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Separation, Farewell, Departure, Loss, and Death Explained with Classical Music to Young Adults With Severe Disabilities

In-Press

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Abstract

Classical music has been widely used by scientists to better understand the origins and the nature of emotions in relation to the brain functions, and to the socio-cultural background of humans. The professional literature shows that its use has been rarer when working with exceptional children in special education and in music therapy. This anecdotal paper describes a project prepared and presented by a transdisciplinary team (teacher, speech pathologist, music therapist) during two years with young adults with severe cerebral palsy and moderate to profound mental retardation. Cognitive achievements have been noticed such as the students' ability to recognize and identify musical themes, an increase in their attention span, an improvement in their memory skills, a steady, on-task behaviour, and the presence of relevant, appropriate and unquestionable facial expressions when listening to music. To note is that the term "mental retardation" has been used in the diagnostic sense in this paper.

Today, as schools are under competitive pressure as far as their students' achievements and intellectual accomplishments are concerned, the use of music is considered mainly as leisure and is not always included in regular school programs. Arts represent a secondary discipline mostly acquired outside regular education frameworks. Exposure to classical

music takes place mainly in music schools and in the music departments of colleges and universities. The strong influence of the media has allowed popular music to almost entirely dominate private and public structures from commercial centres to schools, while classical music belongs more to concert halls, only-classical music radio stations and television channels (Jorgensen, 2003). Sloboda (2001) raises the problem of sociocultural differences between teachers and their students' approaches. According to Woody and Burns (2001), pop/rock music is the preferred music style among adolescents, whilst classical music is the most listened to music for only 1% of them, even though 63% of these students admitted having a past emotional response to classical music. Listening to pop music is for the adolescents a sort of "pass" for social acceptance among peers (North and Hargreaves, 1999), although young children, who are not yet under this kind of social pressure, are quite willing to listen to classical music. Sims's study (2005) shows that there are no significant differences between time-length of classical music listening amongst preschoolers when asked to perform a specific task while listening to classical music and listening to classical music during their free time. Peery and Peery (1986) found that preschool children exposed to classical music activities for ten months, developed a preference for this music style even though the posttest did not show any significant decrease in their liking for popular music. Numerous books and studies have reported and validated the impact of classical music on human beings in all kinds of populations including the unborn child (Kisilevsky, Hains, Jacquet, Granier-Deferre, & Lecanuet, 2004). As for non-humans, Nuňez et al. (2002) found that music had an effective and beneficial effect on the immunological system of rats injected with cancer cells. The effect of classical music has been measured on some physiological functions of premature babies. Both stimulative and sedative music showed significant positive changes on the babies' systolic blood pressure, heart and respiratory rates. (Lorch, Lorch, Diefendorf, & Earl, 1994). In addition, classical music has helped scientists understand the relationship between emotions and human brain (Peretz, 2001), as well as the association between language and music (Koelsch, Grossmann, Gunter, Hahne, Schröger, & Friederici, 2003; Koelsch, Kasper, Sammler, Schulze, Gunter, & Friederici, 2004). Also, classical music has been shown to have a strong effect on metabolic functions. Compared to jazz, pop music and no-music, listening to classical music had the most beneficial effect in reducing blood pressure after a stressing task with college students (Chafin, Roy, Gerin, & Christenfeld, 2004). Le Roux, Bouic, and Bester, (2007) found that listening to Bach's Magnificat during a 30 minute treatment had a beneficial effect on emotions and reduced the level of the stress-fighting hormone, cortisol. Other studies have tested the relaxing effects of classical music on stress when the latter is measured by systolic blood pressure and heart rate (Knight & Rickard, 2001). Burns et al. (2002) compared the effect of classical music to hard rock and the effect of self selected relaxing music on perceived and physiologically measured relaxation. Self reported states of relaxation are an indication of probable emotional/psychological states generated by music. Mozart's "Eine kleine Nachtmusik" had the greatest effect on students' reported relaxation states in comparison to New Age music (Smiths & Joyce, 2004). Based on the belief that listening is a fundamental condition for learning, Tomatis, (1991) used Gregorian chant and Mozart's music for the treatment of learning disabilities, autism, languages and communications deficits, as well as for

