



MUSIC THERAPY

THE EFFECT OF MUSIC IN A WILLIAMS SYNDROME

Pseudonym: AIRIN

Year: 2015-2016

Department: foreign
languages

*“Learning music
strengthens your mind.”*

~ Jordi Jauset

ACKNOWLEDGEMENTS

During all the time I have been doing and writing my research project there are many people who have helped and accompanied me and now it is time to thank them.

First of all, I want to thank my research tutor for all the aid and advices he has provided to me, for guiding me on how I should write the project, for the corrections and for the tempers he has given to me during all this time.

Sr. Joan Vidal, my music conservatory teacher, has also to be thanked because he recommended me the topic and encouraged me with the practice I have done with Aleix.

I am grateful with Srta. Núria Ferré and Sr. Carles Capseta for helping me to complement the project with both interviews and all the information with the one I have expanded my theoretical part.

Aleix, his mother and his cello teacher have also to be thanked. I have enjoyed a lot doing my practice and I am really happy with the result I have achieved.

I also have to thank all the people who have answered the survey I planned. I have seen music therapy is not really common in my surroundings and it is a good topic to research about.

I express my gratitude to Sr. Jordi Jauset too. The conference he did in Móra d'Ebre was really interesting and encouraged me a lot with the topic. One of the exercises he planned to me there, it is going to be planned by me on my oral presentation to show the effect music has on people.

Last but not least, I want to express thanks to my family and close friends for all their support, cheering me up when they have seen me worried and anxious.

ABSTRACT

→ CATALÀ:

Aquest treball sorgeix de la curiositat de què és realment la musicoteràpia i com afecta a la persona que assisteix en aquest tipus de teràpia alternativa. Està fet amb l'objectiu de veure si la musicoteràpia té bons resultats i, més específicament, quines són, si n' existeixen, les millores en l'organisme d'un infant que conviu amb una malaltia genètica concreta com és un Síndrome de Williams a partir de la música.

Consta de dues parts que es diferencien en què la primera és una base teòrica de la teràpia, que inclou la seva història i les seves àrees d'aplicació, per exemple, i la segona és la part pràctica, que inclou la meua experiència i observació de com afecta la música a una Síndrome de Williams.

Paraules clau: música, teràpia, musicoteràpia i síndrome de Williams

→ CASTELLÀ:

Este trabajo surge de la curiosidad de qué es realmente la musicoterapia y cómo afecta a la persona que asiste a este tipo de terapia alternativa. Está hecho con el objetivo de ver si la musicoterapia tiene buenos resultados y, más específicamente, cuáles son, si existen, las mejoras en el organismo de un niño que convive con una enfermedad genética concreta como es un Síndrome de Williams mediante la música.

Consta de dos partes que se diferencian en que la primera es una base teórica de la terapia, que incluye su historia y sus áreas de aplicación, por ejemplo, y la segunda es la parte práctica, que incluye mi experiencia y observación de cómo afecta la música a un Síndrome de Williams.

Palabras clave: música, terapia, musicoterapia y síndrome de Williams

INDEX

1. INTRODUCTION	1
2. CONCEPTUAL PART	2
2.1 Music	2
2.1.1 What is music?	2
2.1.2 Properties of music and effects on the brain	2
2.2 Laterality	4
2.2.1 What is laterality?	4
2.2.1.1 When is laterality determined?	5
2.2.2 Types of laterality	5
2.3 Therapy	6
2.3.1 What is a therapy?	6
2.3.2 Types of therapy.....	6
2.4 Music therapy	7
2.4.1 What is music therapy?	7
2.4.2 History of music therapy.....	9
2.4.3 Application areas.....	10
2.4.3.1 Physiological diseases.....	11
2.4.3.2 Mental disorders	11
2.4.3.3 Other applications	12
2.4.4 Objectives	12

2.4.5	How is a session developed?	14
2.5	Music therapist	14
2.5.1	Who is a music therapist?	14
2.5.2	Working methods used by music therapists	15
3.	PRACTICAL PART	17
3.1	Survey	17
3.1.1	The questions.....	17
3.1.2	Results and conclusions.....	20
3.2	Music therapists' interviews	21
3.2.1	Interview with a music therapist: Núria Ferré	21
3.2.2	Interview with a music therapist: Carles Capseta	25
3.2.3	Conclusions.....	27
3.3	Aleix and Williams Syndrome	29
3.3.1	Williams Syndrome.....	29
3.3.2	Aleix diagnostic and daily life	31
3.3.3	Aleix musical experience and evolution process	32
3.3.3.1	Music therapy sessions.....	32
3.3.3.2	Aleix and the cello.....	33
4.	CONCLUSIONS.....	36
5.	INFORMATION SOURCES	38
5.1	Bibliography.....	38
5.2	Webgraphy	38

1. INTRODUCTION

My research project is about music therapy, a topic I decided thanks to my research tutor and his recommendations. At the beginning I doubted but now I am really encouraged to research about this alternative therapy which is so little known by people.

Alternative therapies are really common nowadays; it is very easy to find someone in each family who has attended to an alternative therapy session, independently which therapy we talk about. Music therapy is an alternative therapy which is not as known as homeopathy, for example, that uses music to improve patient's health and disorders. Even though it is not so known, does it work? Does it produce changes and enhancements to the people who attend to music therapy sessions?

The project is structured mainly in two parts: the conceptual part and the practical part. The first one is where the main question is explained: what is music therapy? To explain the concept of music therapy I am going to explain the two words since it is formed separately and then I will talk about music therapy, its history, the areas where it is applied, the objectives it wants to achieve, how a session is developed and also who is the therapist responsible to manage a music therapy session.

The practical part contains a survey I have done to 286 people, two interviews with music therapists in my region and the practice I have chosen. This practice consists of the investigation of the effect caused by music to a ten years old child who suffers a Williams Syndrome.



2. CONCEPTUAL PART

2.1 MUSIC

2.1.1 What is music?

If we stop and think about one definition of music, we will find out a lot of different definitions and explanations, but all of them would be right because they would come from different points of view.

The Oxford Dictionary defines music as the “vocal or instrumental sounds (or both) combined in such a way as to produce beauty of form, harmony, and expression of emotion”. On the other hand, the Collins Dictionary defines it as “the art form consisting of sequences of sounds in time, esp tones of definite pitch organized melodically, harmonically, rhythmically and according to tone colour”.

By this way, we can define music as the art that by using the combination of different types of sounds and silences, it can produce different emotions and states of mind on the people, according with the laws of the melody, the harmony and the rhythm which are defined depending on the era and the sociocultural trends of the moment.

2.1.2 Properties of music and effects on the brain

Nowadays, music is much more than a hobby or an entertainment because it has been demonstrated that music provides lots of benefits to the emotional and physical human health.

