

A study on the impact of music on a school going individual.

Individuals between the age of 13 and 18 years in Chennai, India.

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This is to certify that the project titled A Study on the impact of music
on school going individuals

is a record of work done by _____

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TABLE OF CONTENTS

Title	Page No.
Certificate	i
Acknowledgement	ii
Table of Contents	iii
List of Figures	iv-v
Chapter 1	1 – 14
Chapter 2	15 – 20
Chapter 3	21 - 35
Chapter 4	36- 39
Appendices:	
Appendix I - Reference	vi - vii
Appendix II - Tools	vii - xii
Appendix III – Consent form	xiii

LIST OF FIGURES

Fig.no	Title	Page No.
3.1	Gender of respondents	21
3.2	Age of respondents	22
3.3	Regularity of listening to music	22
3.4	Impact of music on an individual	23
3.5	Change in mood because of music	23
3.6	Background music helps improve concentration	24
3.7	Music while studying	25
3.8	Reasons for listening to music while studying	25
3.9	Reasons for not listening to music while studying	26
3.10	Listening to music while performing other tasks is helpful	27
3.11	Listening to music positively affects academic performance	27
3.12	Types of music listened while performing tasks	28
3.13	Effect of music on efficiency or quality of work	29
3.14	Music helps cope with fallbacks	29

3.15	Music improves quality of life	30
3.16	Music retrieves memories that bring joy to an individual	31
3.17	Relief from stress when singing or listening to music	31
3.18	Music helps sleep	32
3.19	Listening to music (when you are in pain or stress), brings negative thoughts like anxiety, despair, and depression	33
3.20	Music helps decrease these negative thoughts	33
3.21	Music has a bad influence on you	34
3.22	How music has a bad influence on you	35

CHAPTER I

REVIEW OF LITERATURE

INTRODUCTION

This study was done to understand the impact on music on an individual. To be more specific, it was done to investigate the effects of music on an individual and to determine if it has an impact on quality of life. This study also looked at the efficiency of music while a student is studying.. Music is something that makes you feel good. It causes the brain to release dopamine, which results in happiness, excitement and joy. When in pain, sad or upset about something, listening to your favourite music can be very therapeutic and can heal a person both emotionally and physically. Music plays an important role in modulating an individual's mood. Positive music can boost up an individual's positive moods and vice versa. Music also helps in relieving physical pain. Many studies have shown that music therapy helps in pain management and also improves the quality of life.

WHAT IS MUSIC?

Sounds are all around us, from birds chirping and waves lapping against a coastline to cars honking in traffic. But sometimes sounds are put together in purposeful ways to create a specific atmosphere or to express ideas or emotions. Such organized sounds are called music. Music is a collection of coordinated sound or sounds. Making music is the process of putting sounds and tones in an order, often combining them to create a unified composition. People who make music creatively organize sounds for a desired result, like a Beethoven symphony or one of Duke Ellington's jazz songs. Music is made of sounds, vibrations, and silent moments, and it doesn't always have to be pleasant or pretty. It can be used to convey a whole range of experiences, environments, and emotions.

Music expresses everything which cannot be expressed into words and that which must remain silent," remarked author Victor Hugo. Music has been shown to affect a person's emotions. When we are happy, unhappy, thrilled, detached, or even heartbroken, we prefer to listen to various music. The use of music as a pain reliever dates back to the periods of

philosophers such as Aristotle and Plato, who discovered texts on the subject. It became a formal practise during World War I and World War II, when physicians discovered that soldiers healed quicker in terms of their physical and mental health when they heard music performed by community musicians. Music has been found in studies to decrease both acute and chronic pain.

Almost every human culture has a tradition of making music. Examples of early instruments like flutes and drums have been found dating back thousands of years. Ancient Egyptians used music in religious ceremonies. Many other African cultures have traditions related to drumming for important rituals. Today, rock and pop musicians tour and perform around the world, singing the songs that made them famous. All of these are examples of music.

CHARACTERISTICS OF MUSIC

1. Pitch - the highness or lowness of sound. Pitch depends upon the frequency of vibration. The higher the frequency of vibration, the higher the tone.
2. Intensity - the loudness or softness of a musical sound. The intensity or loudness of a sound depends on the amplitude of vibration.
3. Timbre/Tone colour - the distinctive tonal quality of the producing musical instrument. Quality is dependent on the number and relative intensity of overtones produced by the vibrating body, and these in turn depend upon the nature of the vibrating body.

DIFFERENT GENRES IN MUSIC

A music genre is a conventional category that identifies some pieces of music as belonging to a shared tradition or set of conventions. ... Music can be divided into genres in varying ways, such as popular music and art music, or religious music and secular music. A music genre is a conventional category that identifies some pieces of music as belonging to a shared tradition or set of conventions. ... Music can be divided into genres in varying ways, such as popular music and art music, or religious music and secular music.

Top Music Genres in the World are listed below, these are the most popular and wide categories of music

- Country.
- Electronic dance music (EDM)
- Hip-hop.
- Indie rock.
- Jazz.
- K-pop.
- Metal.
- Oldies.

Top Music Genres in Asia are listed below

- Baila
- Bollywood
- Carnatic
- Chinese folk
- Chinese traditional opera
- C-pop
- Dangdut
- Gagaku court music
- Goa trance
- Hindustani
- Japanese folk
- J-pop
- K-trot
- Punjabi
- Rafi
- Raga rock
- V-pop

EFFECT OF MUSIC ON THE BRAIN

Music has been scientifically proven to have a powerful effect on the brain. Recent research shows that music can help in many aspects of the brain, including pain reduction, stress relief, memory, and brain injuries. In the book *The Power of Music*, Elena Mannes says, “Scientists have found that music stimulates more parts of the brain than any other human function.”

- Pain Reduction

A 2014 study found that music was helpful for patients with fibromyalgia. The study showed that listening to relaxing music of the patient’s choice “reduced pain and increased functional mobility significantly.” Researchers believe that music eases pain because listening to it triggers opioids—the body’s natural pain relievers.