social and psychological problems of children and adults. Based on his belief that both ears do not hear equally and that some people don't hear certain frequencies, Tomatis, an ear nose and throat specialist, developed an electronic device that filters the frequencies of the music. The patient's ears are stimulated by the high frequencies of the music which has a positive effect on the different functions of the brain. The music of Mozart and its influence on reasoning, intelligence and mood, known as the "Mozart Effect", has attracted many researchers. The results of several studies are either controversial or not clear-cut so that the famous Mozart effect has been a debated issue in many studies as emphasized by Steele et al. (1999) and by Van Gundy (2004). The relation between music and emotions from many points of view and by different scholars has been also reported by Juslin and Sloboda (2001) and by Vink (2001). Emotions elicited by music seem to be a biological reaction but also the result of a cognitive and social process, and no clear-cut conclusions have yet been drawn. In an investigation by Jensen (2001), undergraduate students found that classical music had an inspiring effect for writing about their emotions. Juslin and Laukka (2003) have analyzed different but not yet conclusive studies on the communication of emotions in vocal expression and music performance. They suggest that both voice and music are linked as far as the communication of emotions is concerned, but due to its technical possibilities, instrumental music surpasses the human voices, therefore making musical instruments "superexpressive voices". Fernald (1989) studied the prosody of mothers' messages and her research showed that the melodic contour of speech is meaningful to babies and represents an important tool for the language comprehension of the child. Classical music offers us a large diversity of hidden words, images, scenes and feelings. Its structural features, melody, rhythm, tempo, timbre, as well as its dynamics are the fundamental elements that make this style such a rich, exceptional and powerful force on the human body and the human emotions. All these components have an impact on our emotions as discussed by Gabrielsson and Lindström (2001). Listening to classical music makes our body move or relax, our heart laugh or cry, arouses our imagination and awakens memories, (Scherer & Zentner, 2001). Helen Bonny in an interview to Music Therapy Perspectives (2001), states that classical music heard in a relaxed state, can lead persons to spirituality.

Setting

This project was run in Tel Aviv (Israel) in a day-care centre for the treatment, rehabilitation and education of 55 children and young adults affected with cerebral palsy (CP) between the ages of 6 and 21. CP is a condition that affects some 8,000 children each year in the U.S. This neurological condition, due to some brain damage that occurred around birth, can reach different levels of severity, from the mildest motor handicap to a severe one and can be accompanied by sensory impairments, language deficits and mental retardation (United Cerebral Palsy National, 2007). All the young people attending this Israeli centre were severely brain damaged, wheelchair bound (none of the children were self ambulatory), unable to fulfill their activities of daily living, sensory impaired, and had mental retardation (their mental retardation varied from moderate to profound retardation and has been evaluated by a social worker). Ten students were grouped together in one classroom where they received their formal education from a special education teacher

and group therapeutic activities such as occupational, music, art, pet and speech, provided by professionals. All these disciplines were given also on a one to one basis. In their classroom, the children were grouped according to their chronological age and not according to their cognitive level or level of functioning. Some children were verbal, but their speech was limited in vocabulary and distorted because of muscular problems that are typical of cerebral palsy. Some expressed themselves with the help of a communication board or an electronic device and some others communicated only by activating a voice output communication aid (VOCA). A VOCA is an electrical device where simple messages can be recorded in order to assist people with communication impairments. In addition to the sensory-motor deficits present at birth, the lack of environmental and social stimuli of those who reached adulthood added to their intellectual deficits and to their level of emotional maturity that did not correspond to their chronological age.