Listening to music causes a big variety of activities and brain stimulations that activate a complex quantity of reactions, which influence directly on important things in life as the frame of mind, the control of stress; it reduces the feeling of fatigue and anxiety, for example.



Sr. Montemayor, a professor of the Faculty of Medicine at the Autonomous University of Mexico, explains that all these benefits are produced by a stimulation generated by every musical wave, independently of the musical tastes of everyone.

Furthermore, if you like the music you are listening to, the brain immediately sends pleasure and wellness sensations through the segregation of some substances. Two of the most important substances liberated by the human body in these occasions are the dopamine, which causes the pleasure and satisfaction sensations and incites people to reach their objectives; and the endorphin, which generates wellness.

Some of the most interesting benefits that listening to music causes are the following ones:

- It helps to accelerate the healing to the people who had a surgery.
- The brain gets sensitized with structured music, as can be the classical one.
- Music is like a gym for the human brain because it increases the neuronal communication, the elasticity and plasticity of the organ.
- Listening to pleasant melodies and in a correct volume (not too high) reduces the arterial pressure and the answers to fear.

Humans have to find physical and mental harmony, and finding them on the music is a perfect option to have a healthier life.

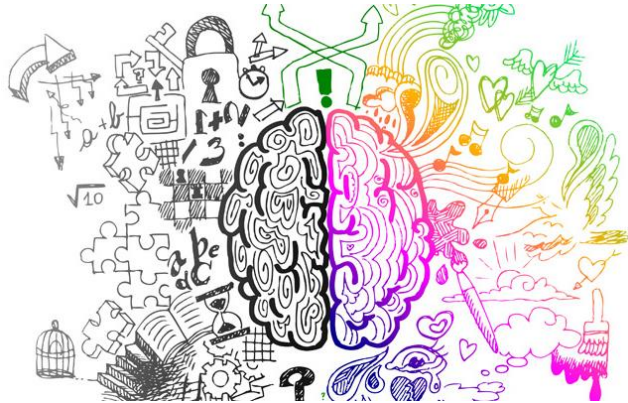
Music is characterized for affecting a person in all his dimensions:

- Physical dimension: it affects to the respiration and cardiac rhythm and also generates motor responses
- Cognitive dimension: it stimulates imagination and memory and develops sustained attention
- Emotional dimension: it awakes and generates emotions and feelings, and helps with the expression too
- Spiritual dimension: it invites you to the reflexion and meditation and also recalls and allows people to express feelings of transcendental and/or existential types



2.2 LATERALITY

Talking about laterality is talking about which part of the body has the dominance in each person. The brain has also laterality, and each part of it has the dominance of some different functions in the body. It happens because there is a specialization of hemispheres and, as each hemisphere dominates the opposite body part, that is why it exists a bigger accurate specialization in some actions of one part of the body above the other. (Source 1)¹



- Left hemisphere: has a linear thinking way used in maths, logic, language, etc.
- Right hemisphere: has a holistic thinking method used in music, art, creativity, etc.

2.2.1 What is laterality?

The Oxford Dictionary defines laterality as the “dominance of one side of the brain in controlling particular activities or functions, or of one of a pair of organs such as the eyes or hands”. The definition provided by the Collins Dictionary is “the difference in the mental functions controlled by the left and right cerebral hemispheres of the brain”.

Therefore, we can define laterality as the lateral domination extended to the organs composed by two parts like can be the hands, the eyes, the feet and the ears in different actions which require a unilateral action by one of these organs.

¹ Source 1: picture which shows brain laterality

2.2.1.1 When is laterality determined?

Laterality is being developed going through different steps which are the following ones:

- Identification phase: clear differentiation (0-2 years old)
- Alternating phase: defined by yield contrast (2-4 years old)
- Automation phase: instrumental preference (4-7 years old)

When children are in the first period of school their teachers have to teach how to use both parts of the body and when they grow up they choose the part they feel more comfortable with.

2.2.2 Types of laterality

There are different studies about the classification of laterality, but the most accepted way is the following one:

- Homogeneous laterality: the dominance of the hand, foot, ear and eye on the same part of the body, regardless it is the right part (rightist) or the left part (leftist).
- Crossed laterality: the dominance of the hand does not match with the dominance of the foot, eye or ear on the same part of the body.
- Upset laterality: the use of the right hand in leftist people. The functional laterality does not match with the neurological laterality.
- Ambidextrousness: people who have the same ability on both parts of the body in some activities.
- Mixed laterality: people who have heterogeneity in some of the lateralities.



2.3 THERAPY

2.3.1 What is a therapy?

The word “therapy” comes from the Latin “*therap̄a*” and from the Greek “θεραπεία” and the literal meaning is “curing” or “healing”.

Depending on the context the word “therapy” is used, it has many synonyms: treatment, care and intervention. In the medical field, therapy is usually synonymous with treatment; but mental health professionals prefer therapy or psychotherapy. The word care is used to talk about everything done to improve or protect somebody’s health whereas the word intervention is more specific and concrete and it is countable.

Using the Oxford dictionary we can define therapy as a “treatment intended to relieve or heal a disorder” and the Collins Dictionary defines it as a “treatment of physical, mental, or social disorders or disease”.

By this way, we can define therapy as the amount of activities performed by a team of health specialists (doctors, nurses, therapists ...) who pretend to improve the quality of life of the patients using different methods for the treatment of the diseases.

2.3.2 Types of therapy

There are loads of ways to classify the different types of therapy. The most common ones are by chronology, priority and intensity. We can also classify all types of therapy by treatment intent or aim and by therapy composition, depending on the method of treatment.

Talking about treatment intent or aim we can find very different types of therapy like can be abortive therapy (to stop a medical condition from going on), consolidation therapy (to consolidate the profits from induction therapy) or preventive therapy (to prevent a medical condition from happening).



When we try to classify all the therapies which exist nowadays, the most efficient way is by their composition because there are a lot of types. We can start the list with some of the matters which are being used: drugs, some chemical elements (metals, non-metals), water, biological materials (organisms or products of organisms, food...), salts and aroma. Some therapies use human interaction, others animal interaction, some of them meditation, reading, creativity and sleeping and waking too. Also there are some therapies which use different types of energy like can be: magnetic energy, mechanical, temperature, heat, cold and sound that includes music therapy, the one I am explaining below.

2.4 MUSIC THERAPY

2.4.1 What is music therapy?

By the same way we can find a lot of definitions about music, we also can find loads of definitions for music therapy.

The American Music Therapy Association (AMTA) founded in 1998 as a fusion of the National Association for Music Therapy (NAMT, founded in 1950) and the American Association for Music Therapy (AAMT, founded in 1971), defines music therapy as:

“an established health profession in which music is used within a therapeutic relationship to address physical, emotional, cognitive, and social needs of individuals. After assessing the strengths and needs of each client, the qualified music therapist provides the indicated treatment including creating, singing, moving to, and/or listening to music. Through musical involvement in the therapeutic context, clients' abilities are strengthened and transferred to other areas of their lives. Music therapy also provides avenues for communication that can be helpful to those who find it difficult to express themselves in words. Research in music therapy supports its effectiveness in many areas such as: overall physical rehabilitation and facilitating movement, increasing



people's motivation to become engaged in their treatment, providing emotional support for clients and their families, and providing an outlet for expression of feelings.”

