain a motivation to wake up the body, in the same way at recess to control agitation a less agitated music stimulating inversely. For Weigsding and Barbosa (nd) "the influence of music on human behavior mainly categorizes two styles of music, sedative and stimulating".

The sedative-style music comprises slow tempos, with simple harmonies and light musical variations. One of its characteristics is the fact that it can make physical activity smooth or increase the human being's contemplative capacity, producing a relaxing effect, with a reduction in heart rate, blood pressure and ventilation. On the contrary, stimulating music can produce an exciting effect by increasing the rate of breathing, blood pressure

and heart rate as a result of sympathetic autonomic activation that produces a sensation of heightened alertness (WEIGSDING and BARBOSA nd).

One cannot expect anything other than a response to the given stimuli. Studies in the field of neuroscience point to satisfactory results from the action of music on the brain. Hardly anyone listening to a sound set to music is indifferent to it, some part of this sound will call their attention, eliciting some memory from their auditory memory, searching for the most remote memories. As a language that works with rhythm, structure and symbols and is a facilitator of memorization, through listening, as a socializing agent in group dynamics and a brain stimulant, so music makes its contribution in a simple, but simple way. , embracing.

MUSIC AND NEUROANATOMY

Human behavior differs from person to person, according to the stimulus received, there are multiple reactions, with music it is also like that, depending on the style, rhythm, sound, the reactions can be pleasing or not, for Muszkat with the advance and the expansion of knowledge of the bases of brain processing, and the technologies that support studies in this scientific area through neuroimaging, "it becomes possible to verify in real time how the brain processes, gives meaning and emotion to the impalpability of organized sounds and articulated silences" (MUSZKAT 2012, p. 67). The brain, due to its structure, according to Lemos (2015), has in its gray area, several folds and grooves that increase its anatomical and functional area, also called convolutions, fissures or fissures. These fissures divide the brain into areas with delimited functions, the first being in the longitudinal plane, by dividing it into the right hemisphere that coordinates the left side of the body, and the left that coordinates the right side of the body.

What is interesting is the role it plays, and how this is processed in each hemisphere, the right in emotions, hallucinations, dreams or ideals, in musical skills, constructive skills, among other functions, and the left in visual, tactile information, in vision functional aspects of things, in calculations and in oral and written communication. Also considered the dominant side in 90% of people because there are two important areas in it, Broca's area, located in the frontal lobe, and Werneck's, in the temporal lobe, are responsible for the coordination and development of language and orality (LEMOS 2015). In addition to these, no less important is the parietal lobe, responsible for receiving tactile (primary area) and proprioceptive (secondary area) sensations, which interprets sensations by responding or associating, forming memory and learning, and the occipital, which detects sensations visual, has its primary and secondary division and afferent, interpretive, memory and learning functions respectively (LEMOS 2015).



Figure 01. The musical brain, its parts and functions (LEMOS 2015, p.102)

To reach an understanding of how this organ works and processes information, much study is still needed, even with what has been discovered, of neuronal connections, the release of substances such as dopamine that bring satisfaction, pleasure when listening to a melody.

The link between music and dopamine, which is a neurotransmitter and is associated with the brain's reward mechanisms, responsible for making us feel pleasure and happiness, has been scientifically proven. Therefore, any activity that influences their release is beneficial, such as practicing physical exercises, listening to music, among others (MESSAGEIRO DA PAZ p.23 No. 1582-March 2017).