The project was presented to a group of ten young adults from 19 to 21 years of age (three females and seven males). Seven of them had a relatively high level of functioning. Four of them were able to communicate verbally (one female and three males); two other students (one female and one male) used a communication board with Picture Communication Symbols (PCS) and one male communicated by answering "yes" or "no" to questions. The other three students, (low functioning group) were three young people with profound retardation (one female and two males) who were unable to communicate either verbally or with the help of a communication board. Laughing, smiling or crying was their only way of expressing themselves. They were, however, able to activate a voice output communication aid when presented with two taped messages, each on a device, but their choice seemed to be arbitrary and not always appropriate.

Project Goals

The goals of this project were:

1. To explain to the students the concepts of separation, farewell, loss, departure and death through the stories of music composers.
2. To use the musical examples as a reinforcement and as a complement to the stories in order to help the students perceive and internalize related emotions.
3. To arouse and elicit emotional feelings among the students.
4. To widen and deepen the perception of their world, and to enhance their imagination, their creativity and their verbal skills.
5. To prepare the students cognitively and emotionally for their own departure from the day care program and for other possible similar experiences they might have to cope with in the future, in the hope that they would express themselves freely according to their own needs, on other occasions and in other frameworks.

Description of the Project

This program was conducted over a period of two years. It was presented once a week for two hours each time. Its idea came as a result of the fact that each year, a number of students, having reached the age limit of 21 years, had to move from the centre and leave behind classmates with whom they

had spent many years together. Neither the ones who were about to leave, nor the students who were still staying, understood and internalized the importance of departure and its consequences after spending up to 15 years together with their peers. They were not capable of expressing themselves in any manner on the subject, except by telling that they were leaving. Asked to give examples about a departure-related situation they could not even mention one. The teacher decided therefore to choose the term "farewell", as the year's central subject. This subject was to be explained to the students and developed through the whole school year by their teacher, by therapists and other professionals as well (speech pathologist, art therapist, pet therapist and school counsellor), hoping that these young people would be able to cope adequately with the reality and to feel and express emotions appropriately. All the professionals were asked to relate to the subject within their own discipline and orientation during their group sessions. The music therapy program was, however, developed in common with the music therapist, the special education teacher and a speech pathologist. The music therapist was the main therapist while the teacher and speech pathologist contributed on the basis of their own area of specialization. Since the term "farewell" is related to other concepts such as "departure", "separation", "death" and "loss", it was decided to bring up these terms as well and explain them to the students through the stories and the musical excerpts of six classical music composers who composed a particular piece of music as a result of a personal and significant farewell episode. The stories were carefully chosen as they also reflected the true and actual life of Israeli people.

During the first year, the teacher, the speech pathologist and the music therapist worked together as a team. The teacher and the music therapist jointly presented the program, while the speech pathologist was giving the same program separately to a non-verbal student in a separate room. In the second year, the material prepared by the teacher was used, with new ideas and material added by the speech pathologist substituting for the teacher who was on sabbatical leave. Four to six weeks were needed for each composer. First, a short and relevant-to-the-subject biography of the composer was narrated to the students. Then, the music therapist highlighted the farewell episode, emphasizing the feelings of the composer in relation to the event. For this purpose, she chose a musical excerpt that would best describe in sounds the situation and/or the feelings of the artist. The musical excerpt was short so that it would most accurately evoke in sound what words could not express, that is: "emotions". The music was taken from personal CDs, and played on a CD tape player. The musical passages were also taped on cassettes so that the speech pathologist and the teacher could play them to the group outside the weekly sessions. In the first year, five musicians were presented and in the following year, the stories were repeated and a new composer was introduced. In the higher functioning group of students, three heard the program in both years and four students heard it either in the first or in the second year only (each student stayed two years in the same classroom). The lower functioning group was present only in the second year. During the second year and after the presentation of each composer, the speech pathologist wrote each story in rhymes, then recorded the text and the music in an animated PowerPoint presentation. The music therapist added artistic paintings and/or pictures (taken from the internet or from the music therapist's own books). The students could see and hear all the stories and the

music on the class computers. Texts and pictures were also printed by the therapist in a booklet. The students were encouraged to access both the computer and the booklet.