The Canadian Association for Music Therapy (CAMT, AMC) founded in 1976, defines music therapy as:

“the skilful use of music and musical elements by an accredited music therapist to promote, maintain, and restore mental, physical, emotional, and spiritual health. Music has nonverbal, creative, structural, and emotional qualities. These are used in the therapeutic relationship to facilitate contact, interaction, self-awareness, learning, self-expression, communication, and personal development.”

The World Federation of Music Therapy (WFMT) founded in 1985, defines music therapy as:

“the professional use of music and its elements as an intervention in medical, educational, and everyday environments with individuals, groups, families, or communities who seek to optimize their quality of life and improve their physical, social, communicative, emotional, intellectual, and spiritual health and wellbeing. Research, practice, education, and clinical training in music therapy are based on professional standards according to cultural, social, and political contexts.”

The Catalan Association for Music Therapy (ACMT) created in 1982, defines music therapy as:

“the use of music for therapeutic purposes, ie, to work physical, emotional, social, cognitive and/or spiritual needs of people.”

All these definitions have two common points:

- ➔ Music therapy is a therapy applied by a qualified professional.
- ➔ Music therapy provides many benefits at different levels (physical, emotional, cognitive-mental, social and also spiritual) to a big variety of patients, individually or collective, of any age, affected by some illness or not.

By this way we can understand music therapy as a therapy that by music wants to achieve an improvement of the patients' health and improve the quality of people's



life. This therapy has to be applied by a qualified professional and can be devoted to a person individually or collectively.

2.4.2 History of music therapy

Music therapy, despite the fact that is an innovative project, has an evolution in the history that has driven it to the place that it is now.

Throughout history we can see that, in every historical period, music has been used as an important element inside one community and this fact contributes to create social and familiar links. That is why, nowadays, music is still being used to celebrate important days like can be a birth or a relevant festivity.

If we want to know the origins we must look back to the prehistory, when music was used in magical rites by the use of rhythmical object bangs that were the means for the mystical action. In the Ancient Mesopotamia, music was used to calm gods' anger and, by this way, avoiding the punishments. But the firsts writings which describe the influence of music on the human body are some Egyptian papyrus found in Kahum (1899) and are dated from the year 1500bC. These papyruses talk about the use of music as an element capable of curing the body, calming the mind and purifying the soul. They also assigned music as a favourable element for the woman conception.

In the Ancient Greece, the scientific bases of music therapy were raised, giving music a big importance as a method or help for some illnesses, starting on the observation and clinical situation of the patient without the assignation of magical elements, but with some religion elements. By this way, music had a divine origin and the illness was the sin consequence. At that time, Pythagoras (582 bC) is important because he was the first to attribute a mathematical part to music. Aristotle (384 bC) said that music and humans are closely related and music can influence on the emotional state and also on the character; Plato (427 bC) remarked the importance of music on the youngsters' education on his book "*The Republic*". Both of them



though that music influence on people state of mind and they used music to fight with their fears.

In regards to the Medium Age, some Saint Augustine and Saint Ambrose stories had been found and they talk about music as an intermediary of God, nature and humans, moreover, of the utilization of chant to implore and approach to God.

Finally, on the Contemporary Age it is found that, during XXth century, some scientific studios about the application of music on mental illnesses treatment were initiated in England. They also implemented the firsts studios about the physiological effects produced by music on the answers of blood circulation, heart rhythm and breathing.

At the beginning of the XX century some musical groups were initiated and they are so important because they had a musical pedagogy unifying music, humans and the world. Mr. Emile Jacques Dalcroze was one of the predecessors of music therapy because he broke the stereotypes and initiated a new educative and rhythmical therapy. Music was an important factor during this century because it had the capacity to distract and improve the state of mind of the sufferers of wars and it also influenced positively in some depressive cases and relieved the pain.

In Spain, Dr. Candela Ardit verified the utilization of music as a positive agent on psychiatric patients.

Nowadays there are some hospital centres, institutions and universities that research, analyse and experiment the effects that music and sound have on therapies.

2.4.3 Application areas

Music is innate to humans and it does not surprise that it has a big application area. As medicine, music therapy has two different and large fields: prevention field and curative field. Both things have been present in humanity since prehistory: working or fighting music, cradle songs, religious dances, music used by prehistoric people...

So far, curative field method is the one which has been more present by music therapists, as a priority objective and in an exclusive mode. It has happened, maybe, because it was a new job that needed to be included and the most important part was the curative field. Moreover, preventive music therapy is still a new brand equally than preventive medicine.

Nowadays, music therapy is specially applied in education (hyperactivity, Down's syndrome, autism, cerebral palsy), mental health (depression, anxiety, stress), geriatrics (senile dementia, Parkinson, Alzheimer, terminally ill) and medicine (oncology, pain, neonatology, ICU people).

2.4.3.1 Physiological diseases

As music affects the entire human organism, it can be used to treat physical diseases and disabilities.

Loads of physiological disorders are the result of a lack of communication with the environment or movement ineptness.

In this group we can find some of the following diseases:

- Brain injury
- Impaired auditory
- Visually impaired
- Breathing diseases
- Orthodontics
- Coma patients
- Mentally handicapped
- Terminally ill

2.4.3.2 Mental disorders

Music therapy and its methodology and techniques are principally applicable in psychiatric or mental disorders.

The two most important disorders in which it is applied are:

- Infantile autism and its familiar group
- Group and individual psychotherapy

2.4.3.3 Other applications

Music therapy has other applications apart from the medical ones.

Some of these applications are the following:

- Special education
- Child's education and development
- Pregnancy
- Geriatrics
- Addictions (drugs, alcohol...) as supportive therapy
- Recreation activities in hospitals
- Anaesthesiology
- Pain treatment
- Functional music in industries
- Kindergartens
- Dreams' induction

2.4.4 Objectives

According to the effects that music has in a human level, music therapy has some general and specific objectives to each of the different levels (cognitive-emotional, social...). These objectives are the following ones:

→ General objectives:

- Not intended to form musicians, but to improve personality, affectivity and people's behaviour in all levels
- Reestablishment of the biological rhythms through music
- Acquisition of a psychophysiological balance

→ Psychophysiological objectives:

- Integration and development of the body image
- Development of the space-temporal-corporal organization
- Psychomotor development (laterality, balance, tonicity...)
- Sensory-perceptive development
- Development of the oral expression and locution
- Development of the communication and expressive environments
- Thought-language coordination
- Release depressed energies and impulses
- Provide child with enriching, stimulating and motivating musical experiences

→ Cognitive-emotional and personality objectives:

- Affective-emotional awareness
- Aesthetic values
- Cognitive development (imagination, attention, memory...)
- Self-esteem and personality strengthening
- Self-realization and integration of himself
- Personal balance

→ Social objectives:

- Social and collective integration
- Rehabilitation, socialization, re-education
- Social acceptance and cohesion
- Encouraging interpersonal relations

→ Spiritual objectives:

- Spiritual taste
- Interior enrichment
- Sublimation
- Transcendence
- Purifier feeling

2.4.5 How is a session developed?

There are not rules to apply into a music therapy session. Each of them has to be designed and planned depending on the people that are going to be there and the objectives they and the music therapist want to achieve.