- Stress Relief

A 2013 study demonstrates a link between music and decreased stress in paediatric emergency room patients.

- Memory

A 2014 study was conducted on 89 patients with dementia, where the patient and caregivers were randomly assigned either a 10-week music listening coaching group, a 10-week singing coaching group, or regular care. The results showed that “compared with usual care, both singing and music listening improved mood, orientation, and remote episodic memory and to a lesser extent, also attention and executive function and general cognition. Singing also enhanced short-term and working memory and caregiver well-being, whereas music listening had a positive effect on quality of life.

- Seizure, Brain Injury, or Stroke

In 1973 a music-based treatment called Melodic Intonation Therapy was developed to help stroke survivors or people who suffer with aphasia to be able to communicate again. The purpose of the therapy is to convert singing into speech.

PHYSIOLOGICAL BENEFITS OF LISTENING TO MUSIC

- Improved Cognitive Performance

Research suggests that background music, or music that is played while the listener is primarily focused on another activity, can improve performance on cognitive tasks in older adults. One study found that playing more upbeat music led to improvements in processing speed, while both upbeat and downbeat music led to benefits in memory

- Improves Memory

Research suggests that it may help. But it depends upon a variety of factors, including the type of music, the listener's enjoyment of that music, and even how musically well-trained the listener may be. In one study, musically naive students learned better when listening to positive music, possibly because these songs elicited more positive emotions without interfering with memory formation.

- Helps One Sleep Better

Insomnia is a serious problem that affects people of all age groups. While there are many approaches to treating this problem, research has demonstrated that listening to relaxing classical music can be a safe, effective, and affordable remedy.

- Reduced Symptoms of Depression

Researchers have also found that music therapy can be a safe and effective treatment for a variety of disorders, including depression. One study found that music therapy was a safe, low-risk way to reduce depression and anxiety in patients suffering from neurological conditions such as dementia, stroke, and Parkinson's disease

- Improves One's Mood

A study found that intentionally trying to boost moods by listening to positive music could have an impact within two weeks. Participants were instructed to purposefully attempt to improve their mood by listening to positive music each day for two weeks.

MUSIC, MEMORY, EMOTIONS

Several studies in recent years have linked music, memory, and emotion. To back this claim, Petr Janata has conducted two studies to prove that music, memory, and emotion are linked. His initial study found that “music serves as a potent trigger for retrieving memories.” During his second study, Janata took Functional magnetic resonance imaging (MRI) of students’ brains as he played popular songs from their childhood and teenage years. “After each excerpt, the student responded to questions about the tune, including whether it was familiar or not, how enjoyable it was, and whether it was associated with any particular incident, episode or memory” (UC Davis). This study reveals that music, memory, and emotions are strongly linked. This evidence supports the theory that studying while listening to music is a very beneficial practice.

Ever wondered why it’s easier to memorize the lyrics to a song than the periodic table of elements? That’s because your brain looks for patterns to better understand, recall, and process information. It’s the same reason why music producers always put a hook in their songs since what is more commonly known as the earworm or catchy bit. “Earworm” was coined in 1979 by psychiatrist Cornelius Eckert. It happens when a part of the song gets stuck in your head for an extended period of time and you can’t get it out. It just so happens, this is also one way of improving your brain’s memory, which is why some language courses are set to a musical pattern of ear-catching melodies. Some even suggest that the benefits don’t necessarily depend on the kind of music you listen to, but rather how effectively your brain latches on to the pattern of the song.

MOZART EFFECT

In 1993 Rauscher made the surprising claim that, after listening to Mozart's sonata for two pianos for 10 minutes, normal subjects showed significantly better spatial reasoning skills than after periods of listening to relaxation instructions designed to lower blood pressure or silence. The mean spatial IQ scores were 8 and 9 points higher after listening to the music than in the other two conditions. The enhancing effect did not extend beyond 10-15 minutes. These results proved controversial. Some investigators were unable to reproduce the findings but others confirmed that listening to Mozart's sonata K448 produced a small increase in spatial-temporal performance, as measured by various tests derived from the Stanford—Binet scale

such as paper-cutting and folding procedures or pencil-and-paper maze tasks⁸. However, Rauscher has stressed that the Mozart effect is limited to spatial temporal reasoning and that there is no enhancement of general intelligence; some of the negative results, she thinks, may have been due to inappropriate test procedures.

EFFECT OF MUSIC ON CONCENTRATION

Music is found to help people perform better in high-pressure situations, such as the bi-annual high-pressure event that is finals week. Studies have shown that music can help students transform from coal to diamonds, shining under pressure. USA Today asks, “Want to sink the game-winning shot when the pressure’s on? Listen to some upbeat tunes before the big game. Basketball players prone to performing poorly under pressure during games were significantly better during high-pressure free-throw shooting if they first listened to catchy, upbeat music.” This relates to anyone combating high-pressure situations, including school and college students.

Perhaps one of the most compelling reasons to listen to music during a study session is because music is proven to help improve cognitive performance. Basically, music helps your brain function! “Background music may enhance performance on cognitive tasks. One older study found that listening to music allowed test takers to complete more questions in the time allotted and get more answers right. More recent research suggests that whether or not music improves cognitive function depends on whether the music first improves a person’s emotional state”. If one wants to improve brain performance while studying, evidence now shows that you must first improve your emotional state by listening to music that he/she enjoys. Musical activity serves as a cognitive exercise for the brain which trains it for more challenges in the future. Therefore, people who have musical training early on, specifically before age seven, have healthier brains and are less likely to suffer from debilitating diseases like Alzheimer’s or Dementia. But you don’t have to wait for a certain age before benefitting from music.

One of the many studies performed at Stanford says that if you’re like many students suffering from anxiety and stress, try listening to rap music while studying. A study done by Cambridge University showed that hip-hop music provides an uplifting effect on its listeners that can help them accept, manage and deal better with mental health issues. There’s more than

one genre of rap, so find the one you like if it means giving your brain that extra bit of support it needs.