In the first year the teacher rehearsed the stories with the students several times during the week, and played the musical excerpts on a tape. For each story, she hung on the wall a portrait of the composer and pictures of the relevant instruments/orchestras, so that the students were continuously visually stimulated. The musical examples were also taped by the teacher on a VOCA accessible to, and activated by the students. She encouraged them to formulate personal opinions such as "What would you do if you were Chopin: would you stay in Poland with Maria, or would you travel to France?" or to recall personal stories: "Do you have a sibling who served in the army?" The speech pathologist wrote the story in PCS (pictures communication symbols) and each non-verbal student was provided with his own communication board. The complexity and numbers of symbols varied according to each student's cognitive level. Each session started with questions and musical quizzes from the previous week prepared by the team. The speech pathologist recorded the questions and the musical excerpts on VOCA devices that were activated by the low functioning students so that they would be kept active.

The Six Composers, Their Story, Their Music

The stories and music of the following musicians were presented to the group in the order listed below. Biographical information about these musicians was compiled from the Harvard Concise Dictionary of Music (Randel, 1982).

1. Frederic Chopin (1810-1849): one of the most famous composers and pianists of the Romantic period of music (c. 1815-1910) who composed music for piano solo almost exclusively; he was born in Poland and died in Paris, France.
2. Johann Sebastian Bach (1685-1715): a German composer and organist of the Baroque period of music (c.1600-1750); he is now considered to be one of the greatest composers of all time.
3. Piotr Illich Tchaikovsky (1840-1893): a famous Russian composer of the Romantic era.
4. Wolfgang Amadeus Mozart (1756-1791): a prodigious piano, organ and violin player as a child and prolific and influential Austrian composer of the Classical period of music (c.1750-1820); he was born in Salzburg and died in Vienna.
5. Maurice Ravel (1875-1937): a Basque French composer and pianist known also for the colourful effects of his orchestration. Several of his compositions are associated with the impressionist style of the French composer Claude Debussy (1862-1918).
6. Franz Joseph Haydn (1732-1809): an Austrian composer considered to be one of the foremost composers of the Classical period.

Apart from Haydn, all the other composers created these pieces of music close to a personal period of stress. Simonton (2001) believes that the degree of the melodic originality in a composition is a reflection of a stressful phase that the composer went through and therefore will express and provoke strong emotions.

Chopin left Poland at the age of 18 to pursue his musical career in France, leaving behind his beloved friend Maria whom he intended to marry. On one hand, he was happy to go abroad and pursue his musical career, but on the other, he felt sad to leave his homeland and his friend Maria for whom he composed the "Farewell Waltz" op. 69 no. 1 in A flat major (Jachimecki, 1930). The music therapist found that this composition did not emphasize strongly enough the ambiguous feelings of Chopin that she wanted the students to feel through the music, so she chose instead the Waltz op. 70 no.1 in G flat major that contains a melancholic part (Meno mosso) inserted between two happier parts (Molto vivace). The music therapist insisted in choosing a waltz rather than any other of Chopin's compositions, in order to remain as close as possible to the originally written composition. Chopin had to deal with a geographical separation which, for the students, was the easiest concept to understand, as they were about to face the same situation themselves at the end of the school year. The story and the music of Chopin helped the professional team explain the different feelings that these young adults might experience after leaving the centre and before arriving in a new framework.

Johann Sebastian Bach was the second composer chosen for the project. The famous Baroque composer wrote the Capriccio in B flat major (BWV 992) that he himself named "on the departure of his beloved brother" (translated from Italian) after he tried in vain to convince his brother not to join the army. Each of the movement of the Capriccio has a descriptive title given by Bach himself (Marcel, 1966). Three different musical excerpts were used: One described the background, that is, the military atmosphere (Aria di Postiglione); the other two emphasized Bach's feelings after his brother's decision. Bach was already confronting the notion of danger and possible death, and we used this example in order to give the students the message that separation can sometimes be a painful experience. As most of them had siblings serving in the army, this example was also appropriate.