In the beginning, just to establish the necessary familiarization, it is usual to start with an easy welcome song and then to apply other techniques depending on the objectives. Sessions are usually finished with a farewell song, which puts the assistants back to the reality.

A clear example could be a session designed for a group of people with psychological problems in which the music therapist tries to exercise their memory and attention. The therapist will use active techniques (like songs or games) and also receptive ones, so when he will have won the group's trust, he will get attention and motivation for the participation of the assistants.

In all these easy actions there are loads of motor and cognitive aspects that interfere, like the attention or memory, and also socioemotional ones, like the communication or the expression, apart from strengthening the self-esteem.

2.5 MUSIC THERAPIST

2.5.1 Who is a music therapist?

A music therapist is a professional specialized in the therapeutic application of music. The basic formation of this professional should include, mainly, psychological and musical camps. Moreover, it would be important for the professional to have notions about physiology, biology and medicine, especially if his/her interest is heads to the investigation.

The music therapist has a big responsibility as a health professional owing to his/her relation with humans and it is very important for the therapist to have sensibility and

respect and to show a correct disposition, attitude and intention in all his/her actions. The different musical instruments and different techniques used by the music therapist are a method, a vehicle whereby the verbal and non-verbal communication is transmitted in all its contents.

2.5.2 Working methods used by music therapists

When we talk about music therapy we found two different types of methodology: active and passive. In the passive one the patient only listens to a specific type of music depending on his/her problem or problems whereas in the active methodology the patient plays and sings with the music therapist, using his/her own imagination, participating on the session or activity.

Talking about different methods used in music therapy sessions is not really usual, because music therapists usually mix the different methods depending on the problems their patients have, on the answers they are given during the session and the moment. However, there are some methods that can be used by music therapists. I will talk about two of them: Benenzon and Nordoff-Robbins.

➤ Benenzon

Benzenon Model of Music Therapy (BMMT) is also called *music psychotherapy* and takes the name of its founder, Dr. Rolando O. Benzenon. The main objective of this model is to establish new communication channels using the non-verbal system to improve and to strengthen the patient's health. The BMMT is based in the concept of ISO, the sonorous identity which characterizes everyone and is part of our personality. Searching, identifying and recognizing the ISO of the patient, BMMT as a non-verbal therapy allows to the confused person the capacity to communicate and to express his/her feelings and emotions.

➤ Nordoff-Robbins

The Nordoff-Robbins method of music therapy is based on the idea that everyone has sensitivity to music which can be used for the personal maturity and development. This kind of treatment consists in the creation of music by the patient, who takes an active action, and the music therapist together. At Nordoff-Robbins **music is made with people, not for the people**. The program of Nordoff-Robbins in Music Therapy is based on different techniques which allow everyone, including the most disabled clients, to turn into active and satisfied participants.

3. PRACTICAL PART

3.1 SURVEY

3.1.1 The questions

MUSIC THERAPY

Survey planned by a student of second Bachaloret for her research project.

***Obligatory**

Sex *

- Man
- Woman

Age *

Have you ever studied music out of the ordinary school? *

- Yes
- No

If your answer is yes, how long?

- 1 or 2 years
- 3 or 4 years
- 5 or 6 years
- More than 6 years

When you practise music, does it influence on your feelings?

- Yes
- No

If your answer is yes, how?

If you do not practise music, when you are listening to music does it influence on your feelings?

- Yes
- No

How?

Do you know what alternative therapies are? *

- Yes
- No

Explain it and give some examples.

Do you believe in alternative therapies?

- Yes
- No

Have you ever been in an alternative therapy session? *

- Yes
- No

Which one?

Do you think it is possible to combine alternative therapies with traditional medicine?

- Yes
- No

Have you ever heard about music therapy? *

- Yes
- No

How do you explain what it is?

Do you consider music therapy as a good method to help children/adults with psychological disabilities?

- Yes
- No

Do you know anyone who works as a music therapist? *

- Yes
- No

Do you know anyone who attends to music therapy sessions? *

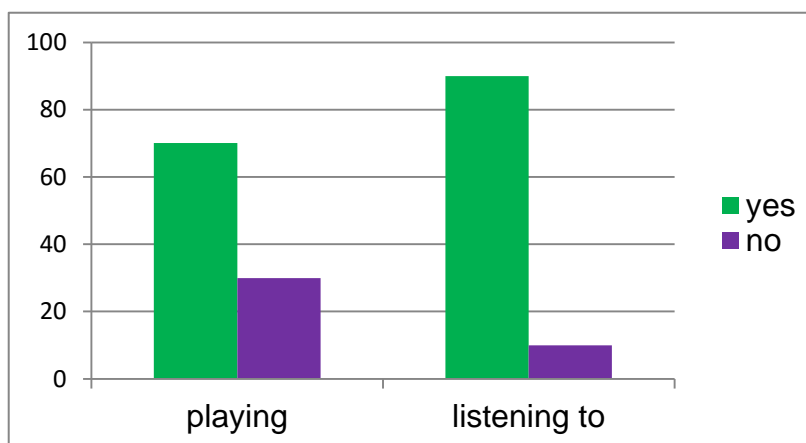
- Yes
- No

3.1.2 Results and conclusions

As I can see in the answers of the survey, the majority of people who answered it were women even though it was an online survey which everyone could answer and I also spread it into my high school. It is a usual thing that most of the people who did the survey are teenagers, the majority of them are people of my age and friends. I will take out the conclusions from their answers, totally 286 answers.

When I asked about if they have studied music out of the ordinary school, about a 60% answered YES and more or less a 40% answered NO; It could influence in some of the other questions, because the people who have studied music is possible for them to know more about music therapy than the others.