Rather than distracting college students, a Stanford study found that “music moves the brain to pay attention.” Researchers utilized musical compositions from the 1800s in their study and found that “music engages the areas of the brain involved with paying attention, making predictions and updating the event in memory” (Baker). They believe that music choice was influential in brain processing, revealing, “The goal of the study was to look at how the brain sorts out events, but the research also revealed that musical techniques used by composers 200 years ago help the brain organize incoming information” (Baker). Mozart, Bach, and Beethoven can help students categorize information, which is an influential asset to studying.

HOW DOES IT HAVE AN IMPACT ON AN INDIVIDUAL’S PAIN?

Music therapy is a strategy used to treat a person's physical, mental, social, emotional, and cognitive needs. The therapy can help people of all ages who are in pain. Music of many types may help a person, and it is not limited to one style for one person.

Music therapy not only decreases the impression of pain, but it also reduces the number of pain medications required, eliminates any tension, worry, or sadness they may be experiencing, and helps patients manage with the pain in a controlled manner. According to studies, people undergoing surgeries or procedures who listened to music before or during the procedure were less likely to be agitated or apprehensive and did not require as many sedatives. Patients who are recovering after an operation or surgery might benefit from music as well.

IMPACT OF MUSIC ON THE QUALITY OF LIFE

According to WHO, quality of life is an individual's view of their place in life in relation to their objectives, aspirations, standards, and worries, as well as the culture and value systems in which they live. Many things influence this, including the person's physical and psychological status, beliefs, social ties, and the environment in which they live. The pain

quality of life scale lets us determine how severe the pain is. Because music has a favourable influence on stress, sadness, and anxiety, lowering it in many circumstances, it eventually contributes to an improvement in a person's quality of life.

Music plays an important part in the lives of many individuals of all ages, but it aids the elderly and persons suffering from chronic pain and ailments the most. Music might help elderly recall old memories and decrease age-related cognitive deterioration. All of this increases the quality of life for seniors.

IMPACT OF MUSIC ON STRESS

Studies on the influence of music on stress have been conducted, and we can infer that music may have a favourable impact on a person's stress levels. It can also improve a person's well-being. Music has been shown to reduce physiological arousal, which rises when a person is agitated. It has been shown that physiological arousal diminishes, as do cortisol levels, heart rate, and blood pressure. Music has also been shown to reduce stress-related feelings such as anxiety, worry, and uneasiness.

THE EFFECT OF MUSIC LISTENING ON PAIN AND STRESS IN THE DAILY LIFE OF PATIENTS WITH FIBROMYALGIA SYNDROME

A study conducted in 2015 by Alexandra Linnemann, Mattes B Kappert, Sussane Fischer, Johanna M. Doerr, Jana Strahler and Urs M. Nater was done on 30 women aged between 27 and 64 who were suffering from Fibromyalgia Syndrome. This syndrome is characterized by chronic pain. The researchers wanted to understand the effect of music listening on pain and stress in these patients.

Women were recruited through specialized clinics and were examined for 14 days. For the study, the women were given iPods where they would have to fill 6 assessments in one day. They were also asked to give saliva samples after every assessment for the measurement of the stress levels they had so that the researchers could check the levels of salivary cortisol and salivary alpha-amylase. After the 14th day, the samples and iPods were taken for analysis and

the women were also asked to fill out an online questionnaire. In this study, the participants could listen to any type of music for however long they liked, and no instructions were given. Activation and relaxation were predicted to have an impact on the participant's pain.

Results showed that there was a beneficial effect of music on the chronic pain. While the pain intensity perception did not reduce, the perceived control of that pain did increase. This was found more in the patients who listened to music more than others. This research did not find any stress reducing effects by music on the participants. There was definitely a reduce in the stress subjectively but the stress responsive systems (salivary cortisol and salivary alpha-amylase was sampled) did not seem to be affected by music. This showed that the music did not have an impact on the stress biomarkers.

EFFECTS OF MUSIC INTERVENTIONS ON STRESS-RELATED OUTCOMES: A SYSTEMIC REVIEW AND TWO META-ANALYSES

This study was done by Martina de Witte, Anouk Spruit, Susan van Hooren, Xavier Moonen and Geert-jan Stams in the year 2018. This was a computer-based search for literature and a two-level meta-analysis was done. 104 RCTs were taken with 327 effective sizes and 9,617 participants. Results showed that there was a significant small to medium effect of music intervention on stress related outcomes such as heart rate, blood pressure and stress related hormones. A significant moderating effect by music on the heart rate ($d = 0.456$) was seen which was more than stress related hormones ($d = 0.349$) and blood pressure ($d = 0.343$). The gender and age of the samples did not have much of an effect on the physiological stress symptoms.

The study also showed that there was not much of a difference between the type of intervention when it came to music therapy and music intervention, type of control condition like CAU or other interventions, music induction such as pre-recorded or live sessions, music style such as the music determined by the researcher or the music preferred by the patient, music tempo or lyrical music or purely instrumental music.

This study also showed a moderating effect on the psychological stress outcomes such as worry, anxiety and nervousness. This may have an effect on the amygdala, the part of the

brain which is responsible for emotional processes. An explanation for this could be that when listening to the said pleasant music, the person would feel an increase in the intensity in emotional valence and start feeling happy, which reduces the stress. Another explanation for this could be that music could be a distraction from the thoughts and feelings that causes this stress. This is a property that is beneficial for people to distract themselves from an aversive thought and can help in acute stress reduction.

Music intervention in a social environment may help strengthen the impact of music on stress reduction as it brings out the feeling of togetherness and bonding.

(d = intercept/mean effect size)

THE EFFECT OF MUSIC ON THE HUMAN STRESS RESPONSE

This study was conducted in 2013 by Myriam V. Thoma, Roberto La Marca, Rebecca Bronnimann, Linda Finkel, Ulrike Ehlert and Urs M. Nater. 60 Female participants were recruited between the ages 20 and 30 with their native language being German. Individuals who had knowledge in music were not a part of this study. The measures for this study were done by questionnaires, electrophysiological and biochemical methods to analyse the Heart rate and respiratory sinus arrhythmia.