Tchaikovsky, the next composer, heard that Nikolai Rubinstein, his close collaborator and teacher, was very ill. He hurried to his bedside but did not arrive on time to see him alive. About a year after the death of Rubinstein, Tchaikovsky wrote the Trio op. 50 in A minor for piano, violin and cello, named: "in the memory of a great artist" (Evans, 1963). Tchaikovsky felt very disturbed and saddened by Rubinstein's death. To illustrate these feelings of frustration and grief, we chose to play the last part of the Trio (from bar 244 to the end), where these emotions are expressed through the strong contrasts in the tempo, the timbre, the pitch and the dynamics. With this example, the students had to cope with the concept of death, its irreversibility and the two extreme and intense feelings of "anger" and "grief". Even though the students were themselves exposed a few times to this situation after the death of some of their young friends from the centre, or the loss of a family member, their reactions were inappropriate or nonexistent when asked about "death". Therefore, we found that it was an opportunity to go beyond the concept of farewell and reach the subject of "death". The team thought that from the story of Tchaikovsky, the students could understand the concept on a cognitive level, while the listening of the extremely contrasting sounds of the music, would to some extent arouse them emotionally.

The story of Mozart was intended to give the students a different image of the

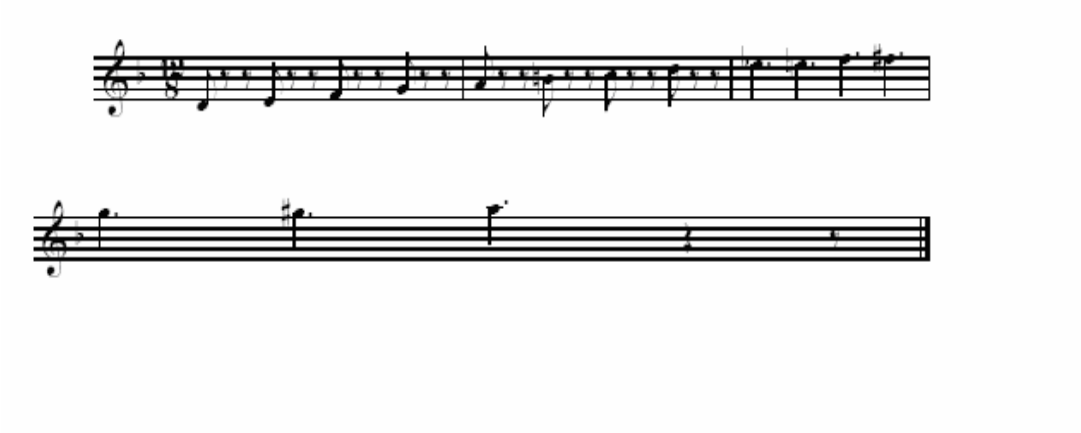
"death" concept. Mozart composed his Requiem (K. 626) three months before he passed away. He felt that his time had come and he accepted the death serenely when he wrote in a letter to his father:

> As death is the true goal of our existence, I have formed during the last few years such close relations with this best and truest friend of mankind that his image is not only no longer terrifying to me, but is indeed very soothing and consoling! And I thank my God for graciously granting me the opportunity of learning that death is the key which unlock the door to our true happiness. I never lie down at night without reflecting that -young as I am- I may not live to see another day. Yet no one of all my acquaintances could say that in company I am morose or disgruntled. For this blessing I daily thank my Creator and wish with all my heart that each one of my fellow creatures could enjoy it. (Marshall, 1991, pp. 197-198)

In order to best illustrate this state of mind the very short passage of the "Lacrimosa" was played (see Figure 1). Through this musical excerpt, the concept of Heaven was brought up and described by the teacher through every-day-life examples that aimed to explain that each end is also a new beginning. The author did not want the students to have a sad, hard and final image of death, so she linked it to a more positive one, the holy symbol of Heaven.

Figure 1

Excerpt from Mozart's Requiem: Analogy between the ascending notes and the soul mounting to Heaven



This musical example was copied from: Wolfgang Amadeus Mozart: Requiem K. 626. Boca Raton, Florida: Edwin F. Kalmus & Co., Inc., Publishers of Music.