Indifferently if they are playing or listening to music, the majority of the people answered that music influences on their feelings, depending on the music they are playing or listening to, if they like that type of

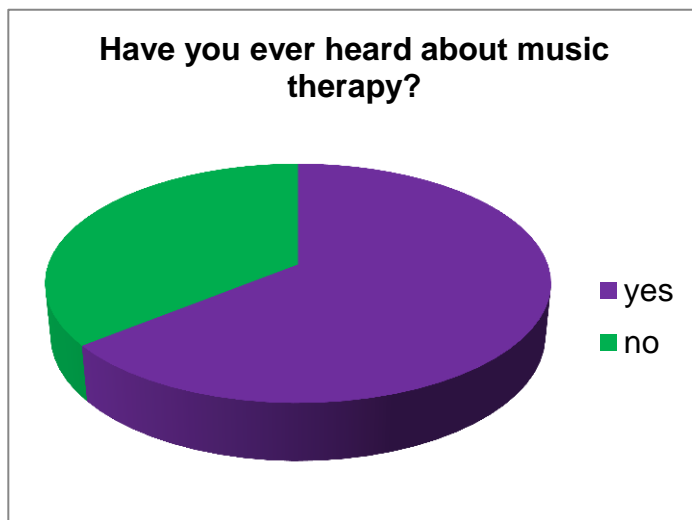


music or not, if that specific song reminds them something special... But the conclusion is that music has a big influence on people's feelings. (Source 2)²

Not many people know what an alternative therapy is; they define an alternative therapy as something which differs from traditional medicine because it does not use pills. Even though that, some people make an approach saying that alternative therapies objective is to improve patient's health and to help them with their disabilities and problems. About an 89% of the people have never been in an alternative therapy session and only an 11% has taken part on one.

² Source 2: graphic which shows the influence of music both playing or listening to music

Asking about music therapy and if they know what it is, a 65% of the people knows what it is, but not everyone can describe it correctly. One of their definitions, which is the most similar to the correct definition is that music therapy is the art that combines music and therapy to solve psychological problems and illnesses through a therapy in which music is the main tool. (Source 3)³



Independently if they know or not what music therapy is, they think that it will be a good method to help both children and adults with mental and physical problems and disabilities.

Finally, I asked if they know someone who works as a music therapist or if they know anyone who assists to music therapy

sessions, and more or less an 80% of the answers said NO.

3.2 MUSIC THERAPISTS' INTERVIEWS

3.2.1 Interview with a music therapist: Núria Ferré

1. How long have you been a music therapist?

I have been a music therapist since 2007

2. What's your academic background?

Master's degree in music therapy in the UB

³ Source 3: graphic which shows the percentage of people either have heard or not about music therapy

3. Have you got another degree?

Degree in music, specialized knowledge of horn in the Conservatori Superior de Música de Barcelona

4. Who do you cooperate with to make and design the treatment?

With the technical team in the centre I work: psychologists, educational psychologist, nurses, social worker, teachers and the music therapist.

5. How are the sessions you do more efficient: individually or in groups?

It depends on the objectives you want to reach. By the moment, all the sessions I am working on in the centre are collectives.

6. Do you base on any criteria when you create the therapy groups? Which one?

I always try to create the groups looking to the capacities of the people and what we want to strengthen, and afterwards I group them in 5-6 people groups.

7. How do you choose the music you are going to use with the group or patient?

Most times, in people who have not developed verbal language, it is difficult to create a musical history and to know which are their musical interests, but I always try to search the ones I think they can stimulate some interests:

- Depending on their age: looking for music of their own childhood and youth ages.
- Depending on their siblings' age: usually, when we are teenagers we consume loads of music during all day and we make all the people at home listening to it. By the time I've seen that People with intellectual and development disability (PDID) do not often choose the music they want to listen to, but they listen to the music that is listened at home, usually the music listened to by their old or young siblings. It is a good information source to know which kind of music they like.
- Their parents' music: this is a good option to choose which kind of music we will use during the sessions.
- Different types of music depending on the activity we are going to do: relaxing music, happy music...

8. How long do you think the treatment has to last to be effective?

We have to plan which are the objectives we want to prepare and to be evaluating the results to suggest new objectives or to increase them when they would be reached. In the centre where I work (with PDID) they follow the therapy continually.

9. Do you use instruments as a link with your patients? How: playing them or only listening?

Yes, we use them. We usually play instruments even though sometimes they only accompany in the activities we are doing. Some of the instruments we use are the following ones: guitar, small percussion instruments, Tibetan bowl...

10. Do you think music therapy has benefits for everyone? Which are these benefits? Do they change depending on the age of the patients?

Yes!! The benefits that music therapy can provide are a lot and really varied: physically, cognitively, emotionally, spirituality... The sessions are focused on the necessities of each person. But if we generalize, we can say that we use music therapy to improve the life's quality of the people.

11. For the people who have special needs, do you think it is a good method for treating these needs?

Rather than dealing with these needs, we offer some resources to boost their capacities and to reduce these needs.

Example: when we treat with one PDID who does not have verbal communication but he/she can do some vocalization when we sing, we boost these vocalizations and we try to expand them just to have a way to communicate with him or her

12. Which alternative do you use if the therapy is not effective at first?

We try to reconsider what we are doing and we can change the activities and/or the objectives.

13. Where do you do the music therapy sessions you prepare: in an ordinary school or in another centre?

In a centre where we deal with PDID: it is a retirement home and an adults day centre with people seriously affected, where Occupational Therapy Service and Special Education School are offered.

14. Do you think music therapy sessions have to be included in ordinary schools and curriculum for all the children in order to motivate them?

It would be a good option! I currently, as an after school activity, I'm doing music therapy in the initial cycle in an ordinary school and it has loads of benefits for the children: psychomotor, communication, non-verbal communication, emotions and its management...

15. Is music therapy preventive or it only can be applied after having a diagnostic?
Music therapy can be: preventive, therapeutic and rehabilitative.

16. Is music therapy applicable to physical diseases or it only can be applied to psychological diseases?

It can be used to treat both physiological and physical aspects.

17. What does music therapy provide that other alternative therapies do not provide?

The possibility to work at different working levels: physical, psychological, cognitive, social and emotional using music and without the necessity of developing the verbal language.

18. How do doctors or therapists choose which is the best therapy (music, animals, people...) for each patient?

We value the features of the person and we establish a type of therapy or another, though it will depend on the therapies offered by the centre.

19. Is it possible to apply mixed therapies (traditional medicine + music therapy) or they must be applied separately?

It would be the correct answer if they worked holding hands.

20. Would you recommend music therapy instead of traditional medicine?

When we are talking about illnesses we have to bear in mind that music therapy does not "cure", but we can offer an improvement of the quality of life to the ill people. With music therapy's techniques an improvement on the emotional state are produced, the pain and exhaustion perceptions decrease, anxiety and physical and psychological stress levels (and the consequences

they generate) are lower, the corporal awareness is expanded, the self-esteem increases, people can find out their non-verbal expression space, they can work in the extend of their possible corporal movements...