20 participants were chosen randomly underwent the relaxing music (Miserere by Allegri), another 20 participants underwent a non-music control of rippling water and the last 20 participants underwent a control without any stimulation and just relaxation. According to the results with the endocrine responses, there was a high concentration of cortisol in the individuals in the music control and lower concentrations of cortisol in the individuals who underwent the set up with the sound of rippling water prior to the stress task. This showed that the sound of rippling water was perceived as relaxing and calming before the stress task. There didn't seem to be a significant impact of music on the autonomic responses. It was observed that there was a fast increase in the recovery of the Salivary alpha-amylase and Respiratory Sinus Arrhythmia in the group of participants who underwent the setup with the music control. There was not much difference between the three groups with regard to psychological measures like stress and anxiety. This was not in line with other studies done on the same.

One reason could be because the stressor used in this study was strong, which is not the same in many other studies as mild stressors were used in many other studies.

THE EFFECTS OF MUSIC THERAPY-SINGING GROUP ON QUALITY OF LIFE AND AFFECT OF THE PERSONS WITH DEMENTIA: A RANDOMIZED CONTROLLED TRIAL

This study was done by Heeyoun Kim Cho in 2018. The participants were in the age group between 65 and 100 years and were recruited from a Veterans' Home in upstate New York. All the participants were Caucasians. 18 members were put into the music therapy-singing group, 17 members were under the music medicine-listening group and the rest of the members were in the control-TV group. For the music therapy-singing group, the song preferences were taken from the participants and different sets of songs were played everyday with the therapist on the keyboard and the participants were given lyrics sheets to sing along. For the music medicine-listening group, the participants were given a CD of identical songs in an order of songs preferred by the participants'. For the control-TV group, the participants were given a DVD of an episode of a comedy program called "I Love Lucy" for a similar duration of the other groups. There were eight interventions conducted.

After analysis, it was seen that the effect of music therapy-singing group which was led by a music therapist had the most significant impact on the quality of life and effect of the participants with dementia. The participants in the control-TV group and music medicine-listening group did not see such a significant impact as seen by the music therapy-singing group. It should be noted that the number of participants in this study is less and so interpretation for this study should be done carefully. It was seen that the results in the improvement in the quality of life was seen greatest in the music therapy-singing group and the least in the music medicine-listening group.

The results from the control group and listening group did not show much difference or significance. This result may be because of the involvement of physical relaxation and social togetherness. Singing requires deep breathing and increases the oxygen intake. This helps decrease muscle tension and increases relaxation in the participants. The feeling of togetherness and being part of a community also seems to play a role here.

The difference between the singing group from the listening group and the control group was that there was no actual interaction within the participants of the group. As they were just listening to music or watching TV, they did not seem to have the motivation to interact with each other. Not many researchers have studied on the effect of music on the quality of life of individual's with dementia and the findings have not always been consistent.

It was seen that all the three groups had a positive effect with the margin the highest for the singing group and a slight margin for the other two groups. The negative effect decreased for the listening group and the singing group but seem to have increased for the control group after the fourth and eight intervention. This may have happened due to the preferences. Even though the preferences for music were asked for the listening and singing groups, the choice of program was not asked for the control group.

EFFECTS OF MUSIC ON QUALITY OF LIFE ACROSS THE LIFESPAN - A META-ANALYSIS"

This study was done by Cheryl Dileo, Yukiko Mitsudome and Jin-Hyung Lee. This study has included 27 trials with 2,281 participants. This study spoke about the psychological, cognitive, social, behavioural, and physiological effects of music on the quality of life and whether these effects were significant or not.

Music seemed to have an impact on the fatigue and systolic blood pressure when the participants got to choose the music they listened to. Music didn't seem to have a significant effect psychologically in many aspects like anxiety and mood change and the results were not consistent. 9 studies did show that different music experiences and singing did improve moods and also helped in relaxation. It also was seen to have a significant effect on stress and depression. With regards to social behaviours, the significance is small but is heterogenous across the studies. Also, it is hard to analyse and compare due to the small sample size. The effects of music on social communication and satisfaction seemed to be non-significant. Music did not have an effect on the behaviour of the individual.

7 studies showed that there was a significant effect of music on memory and attention which was small. Studies on listening to music and vibrotactile stimulation interventions were

non-significant but homogenous on memory and alertness. The impact of music on academics seemed insignificant. When looked at separately, the impact of music on language deciphering tasks seemed to be significant, moderate to large. Another study showed that there was a significant impact of music on arithmetic's but the opposite for comprehension reading.

Here, 22 cases used background music. Types of music differed between preferred music of the participants and the choices of the researcher depending on the study. The genres of music also differed from study to study.

CONCLUSION

This chapter has presented the principles required for this investigation as well as briefly describing prior studies done in connection to the specific aims of this study. This has also aided the researcher's understanding of the issue and serves as a starting point for the researcher to continue the investigation. This clears the way for the researcher to create their questionnaire for data collection, which will be utilised for analysis in subsequent chapters.

CHAPTER II

RESEARCH METHODOLOGY

INTRODUCTION

“Research methodology is the specific procedures or technique used to identify, select, process, and analyse information about a topic. In a research paper, the methodology section allows the reader to critically evaluate a study’s overall validity and reliability.”

Research Methodology can be known as the systematic, theoretical analysis of the methods applies to a field of study. It is a way to systematically and logically solve a problem, help us understand the process and not just the product of research, and analytical methods in addition to the information obtained by them. It describes the specific procedures or techniques used to identify, select, process, and analyse information about a topic and hence includes research type, design, sampling techniques, and tools of data collection.

STATEMENT OF PROBLEM

Music has the power to help people cope with and control their suffering. It’s something that very few people are aware of. The correct music may also improve an individual's quality of life. Music, if not used appropriately, may also have a detrimental effect on an individual. This research will help us understand how music influences individuals.

SCOPE OF STUDY

This study was conducted to investigate the effects of music on an individual and to determine if it has an impact on quality of life. This study also looked at the efficiency of music while a student is studying.

GENERAL OBJECTIVE

To understand the effect and impact of music on an individual.