The next story involved the pairing between Maurice Ravel and the pianist Paul Wittgenstein. The latter had lost his right hand during the First World War and Ravel composed for him the "concerto for the left hand" in D major (Seroff, 1953). We chose this peculiar example to explain that the term "farewell" is not only related to someone's departure or someone's death but to some "loss", in this case the loss of a part of the body. A very short passage (the very beginning of the last movement), was played. The music therapist used the "war" as a metaphor to describe the musical

example. This short and particularly dissonant music excerpt meant to help the students feel the harsh, painful, brutal and complex nature of war. This example was important in our country where wars and terror have left people with similar wounds. Incidentally, the team could come across personal life's examples. The Ravel/Wittgenstein story was presented only during the second year.

The last musical story that illustrated the "farewell" concept was an optimistic story. Joseph Haydn composed the "Farewell Symphony" in F sharp minor (no. 45) after his musicians requested some time off from the prince's court in order to be reunited with their families (See figure one). Haydn had a tremendous sense of humour. In composing the "Farewell Symphony" at the end of the Adagio, he had the players leave the stage one by one when they finished playing their part. The prince understood the hint and immediately released the musicians from duty. This symphony was selected at the eve of the summer leave as a closing and optimistic message to the students, and to demonstrate to them that "Farewell" can also be an experience with a happy-ending. Figure 2 shows the slide of Haydn used in this musical therapy program.

Figure 2

Portrait of Franz Joseph Haydn

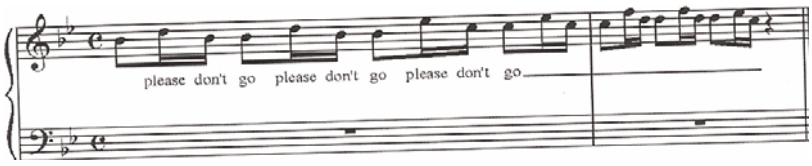
Hayden was a nice person and a great composer. His musicians treated him with respect and called him "Papa". His music is still played a lot on the radio and at concerts almost every day. *Picture scanned from Barbaud (1957), p.54.*

The Role of the Music Therapist

The music therapist's role was the central one: she chose the stories and the musical excerpts and presented them to the group of students. She wrote and adapted words to the music in order to have the story and the sounds connected to each other, making the music more understandable to the students. For example, the words "I am upset" (originally in Hebrew) were added to one of Tchaikovsky's section and the words "please don't go" (originally in Hebrew) were added to one of Bach's excerpts (see Fig. 3). The students memorized these words spontaneously and while listening to the musical excerpts, they sang the words, just as when they had learned a song. She also used analogies and metaphors. For example, the rising notes of the voices in Mozart's Requiem were described to the students as the soul mounting to Heaven (see example three). Stollak and Alexander (1998) approve the use of analogies and metaphors for improving performances of musicians and choir singers.

Figure 3

Excerpt from Bach's Capriccio: Adaptation of words on the music

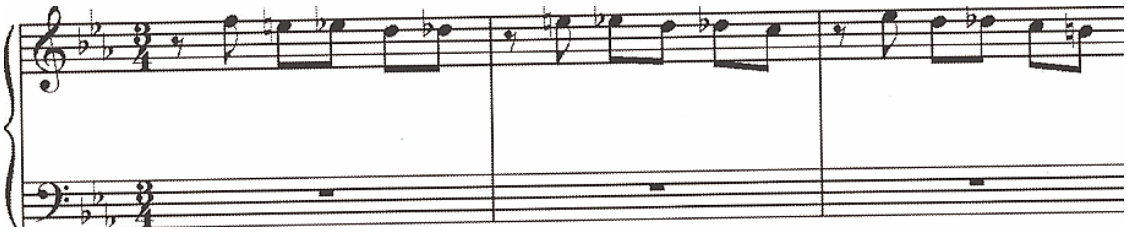


This musical example was copied from J.S. Bach: Suiten, Sonaten, Capricciosos und Variationen (1975).