3.2.2 Interview with a music therapist: Carles Capseta

1. How long have you been a music therapist?

I have been a music therapist for 9 years

2. What's your academic background?

Technical in music therapy, psychomusic therapist and master in musical techniques applied to children's development. All the degrees are recognized by the Generalitat as Health Interest Studies

3. Have you got another degree?

I have a degree in music, specialized knowledge of trumpet and I also work as a teacher in the secondary education.

4. Who do you cooperate with to make and design the treatment?

I usually work on my own, when I cannot have clear some aspect I talk with my jobmates or with the ones who were my teachers.

5. How are the sessions you do more efficient: individually or in groups?

They are different. In the collective sessions I can work better with behaviours or habits, whereas in the individual ones I can focus on personal disorders or problems.

6. Do you base on any criteria when you create the therapy groups? Which one?

No. When I was studying and doing my psychotherapist training part I learnt that the real result becomes from the improvisation's capacity, I allow my patients to grow up themselves.

7. How do you choose the music you are going to use with the group or patient?

I have a preselected music, I call it "the heads", but you must have some prepared music and be capable to change it depending on the process, which is the most difficult part.

8. How long do you think the treatment has to last to be effective?

I think it is effective since the beginning, but it is difficult to agree how long it has to last, it would be an error.

9. Do you use instruments as a link with your patients? How: playing them or only listening?

Yes, I use them as a communication and expression channel. I use loads of percussion and string instruments, depending on the situation. It is not listening, but it is important to see what is not obvious like a caress or rage.

10. Do you think music therapy has benefits for everyone? Which are these benefits? Do they change depending on the age of the patients?

Yes, and we use it every day. Everyone has his own musical kit and uses it. I never search benefits in a short period of time, they are mirages; I look for the smile.

11. For the people who have special needs, do you think it is a good method for treating these needs?

Isn't it for you? Take out the technical convictions and the artistic parameters and you have a musician who is expressed in each person. Forget your necessities.

12. Which alternative do you use if the therapy is not effective at first?

It is always effective. You only have to watch and to listen to him/her and he/she will guide you. You have to let you go and the patient will show you where he/she wants to go.

13. Where do you do the music therapy sessions you prepare: in an ordinary school or in another centre?

I work in my own office. There I have the adapted space and all the material I need.

14. Do you think music therapy sessions have to be included in ordinary schools and curriculum for all the children in order to motivate them?

I think we should enjoy music and stop thinking it only belongs to the musicians or to the people who monopolize it. Music cannot be a pill you take spontaneously, it must be air, something which belongs to our daily life, and

we have to use it with the naturalness with the one we breathe. I believe more in the example than in the implementation.

15. Is music therapy preventive or it only can be applied after having a diagnostic?

The first thing a music therapist does is to doubt about the diagnostic. If you put a label to the “problem”, how will you take it out?

16. Is music therapy applicable to physical disabilities or it only can be applied to psychological disabilities?

Physical and psychological disabilities are the same when you talk about listening to music, the changes into the organism when you are listening to music are parallel.

17. What does music therapy provide that other alternative therapies don't provide?

Precisely, their capacity to act both in the physical and psychological parts.

18. How do doctors or therapists choose which is the best therapy (music, animals, people...) for each patient?

There is a protocol made by generalizations, but finally the consultant is the one who decide.

19. Is it possible to apply mixed therapies (traditional medicine + music therapy) or they must be applied separately?

Everyone must work the part he/she needs, there are no formulas. If you do not believe in it, it does not work.

20. Would you recommend music therapy instead of traditional medicine?

No, I recommend introducing music to our everyday for not having to talk about it as a therapy and to avoid the use of loads of medicines. If you are sad, listen to Rossini with your soul, probably you will not need any stimulating or antidepressing. Beethoven said that “*we must learn to listen with the entrails, not with the intellect*”.

3.2.3 Conclusions

As I can see in the interviews, the two music therapists I have interviewed have some points in common but other ones in which they differ.

Both music therapists have the specialization in a specific instrument as their university degree, so I understand that when you know about music is easier to find the correct songs or type of music to use with your patients. Another thing they also have in common is that they think that collective or individual sessions have to be chosen depending on the objectives you want to reach in each specific session. *How long the treatment has to last* is a question in which both of the music therapists answer that they do not put a period of time, they work depending how the patients react to the treatment they are receiving. Both music therapists agree that the use of different instruments helps the therapist and is an expression channel for the patient. Talking about the benefits that music therapy has on everybody, including people with special needs, is another point in which both therapists agree; these benefits help to improve the patients' quality of life. They also agree that music therapy can be applied in physiological and mental disorders.

Regarding with the cooperation with other professionals or the creation for the therapy groups are some of the points in which they have some differences. Srta. Núria Ferré says that she cooperates with the doctors and workers in the centre she works whereas Sr. Carles Capseta says that he works by his own and he only asks for help when he cannot have clear the problem of the patient he is treating in that specific moment. Talking about the creation of therapy groups, Sr. Capseta says that he does not base on any criteria, but Srta. Ferré accepts she creates the groups depending on the necessities and objectives of her patients. When I asked them how they choose the music they will use in each session, Srta. Núria Ferré answered she searches for the music they are used to listen, their own musical lists, or the musical lists in their familiar surroundings; whereas Sr. Carles Capseta says he have a predetermined music, and he changes this music depending on the objectives of each patient. Sr. Capseta agrees that the treatment is always effective because the patient is his guide, so he works from the answers given by the patient; on the contrary, Srta. Ferré says that if the treatment does not work she tries to find a new one which she hopes to be more effective.

The final conclusion I can take out of the two interviews I have done during this time I have been working on the project is that music has to be always in our daily life, not

only when we are ill or we have a problem, physiological or mental. Music has to take part in our everyday life.

3.3 ALEIX AND WILLIAMS SYNDROME

I have chosen a child with Williams Syndrome for my practical part because it is a genetic problem which is not so common and known by people. Aleix has taken part in music therapy sessions and nowadays he studies cello and drums in a music school. Music contributes to his physiological and mental disorders and makes him improve in loads of aspects.

3.3.1 Williams Syndrome

According with the Williams Syndrome Association (WSA), Williams Syndrome is:

“a genetic condition that is present at birth and can affect anyone. It is characterized by medical problems, including cardiovascular disease, developmental delays, and learning disabilities”.

The Irish Williams Syndrome Association defines it as:

“a rare genetic condition (estimated to occur in 1/20000 births) which causes medical and developmental problems. Williams Syndrome is a genetic disorder that was first recognised as a distinct condition in 1961. It is present at birth, and affects males and females equally. It can occur in all ethnic groups and has been identified in countries throughout the world”.