SPECIFIC OBJECTIVES

- To understand the effect of music on an individual .
- To understand the impact of music on an individual's quality of life.
- To infer if music has a positive or negative influence on a person's concentration.
- To analyse the efficiency of music while an individual is studying.

RESEARCH METHOD

Research methods is an extremely broad term. It depends on the type of research according to the purpose of the study. It would contain and dictate the type of techniques and tools that the researcher might employ in the proceedings of the research. For this study, the researcher has chosen to use Quantitative and Qualitative research. The researcher has used this method to provide a deeper picture using numbers and figures for a clearer understanding of the magnitude of the problem.

RESEARCH DESIGN

The research design is used to structure the research. It is a general plan about what will be done to answer the research question. Important elements of research design include research strategies and methods related to data collection and analysis. The research design used by the researcher is a cross-sectional study, to analyse the research question using the responses from a specific sample size.

UNIVERSE

The universe represents the entire group of units which is the focus of the study. Depending on the purpose and coverage of the study, the population could consist of all the people in the country, or those in a particular geographical location, or a special ethnic or economic group. For this study, the universe would consist of all those children, above the age of 13 years, who have been to school, and who have experienced or witnessed bullying at some point of their school life.

AREA OF STUDY

The area of study is a specific area within which the researcher will be conducting their research. The area of this research will be focusing on students living in the city of Chennai, Tamil Nadu, India.

SAMPLE SIZE

It would normally be impractical to study a whole population, for example when doing a questionnaire survey. Sampling is a method that allows researchers to infer information about a population based on results from a subset of the population, without having to investigate every individual. It is an important feature of any study which aims to make inferences about a population by collecting information from a specific sample. The researcher collected 50 samples.

SAMPLING TECHNIQUE

The researcher has used the Convenience sampling technique for this research. The only criteria for this would be students above the age of 13 years, who have been to school, and who have experienced or witnessed bullying at some point of their school life.

SOURCES OF DATA

Primary data: The primary source of data that was utilized for this research was a questionnaire formed by the researcher.

Secondary data: These are the data that are collected from some secondary source, that is, the source of where the data is collected by one person and used by other agencies. The researcher has collected secondary data from websites, blogs, and journals.

TOOL FOR DATA COLLECTION

The researcher has used questionnaires as a means of collecting data for quantitative and qualitative analysis.

DURATION OF DATA COLLECTION

The data for this research was collected over a period of 2 days, between the 25th of January and 27th of January.

DATA ANALYSIS

Data analysis is the process of evaluating data using analytical and logical reasoning to examine each component of data provided. Data from various sources is gathered, reviewed, and then analysed to form a conclusion. The researcher used the Google Forms software to analyse and compile the data collected from the respondents.

DEFINITION OF TERMS

Conceptual Definition

Music

Oxford dictionary defines music as “An art of sound in time that expresses ideas and emotions in significant forms through the elements of rhythm, melody, harmony and colour.”

Quality of life

WHO defines Quality of Life as “An Individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.”

Concentration

Merriam Webster defines concentration as the ability to think carefully about something you are doing and nothing else.

OPERATIONAL DEFINITIONS

Music

The science or art of ordering tones or sounds in succession, in combination, and in temporal relationships to produce a composition having unity and continuity.

Quality of life

The degree to which a person or a group is healthy, comfortable, and able to enjoy the activities of daily living.

Concentration

The ability of an individual to focus on a on-going task for a fairly long duration without beng distracted.

CONCLUSION

The Research Methodology has provided the researcher a clear understanding of the research, which will help in the collection and processing of the data. This gives a basic idea and lays the groundwork on which the researcher can build their analysis.

CHAPTER 3

ANALYSIS AND INTERPRETATION

Introduction

Analysis can be defined as the detailed examination of the data collected for the research.

All the information given by the respondents has been compiled, interpreted and presented in this chapter. This part of the project aims to represent all the information and data collected from the interviews, and organise it in a tabular and graphical format. The data presented in these tables and graphs will be analysed and interpreted leading to conclusions.

GENDER OF RESPONDENTS

Gender:
50 responses

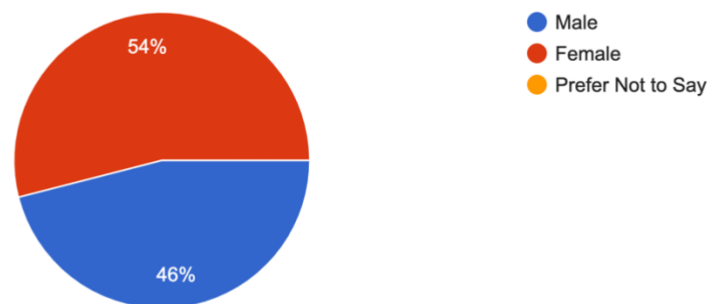


Fig 3.1

More than half the respondents were female and less than half of them were male.

AGE OF RESPONDENTS

Age:

50 responses

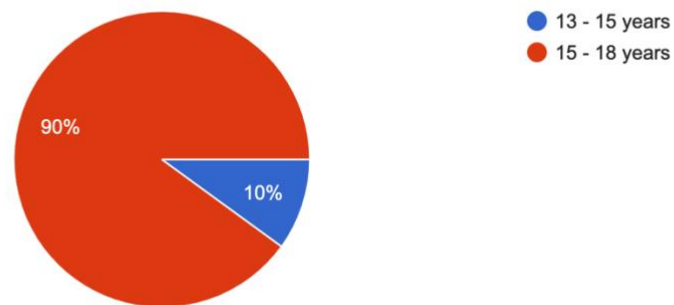


Fig 3.2

Absolute majority of the respondents were between 15-18 years and a considerable portion was between the ages of 13 and 15

REGULARITY OF LISTENING TO MUSIC

How often do you generally listen to music?