One cannot deny the effects or the power that music has to directly interfere with brain functions, and the benefits it brings. Muszkat clarifies that in the brain, when processing musical information, sound stimuli, a wide area is involved related to the perception of pitches, timbres, rhythms, he adds that, "music is not only processed in the brain but also affects its functioning" (MUSZKAT 2012, p.68), and that these physiological interferences range from the neurovegetative modulation of cardiac, respiratory and electrical rhythmic variation patterns, and the release and production of neurotransmitters linked to pleasure, pain neuromodulation, and neurotrophins produced in challenging situation (MUSZKAT, 2012)

Musical activity mobilizes large brain areas, both phylogenetically younger (neocortex) and older and more primitive systems, the so-called reptilian brain that involves the cerebellum, brainstem areas and the cerebral amygdala, stages, the first of which is the sense - Musical perception located in the temporal lobe, more precisely in the primary auditory cortex, initially decodes the pitch, timbre, rhythm and makes the connection with the rest of the brain in a round trip circuit, with memory areas (hippocampus), which familiarizes with thematic and rhythmic elements, and with areas of motor and emotional regulation such as the brain and amygdala (which attribute emotional value to the sound experience (MUSZKAT, 2012, p.67).

The first step is to listen, so initially the temporal lobe is awakened, activating the auditory memory that makes the relationship with the received sound stimulus, which for Muszkat influences the planned behavior in response to the music, interconnecting with the frontal lobe that deciphers the sound structures, it is known that the musical experience brings brain changes, and training with music, in addition to size increases the connectivity (more synapses) of other brain areas such as the corpus callosum responsible for the union of the hemispheres, the cerebellum and the cortex motor.

The left side of the brain is the most activated, which in fact, Muszkat (2012), contributes to developing the linguistic functions located in this area. Several neuronal circuits are activated by music, since music learning requires multimodal skills that involve the perception of simultaneous stimuli and the integration of other cognitive functions such as attention, memory, and areas of body association. In this sense, the study of music can be a unique tool to expand the cognitive and emotional development of children, including those with disorders, neurodevelopmental disorders such as attention deficit and dyslexia. The use of music, not specifically in the treatment of people with disabilities, but when focused on cognitive brain development is also called Neuroplasticity, in this case, used to stimulate brain functions, reorganizing structures, developing other areas. That's why it is so relevant in humandevlopment.

MUSIC, MEMORY AND LEARNING: The child in the early stages needs means, incentives, that call their attention, that's a fact. If you have to choose between watching a drawing or listening to any narration, whoever is speaking will be alone, because the simple fact that in the drawing it will have different sounds (different timbre instruments, height, duration, speech), onomatopoeic sounds, colors, in short, many stimuli that the narrative often lacks. And by way of information everything reaches the brain, some selected, something in which there was an interest, which will go to the long-term memory, others not, they will be forgotten more quickly, they stay in the short-term memory, and the formation of memory it gives from these

relationships with the environment in which it is inserted, and relates to the development of language and thinking, this is one of the principles of Vygotsky's proposal according to Palangana...

The complex functions of thinking they would be formed mainly by social exchanges and, in this interaction, the most important factor is language, that is, communication between men. During the first months of life, the child's activity system is determined by its degree of organic development and, in particular, by the use of instruments (PALANGANA 2015, p.103).

The interaction with the environment is enough for there to be reactions in mental structures, the child alone can develop means to perform certain tasks, what Vygotsky calls ZPD (Zone of Proximal Development), at first its action with the instruments (objects whether physical or symbolic) in the environment, according to their needs. When the child interacts in the environment, his actions generate brain reactions that form the structure, or scheme that help his learning, when a new problem arises, the memory is activated, seeking, from the experience, the solution for the new case, that is, the applying the first learning in the problem solving, the child shows the learning by what he/she has already experienced. According to Mora (2015), memory is defined as the individual's ability to store information and retrieve it later in a position to use it. It is the faculty that the child develops with age, according to the author "the reasons by which the ability to remember, increases with advancing age, are not sufficiently clarified" (MORA 2015, p.369).