The music therapist compared the chromatically descending notes of the cembalo in Bach's Capriccio, to Bach's weeping. In music, chromaticism is the succession of ascending or/descending semitones (see Fig. 4). Chromaticism is described by Simonton (2001) as a way of writing strong emotions. The last example of Bach, the "aria di postiglione" that musically describes through its rhythm the military atmosphere, was also played by the music therapist on the synthesizer with the trumpet-button-effect for making the military atmosphere more real and more noticeable. The musical motifs of all the above examples repeated sequentially helped the students to remember and internalize more easily.

Figure 4

Excerpt from Bach's Capriccio: Descending chromaticism compared to Bach's weeping.



This musical example was copied from J.S. Bach: Suiten, Sonaten, Cappriccios und Variationen (1975).

Observations and Discussion

The 10 students taking part in the study came from families where classical music was not heard on a regular basis at home. During this project, we noticed unexpected reactions on the part of some students (see Table 1). To maintain confidentiality, the 5 students whose responses are summarized in Table 1 have been denoted by the letter A to E and their gender masked. One student, (A), who participated both years in the project was able to easily recognize and identify without hesitation and in any order of presentation all the musical excerpts, and relate them to their composers and their stories. Student B was sometimes off-task and was not able to answer simple questions when asked. But after the stories were read in rhymes, this individual quickly learned them by heart. This technique helped this student stay motivated and concentrated. Another student, (C), often became mixed up between one story and another. However, this student could recognize and name all the musicians from their portraits. Moreover, the listening of the musical excerpts was the trigger for recalling the

stories. Visual and auditory stimuli had an apparent positive effect on this student's memory. This particular student sometimes said spontaneously while listening to the music that it was a "nice music". It was difficult to know whether C had actually experienced a feeling of pleasure by listening to the music, or could express cognitively a personal opinion based on personal music knowledge. From student C's family, we were told that C had never been exposed to classical music before. One non-verbal student, (D), reacted intensely to Ravel's musical example by becoming very emotional. Each time student D listened to the Ravel excerpt, they made loud voices sounding like fear and restless movements on their chair. This particular student was usually either completely passive and did not cooperate with teachers/therapists – adopting a catatonic position, or was very destructive during regular classes – making unintelligible sounds and voices, and seldom participating. The only way to keep student D quiet in the classroom was to allow listening to popular music alone in one corner of the room. During this weekly two hour program of classical music, not only was D quiet and attentive during the whole time, but participated, still sitting in the corner, and was willing to answer the quizzes, even though the answers were not always correct. This student understood the spoken language, was able to say the words "yes" and "no", and to use these words together with gestures to communicate with people. D would calm down only after we understood exactly the message that she (he) had in mind. She (he) told us that Ravel's piece frightened her (him). Obviously, it was a first step toward free expression for these persons (C and D) whose world had been based on day to day concrete and materialistic situations with unattainable emotional experiences. Another student, (E), was able to easily identify and name the instruments that were mentioned during the presentation (cembalo, piano, violin, cello). The rest of the students (1 female and 4 males who were high functioning) demonstrated positive behaviours all through the presentation of the project: They listened attentively, answered questions, and tried to concentrate in finding the correct answer. They did not disturb, nor did they show any sign of fatigue or lack of interest. Two teacher's assistants who were on a daily basis constantly present in the room, happened to personally enjoy the program that, so they said, "added to their musical culture". They sat close to the students who needed help, keeping them on-task, and assisting them with their communication board when needed. Unmistakable observable criteria that enabled the professional team to estimate whether or not the students responded emotionally to the presentations, were their changing facial expressions, the most basic and primary form of communication, as well as their eye-contacts. With the multiply disabled populations, maintaining eye-contact is an important factor to monitor the on-task behavior of a person.