50 responses

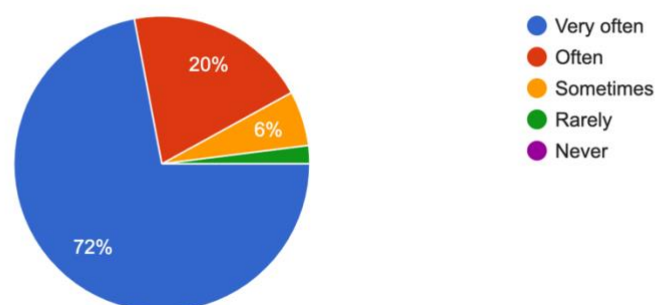


Fig 3.3

Three fourth of the respondents listen to music very often, less than one fourth listen to music often and a very minimal portion listens to music rarely.

IMPACT OF MUSIC ON AN INDIVIDUAL

Music has (a) ____ impact on you
50 responses

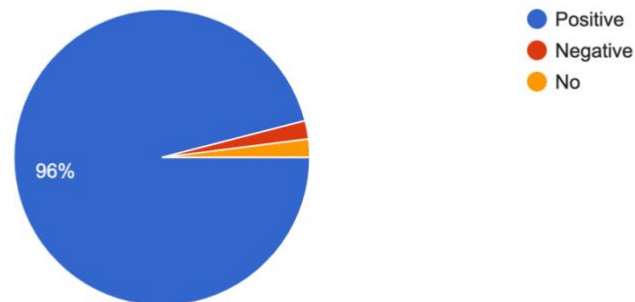


Fig 3.4

A vast majority of respondents feel that music has a positive effect on them whereas a considerable portion believes that music has no impact on them.

CHANGE IN MOOD BECAUSE OF MUSIC

Music helps change your mood or clear your head
50 responses

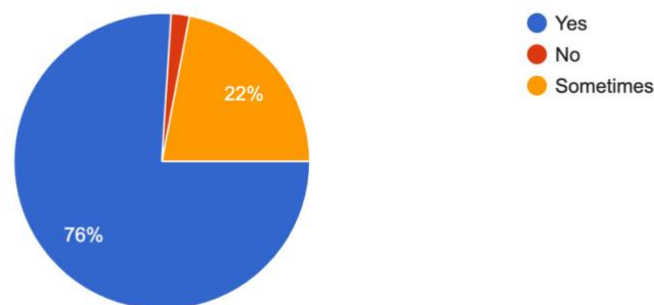


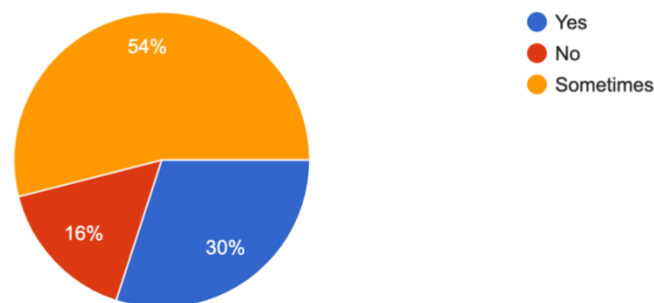
Fig 3.5

Three fourth the respondents are of the opinion that music helps change one's mood or clear their head, but less than one fourth believe otherwise .

BACKGROUND MUSIC HELPS IMPROVE CONCENTRATION

Do you think listening to music in the background helps improve your overall concentration while performing certain tasks? (E.g. Studying, working, drawing)

50 responses

**Fig 3.6**

More than half the respondents think that background music helps improve concentration sometimes and more than one fourth believes that background music always helps improve concentration. A considerable portion believe that background music doesn't help concentration.

MUSIC WHILE STUDYING

How often do you listen to music while studying?
50 responses

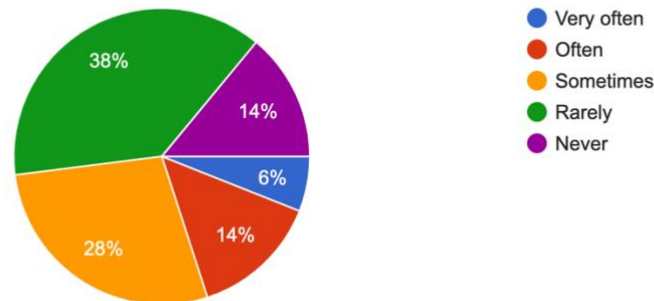


Fig 3.7

A considerable portion of people listen to music while studying while, less than one third rarely listen to music while studying. A small portion never listens to music while studying. Less than one fourth listen to music sometimes while studying but not always.

REASONS FOR LISTENING TO MUSIC WHILE STUDYING

What are your reasons for listening to music while studying?
50 responses

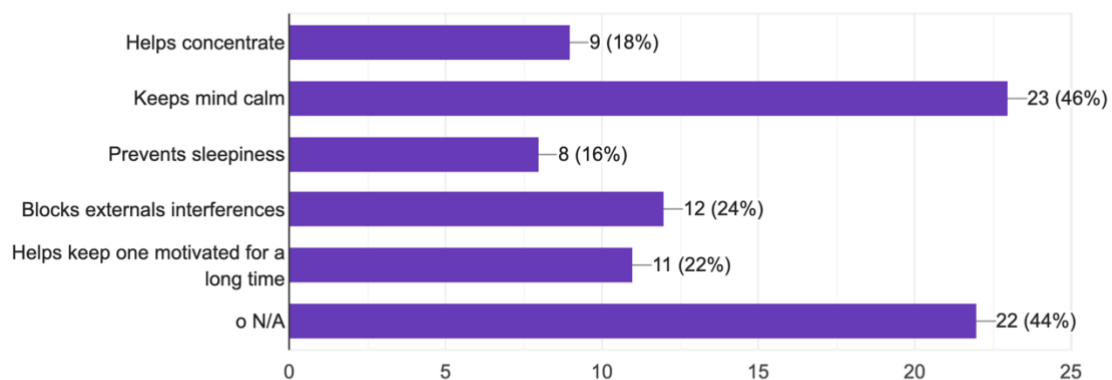


Fig 3.8

There are many reasons to explain why people listen to music while studying. Less than half the respondents listen to music to calm their mind, Less than half do not listen to music while studying. A considerable portion listen to music to help concentrate or to block external interferences or help study for long periods of time.