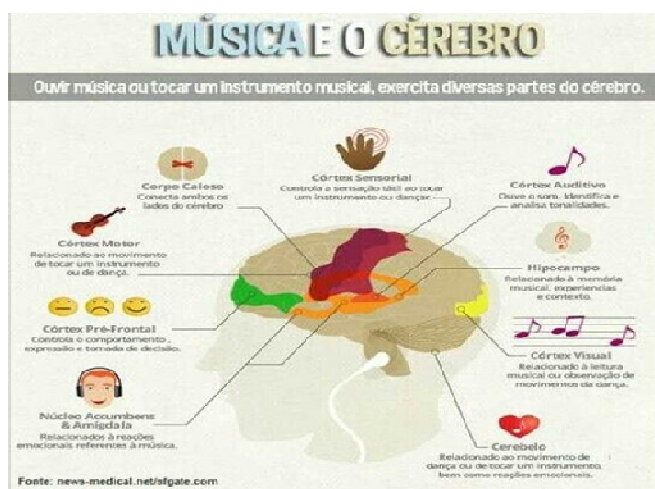


Figure 02. Music and the brain, its parts and functions (LEMOS 2015, p.200)

It is not just now that pedagogy meets music, several scholars such as Dalcroze, Kodály, Edgar Willems, Carl Orff and others have developed methods, programs, musical activities aimed at sensorimotor, operational, rhythmic development. In this setting, the role of activity musical, oriented, directed, aiming at the apprehension of a specific content, it makes a difference. By intermediating educational actions, using music, with sounds, gestures, rhythms, we seek to facilitate assimilation, this of course with the repetitions necessary for the age group, the association of learning comes from the memorization of the lyrics of the song, arising from constant listening. As a connoisseur of the operational phases, he knows that each one has specific activities that need to be developed over time, as well as the brain areas that are activated or compromised due to some biological or environmental factor, so the role of the neuropsychopedagogue is to propose activities, looking for means, developing projects that address these periods, phases or learning difficulties, and stimulation so that the child achieves their cognitive, intellectual development,

FINAL CONSIDERATIONS

As Lima (2014, p. 304) points out, "it is important for the teacher to know the sociocultural conditions, expectations and cognitive skills of

students, because, in this way, they will be able to select problem-situations related to their daily lives". Talking about music opens up space for the creation, imagination, interpretation and expression of the particular knowledge that each student has. Thus, this study offers the opportunity to conclude that learning needs to be inserted in the classroom as something pleasurable, and that all areas have a significant participation in cognitive development. The child grows up listening to music from the mother's womb. She is constantly in contact with the music, with the sound, the rhythm, in short, she needs music, because that's how she establishes her interaction with the environment. Music brings hearts together, overcomes barriers, expands and facilitates the child's development. Music provides children with a change in behavior, songs, body percussion, construction of instruments, circle songs, among other musical activities, make children more relaxed and participative, attentive to content explanations. Music should not be seen and used as an exclusive tool for the training of future musicians, but rather as an indispensable tool in the child's development. It must always be present, enabling the child to be involved in the group, facilitating their socialization, their motor coordination, their verbal language, their body language, assisting in the development of their skills, finally, we can see that music provides a broad knowledge and has as a function entertainment, fun, pleasure and joy.

It is necessary that teachers recognize that they are mediators of culture, within the educational process, therefore, they will be able to take advantage of the means at hand to create and recreate, in their own way, enabling children to build their knowledge about music, of course he does not need to be a specialist in all aspects, but he should be aware of all dimensions that concern the child and their education, including the role of music, which is fundamental for the development of teaching and learning, as well as a vehicle social, which helps children to overcome, negative effects of their daily lives and that are part of their routine, such as poverty, family breakdown and other types of situations, restoring their self-confidence, communication, self-esteem, sociability... It is understood, then, that when working with music in the classroom, it does not mean to train artists, but rather to give the subjects opportunities to learn about a new form of language that encompasses writing, orality and body expression, promoting knowledge of different cultures represented by music, the social reality of some places and the freedom to produce and reproduce knowledge about art. When music is perceived by the teacher as a source of teaching and learning, the most common actions carried out in daily life are transformed into experiences, capable of stimulating its development. In this sense, it can be accurately said that music, like other disciplines, has a wide world of knowledge, which leads the student to seek new curiosities that promote the development of improved intellectual knowledge,

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