Table 1

Main effects of classical music on five students

Student identifier	**Effect of the stories and music**
A	Remembered story and music in any order of presentation
B	Memorized text in rhymes
C	Recognized portraits of composers; expressed personal feelings
D	Expressed feelings of fear from Ravel's music
E	Identified and named instruments when played

It seems that:

1. The fact that the subject was entirely new to the group of people and not a "déjà vu", added to their curiosity, their motivation and their openness toward this new program.
2. The fact that the music was added to the stories made the experiences less monotonous. The pairing between both captivated the group's interest. While the students usually manifested a limited attention span, they maintained it during the entire session. But this positive behaviour was not reported and/or observed in other activities by other professionals. Baumgartner, Esslena and Jäncke (2006), show that the combination of an emotional picture and the listening of classical music evoked stronger physiological and self rated reactions compared to a pictorial stimulus only. They believe that these simultaneous stimuli can enhance emotions and elicit a cognitive process. Perhaps the emotional aspect of the story acted like an emotional picture, thus arousing the students' emotions and improving their intellectual skills.
3. The presence and interaction of two professional people at a time certainly made the activity more interesting and challenging to the students. They were never left without stimulation at any time during each session.
4. An effort was made to attain the best environmental conditions in order to help the students stay on-task and not to be disrupted. The team emphasized that no one should walk in and go out of the room during the entire session. Furthermore, one student who did not fit to the program because of his uncontrolled screaming, did not participate in the project and was taken out of the room for another activity.
5. The program was never interrupted. When one member of the team was missing, the other was responsible for presenting it alone.
6. Even though the PowerPoint presentation and the books were made only during the second year, they turned out to be an important tool and an additional technique that helped improving the memory of the adolescents. The prosodic and rhythmic nature of rhymes was an extra aid for some of the students who memorized the stories the way they would learn a new song.
7. All the stories were narrated by the music therapist in a drama-like style, with mimics, gestures, facial expressions and voice-timbre changing according to the situation, so that the stories appeared more real and more alive.

These students could not be musically active in playing because of their severe motor handicaps; neither could they sing because of their multiple vocal disorders. However, they were internally engaged in the music experience. In contrast to normal young adults who, at the same age, are under their peers' social pressure and chose mostly popular music as their own music style (Woody & Burns, 2001), severely physically handicapped people by being dependent on others, adopt generally a positive and cooperative behavior toward teachers, therapists and other care givers, therefore manifested their enthusiasm for listening to classical music. Even though popular music is the so called "preferred" music of adolescents and young adults, the author believes that the unfamiliarity with this style of music was challenging to them, thus inciting them to curiosity. In addition,

classical music can trigger other positive reactions on the part of exceptional people such as improving their attention-span, their concentration level, their memory, their verbal skills, their intellectual and cultural backgrounds. There is in fact a relatively new debate about emotions: Are they the result of a cognitive process or are they produced directly by the music? Peretz (2001) believes that there is an innate emotional reaction to music in the same way as there are innate facial expressions of emotions. We are confident that the verbal cues helped them on a cognitive level and that classical music stimulated and aroused their emotions, even though they could not express them verbally. We believe that the association between stories and music linked between the people's cognitive process and emotional state and narrowed the tremendous gap between their chronological age and their level of maturity. According to Terwogt and Van Grinsven (1991), five to ten year old normal children can recognize the feelings of happiness and sadness expressed in classical music. Yet, the author is aware of the fact that both music and emotions are invisible and non figurative, and that it was therefore an especially complex task for the students to communicate freely. In their research, Koelsch et al. (2004) found that musical excerpts and words elicited the same brain reactions with regard to semantic content so that music can be a key for understanding verbal concepts. We hope that the music did what words did not, that is, made the mental and intellectual world of the students with severe disabilities more meaningful, better organized and harmonized, and also contributed to the development and the strengthening of their emotional maturity for their future personal experiences with life.

This project does not have any substantiated results. No report was made either by the students' family members or by other professionals as to whether or not these young persons were able to express their feelings both appropriately and more often. But it is hoped that this anecdotal report will encourage the use of classical music in special education, not only by music educators or music therapists, but by other professionals as well. Moreover, more research should be done with children with developmental disabilities about their responses to classical music.

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