REASONS FOR NOT LISTENING TO MUSIC WHILE STUDYING

What are your reasons for not listening to music while studying?

50 responses

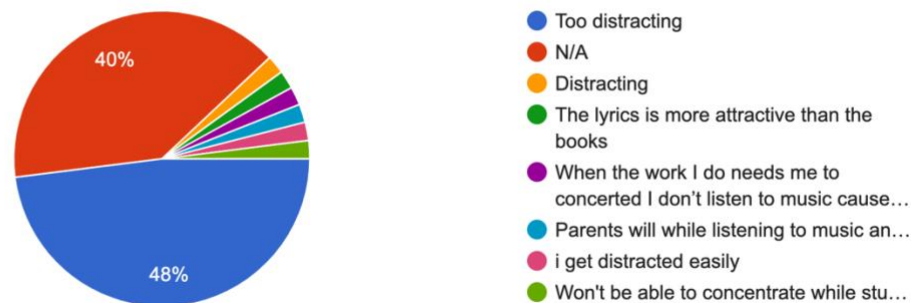


Fig 3.9

More than one third the respondents listen to music while studying more than half the respondents believe that music and its lyrics are very distracting.

LISTENING TO MUSIC WHILE PERFORMING OTHER TASKS IS HELPFUL

Do you find listening to music while studying or working on other tasks to be helpful?

50 responses

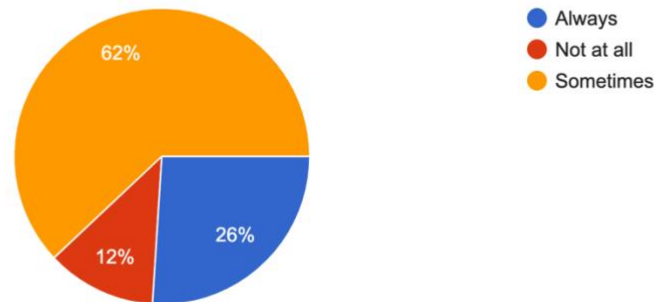


Fig 3.10

Less than two thirds the respondents find music helpful while performing tasks, other than studies. More than two third of the respondents find music helpful sometimes when they are doing other work. A considerable portion don't think music helps while doing other tasks.

LISTENING TO MUSIC POSITIVELY AFFECTS ACADEMIC PERFORMANCE

Do you feel that listening to music positively impacts your academic performance?

50 responses

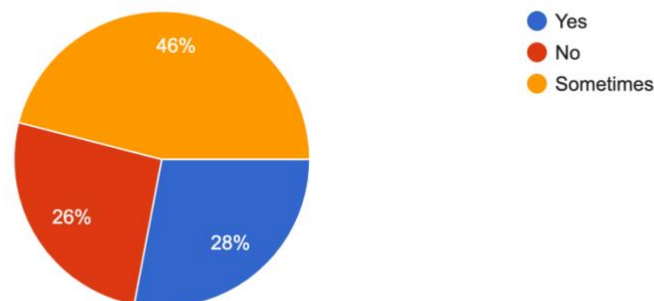


Fig 3.11

Less than half the respondents think music sometimes help boost academic performance a considerable portion believes that music does not help boost academic. One fourth believe that music helps build academic performance.

TYPES OF MUSIC LISTENED WHILE PERFORMING TASKS

"What are some of types of music you typically prefer listening to while doing tasks?"

50 responses

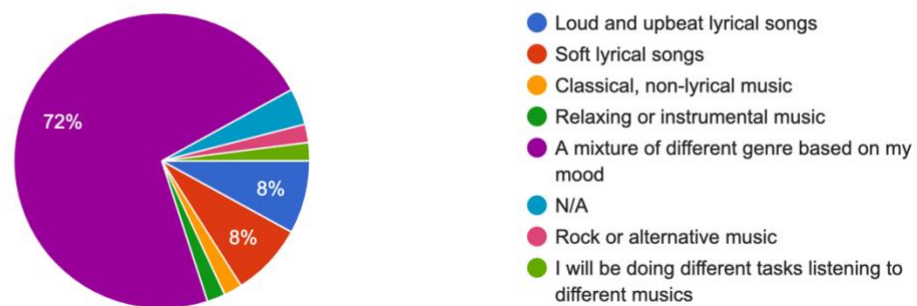


Fig 3.12

According to more than two thirds the respondents a mixture of different music genres according to one's mood is listened too when performing tasks. A considerable portion listen to soft lyrical music and a considerable portion listen to loud upbeat music and lyrical songs.

EFFECT OF MUSIC ON EFFECIENCY OR QUALITY OF WORK

If there is music playing in the background, how does it affect the quality or efficiency of your work?

50 responses

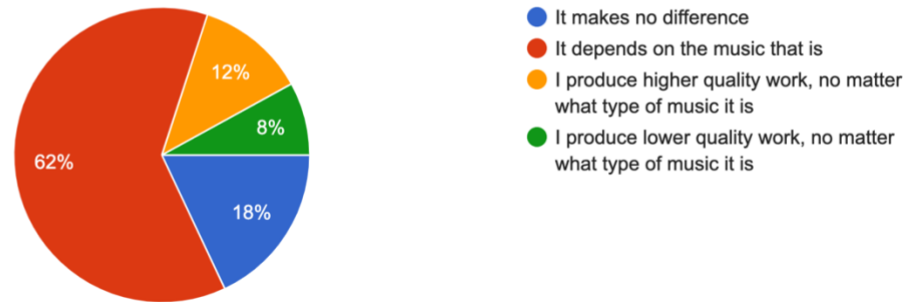


Fig 3.13

More than two thirds of the respondents feel that the quality or efficiency of one's work while listening to music depends on the genre of music one listens too. A considerable portion believe that music makes no difference in the quality of work.