As we can see in these definitions, Williams Syndrome is a genetic condition which causes medical and learning delays and disabilities on the people who suffer it. The problem is present at birth time and it is caused by a loss of genetic material on chromosome number #7 which includes the gene that makes the protein called elastin. The deletion of the elastin gene is considered to be one of the causes of

many of the physical characteristics of Williams Syndrome. Some developmental and mental problems are likely to be caused by the deletion of additional genetic material situated near the elastin gene on chromosome number #7. The enlargement of the deletions can vary depending on the individual: in the majority of the families the child who has Williams Syndrome is the only one in the entire family; however, the individual with Williams Syndrome has a 50% of possibilities to transmit the disorder on to each of his/her children.

The commoner characteristics of Williams Syndrome are:

- heart and blood vessel problems: narrowing in the aorta or pulmonary arteries
- characteristic facial appearance: small nose, wide mouth, big and full lips, small chin and droopy eyelids
- hypercalcemia: elevated blood calcium levels
- feeding problems: many infants have feeding problems that disappear when they get older
- dental abnormalities: slightly small and widely spaced teeth are usual in Williams Syndrome children
- low birth-weight
- irritability: can be caused by hypercalcemia
- hernias: inguinal and umbilical hernias are common
- kidney abnormalities: problems with kidney structure and function
- musculoskeletal problems: low muscle tone and joint laxity
- hyperacusis: sensitive hearing
- overly friendly personality: very endearing personality and extremely polite
- developmental delay
- learning disabilities
- attention deficit disorder

People with Williams Syndrome have an affinity to music: they have a natural feeling that music is part of their lives and being. This affinity for music is used to beat their weaknesses, especially when we talk about their sense of rhythm, the hearing sensitivity and their ability to remember lyrics.

3.3.2 Aleix diagnostic and daily life

Aleix was given the diagnostic when he was two years old after a lot of bureaucracy, due to the fact that he did not show the commoner features that Williams Syndrome presents when they are babies. These commoner characteristics are hypercalcemia and heart, liver and intestines diseases, for example. They did loads of tests to Aleix just to discard other illnesses or disorders like a cystic fibrosis or the fragile X syndrome; they also did some magnetic resonances which were able to discard brain lesions, and some metabolic tests too. Usually, when they are born, they present common facial features which betray the syndrome (phenotype) like little nose, droopy eyelids or big lips; but these characteristics were not present at Aleix face and, moreover, they are not enough conclusive to diagnose the syndrome. Finally, they sent us to a geneticist, because of the mother's insistence, and thanks to a special education teacher who had had a Williams Syndrome child and Aleix reminded her of him. The genetic tests confirmed the diagnostic of Williams Syndrome to Aleix.

When Aleix's mother knew the diagnostic, she looked for lots of information about the syndrome through the internet and she found out the WSA's (Williams Syndrome Association) webpage from England, where the high capacities these people have towards music were explained. She also found out some videos in the online platform *Youtube* in which an American woman with Williams Syndrome, Gloria Lenhoff, was singing like the Catalan soprano singer Montserrat Caballé. Afterwards, she decided to find out someone who guided Aleix in the world of music.

Nowadays, Aleix attends a shared education: there are two days of the week in which he goes to ordinary school and the other three days he assists to a special education centre. By this way, his teachers and family want to improve his cognitive capacities and his concentration skills with the especial education and his socialization with other children on his age by the contact with them in the ordinary education.

Aleix also does music classes in a music school in Amposta where he studies the cello and the drums and sometimes he plays with a traditional music group around Terres de l'Ebre and sings in the children's choir.

3.3.3 Aleix musical experience and evolution process

When Aleix was three years old, he and his mother took part in a musical course which was called Willems method. There they sang loads of easy songs in which they introduced the movement and, step by step, Aleix started to know all the musical instruments and their particular sound. In that moment was when his mother was aware of Aleix's hyperacusis, especially with the brass wind instruments to which Aleix had panic.

At the end of this course, the mother got in touch with the music therapist Núria Ferré and Aleix started individual music therapy sessions during two years and a year after he started music classes in the music school "La Unió Filharmònica" in Amposta.

When Aleix was three years old he assisted to the music lessons with children on his age doing the first year of the period called "*sensitization*" and when he was four years old he started singing on the choir of the music school, thing that contributed to improve his vocalization, which is one of his problems. By the time he was seven, the music therapist considered the possibility to start playing an instrument and now he is playing two very different instruments: cello and drums.

3.3.3.1 Music therapy sessions

As I said before, Aleix started the music therapy sessions when he was three years old and I talked with his music therapist, Núria Ferré, who explained me how his sessions were usually developed. The sessions lasted 45 minutes.

→ Entrance ritual: Aleix takes out his shoes and both he and Núria sing the welcome song while Núria is playing the guitar.

welcome song → "-Hi Aleix! Hi Aleix! Hi Aleix! How are you?"

- The session: the session could change depending on the day, but the main objective Núria told me she wants to reach was to improve and to expand the capacities of Aleix and to give him resources for his daily life. During the sessions they use little percussion instruments as a link to communicate, they create a dialogue with these instruments and Aleix can show his emotions and feelings through music. The music therapist tries to show Aleix loads of new songs using pictograms, singing and using them to learn new vocabulary like can be the colours, jobs... These songs are played with the guitar by Núria while Aleix sets the rhythm and sings. It is a good way to stimulate his concentration and attention and allows the communication between both Núria and Aleix.
- Closure: relaxation and proprioceptive stimulation to have consciousness of the own body. The music therapist presses different parts of Aleix's body while they are listening to relaxing music. It serves to slacken the body and also to improve the hypersensitivity.

3.3.3.2 Aleix and the cello

When Aleix was seven years old, the music therapist suggested Aleix's mother that her son could start playing an instrument and the mother, a very enterprising woman, accepted the suggestion and both the therapist and the mother searched for the ideal instrument for Aleix. They chose the cello because it is an instrument that when you are playing it is situated on your chest so you perceive the vibrations and you have the sound very near. The cello is also a good instrument because he had to use both hands and it helped to improve his fine motor skills.

Aleix's mother and the music therapist talked with the cello teacher, Nai, on the music school where Aleix studies music and they suggested her to be his cello teacher explaining the problem the child has and that she would have to arrange the lessons for his capacities. The teacher accepted the challenge she was suggested to and Aleix started his cello lessons. At the beginning he only worked with the digital part, trying to press the strings of the cello with one hand and to do the pizzicato style

with the other. When this part was overcome, he started using the cello bow with the right hand. All the steps have been slower than to the other people and children who play the cello, but Aleix has made a big progress since his beginning.

I attended to one of Aleix's cello's lessons on 4th November 2015 and the teacher explained me how she usually structures Aleix's lessons:

- 1.** The teacher asks Aleix "*What are we going to do, Aleix?*" and he answers that they have to prepare the material they need to play which is the cello with the bow and the chair.
- 2.** They play a welcome song which is called "*I play the violoncello*". The first time the teacher plays and both of them sing and the second time Aleix plays while both Aleix and the teacher sing.
- 3.** Aleix does not know how to read musical sheets but due to his extremely memory he plays two songs he had practised in other classes. The teacher plays the songs the first time and then Aleix repeats them singing and playing.
- 4.** As Aleix moves a lot the cello bow, his teacher shows him a technique to solve the problem and to move the bow in the correct way. She calls the technique "*the tunnel*", in which Aleix has to move the bow under a bridge she builds with her hand.
- 5.** The next song Aleix plays is with the *pizzicato* technique. Nai sings the traditional song "*Margarideta*" while he plays every musical note using both hands.

The points six, seven and eight are planned to work with the left hand.

- 6.** They play a musical scale with *pizzicato*: Aleix does by his own the part with the right hand while Nai helps him with the left hand, the one that has to press the strings.
- 7.** Aleix plays and sings the song "*cada dia al demati*" which is a traditional Catalan song and in which he has to press the strings with his fingers.
- 8.** Nai plays a new song to Aleix to practise the fingering while she is singing saying the names of the musical notes. When Aleix uses the cello, first he

plays the song piecewise and finally he plays all the song while he sings the names of the musical notes with his teacher.

9. They return to the use of the bow just to relax the left hand and while he is playing he sings the name of the musical notes.

10. Let's collect the cello and all your things. Aleix and Nai collect the cello, the bow and the chair and Aleix mother picks him up from the class.

The progress is really slow but the improvement on Aleix body and on his behaviour and development is really big, so it is an important achievement.

4. CONCLUSION

Now, that I can say my research is finished, it is the moment to write what has been the construction of this project.

On the one hand, and making reference to one of the main questions I planned in the introduction, "*does music therapy work?*", I have checked that music therapy works when we are talking about physiological or mental disorders. Music therapy does not cure, obviously it is not a pill or syrup we can take, but it helps to improve loads of personal capacities; from the cognitive capacities to the emotional ones, through all others.

On the other hand, talking about my practical part is talking about results of a survey I have prepared, talking about two interviews with two music therapists from Terres de l'Ebre and also the practice I wanted to include in the project: to regard the effect of music in a Williams Syndrome.

The survey and the results I have taken out of it show me that more than a 50% of the people who answered have sometimes heard about the concept of music therapy but not all of them can explain what it is. It helps me to see that music therapy is not a very common alternative therapy in my surrounding so I think it is not as common as homeopathy, for example.

Both interviews have helped me to understand what music therapy is at all, how and where it is applied, and which the main objective of music therapy is. Talking with the therapists has also helped me to complement the conceptual part and achieve a better project.

Regarding to the practice I have done with Aleix, I am really surprised of the improvement he has done during all the years he has been studying music; I could not have thought that music had this power before. Despite of the disorder and the Syndrome, Aleix experience with music is something awesome and a perfect example that music helps us to improve.

I have enjoyed a lot during all the time the research has last: at the beginning I was not sure about both the topic and doing my project in English, but today, that I am writing the final conclusion, I am happy to have chosen both these options for my project because I have learnt lots of new vocabulary and I am more interested in alternative therapies than I was before.

Finally, I have always had the idea to continue my studies at the university in the specialization of journalism, and after doing the project I think I will study it, because searching for information and talking to the people to obtain it has been something I have really liked.

5. INFORMATION SOURCES

5.1 Bibliography

- ALVIN, J.: “*Musicoterapia*” (4th edition). Barcelona: Ediciones Paidós Ibérica
- BRUSCIA, K. “*Definiendo musicoterapia*”. Salamanca: Amarú Ediciones
- CAUDET YARZA, F. “*Musicoterapia*”. Molins de Rei: Editorial Astri
- JAUSET, J.A. “*La musicoteràpia*”. Barcelona: Editorial UOC
- LENS VILLAVERDE, M; GARAYZÁBAL-HEINZE, E; FERNÁNDEZ PRIETO, M & SAMPAIO, A. “*Estimulamos la atención*”. Madrid: Editorial EOS
- LINGERMAN, H. “*Musicoterapia. El poder curativo de la música*”. Barcelona: Océano
- POCH BLASCO, S. “*Compendio de musicoterapia*”. Barcelona: Editorial Herder
- SÁINZ de la MAZA, A. “*Cómo cura la musicoterapia*”. Barcelona: RBA Libros
- WILLIAM, B.D; GFELLER, E.E & THAUT, H.M. “*Introducción a la musicoterapia*”. Barcelona: Boileau

5.2 Webgraphy

- ➔ AMERICAN MUSIC THERAPY ASSOCIATION – (checked on September 2015) <http://www.musictherapy.org/>
- ➔ ASSOCIACIÓ CATALANA DEL SÍNDROME DE WILLIAMS - (checked on December 2015) http://acsw.cat/a_files/index.php/es/
- ➔ ASSOCIACIÓ CATALANA DE MUSICOTERÀPIA – (checked on September 2015) <http://musicoterapia.cat/>
- ➔ ASOCIACIÓN ESPAÑOLA DEL SÍNDROME DE WILLIAMS – (checked on January 2016) <http://www.sindromewilliams.org/index.php/es/quees>

- ➔ BENZENON MODEL – (checked on December 2015)
<http://www.centrebenezon.cat/mbmt.htm>
- ➔ CANADIAN ASSOCIATION FOR MUSIC THERAPY – (checked on September 2015) <http://www.musictherapy.ca/en/>
- ➔ COLLINS DICTIONARY - <http://www.collinsdictionary.com/>
- ➔ JORDI JAUSET - <http://jordijaset.es/> (checked on November 2015)
- ➔ MUSIC AND LATERALITY – (checked on November 2015)
<http://www.redalyc.org/articulo.oa?id=29213109>
- ➔ NORDOFF-ROBBINS – (checked on December 2015)
<http://steinhardt.nyu.edu/music/nordoff/therapy/nordoff>
- ➔ OXFORD DICTIONARY - <http://www.oxforddictionaries.com/>
- ➔ WILLIAMS SYNDROME ASSOCIATION – (checked on December 2015)
<https://williams-syndrome.org/what-is-williams-syndrome>
- ➔ WILLIAMS SYNDROME ASSOCIATION OF IRELAND – (checked on January 2016) <http://www.williamssyndrome.ie/about-williams-syndrome/>
- ➔ WORDREFERENCE - <http://www.wordreference.com/>
- ➔ WORKING METHODS MUSIC THERAPY – (checked on december 2015)
<https://books.google.es/books?hl=es&lr=&id=k9EPBQAAQBAJ&oi=fnd&pg=P1&dq=working+methods+music+therapy&ots=srkoW9Reof&sig=a2xKhY4wIxmG7JOCVKDvebcYpZI#v=onepage&q=working%20methods%20music%20therapy&f=false>
- ➔ WORLD FEDERATION OF MUSIC THERAPY – (checked on September 2015) <http://www.musictherapyworld.net/>

*“Without music,
life would be an error.”*

~Friedrich Nietzsche