MUSIC HELPS COPE WITH FALLBACKS

Does music help you cope with your fallbacks

50 responses

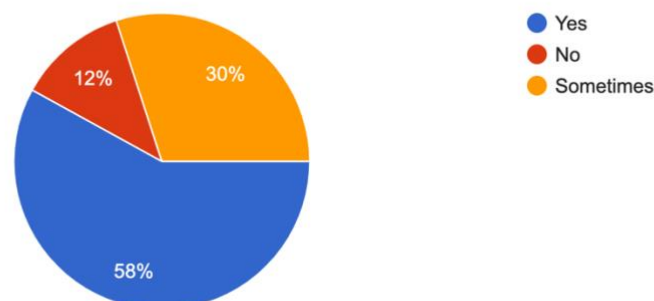


Fig 3.14

More than half the respondents believe that music helps cope with fallbacks. One third believe that music may sometimes help with fallbacks but a considerable portion believes that music does not help with fallbacks.

MUSIC IMPROVES QUALITY OF LIFE

Does music improve the quality of your life?
50 responses

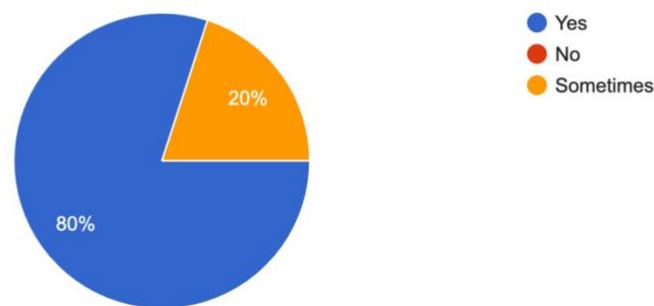


Fig 3.15

Vast majority of the respondents believe that music improves quality of life and a considerable portion of respondents think that music only sometimes improves quality of life.

MUSIC RETRIEVES MEMORIES THAT BRING JOY TO AN INDIVIDUAL

Music bring back memories, which cheer you up.
50 responses

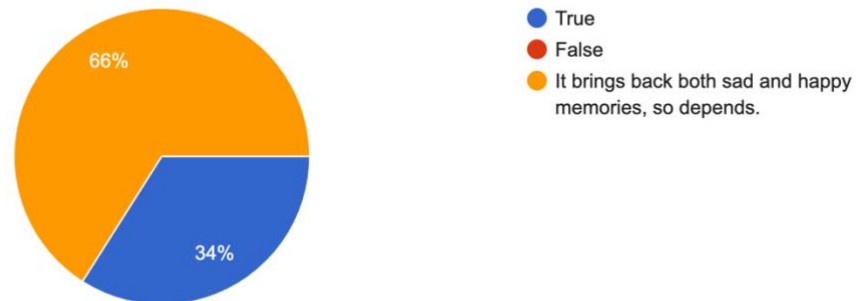


Fig 3.16

More than two third of the respondents responded that music bring backs memories that are both joyous and saddening, whereas, one third believe that music only retrieves memories that bring joy to an individual.

RELIEF FROM STRESS WHEN SINGING OR LISTENING TO MUSIC

Do you feel a decrease in or relief from stress when singing or listening to music?
50 responses

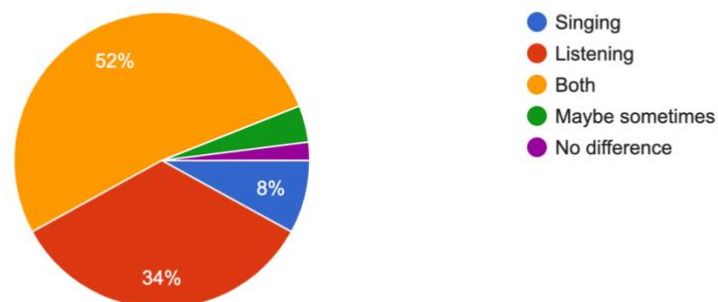


Fig 3.17

More than half the respondents think that both singing and learning help relieve one's stress. One third believe that only listening to music helps relieve stress. A considerable portion believe that only singing relieve stress.

MUSIC HELPS SLEEP

Does music help you sleep?
50 responses

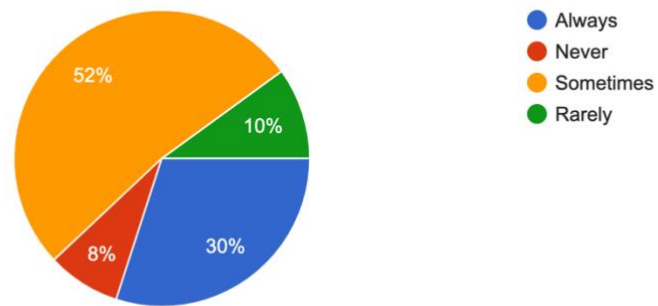


Fig 3.18

More than half the respondents believe that music helps them sleep, one third believes that music always helps one sleep, a considerable portion believe otherwise.

LISTENING TO MUSIC (WHEN YOU ARE IN PAIN OR STRESS), BRINGS NEGATIVE THOUGHTS LIKE ANXIETY, DESPAIR, AND DEPRESSION

When listening to music (when you are in pain or stress), how often do you have negative thought like anxiety, despair, and depression?

50 responses

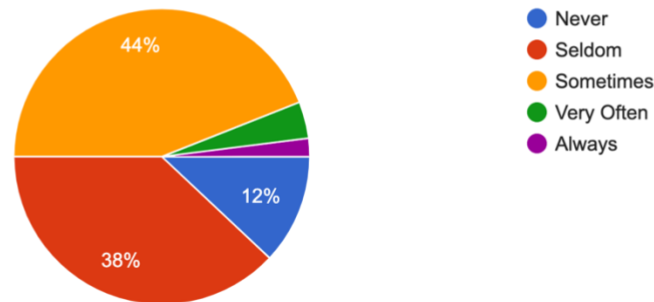


Fig 3.19

Less than half of the respondents responded that listening to music when in stress and pain, only sometimes bring negative thoughts such as, anxiety depression and despair. Half of the respondents believed that these thought would occurs very rarely to an individual.

MUSIC HELPS DECREASE THESE NEGATIVE THOUGHTS

Do you feel like the music helps decrease these negative thoughts?

50 responses

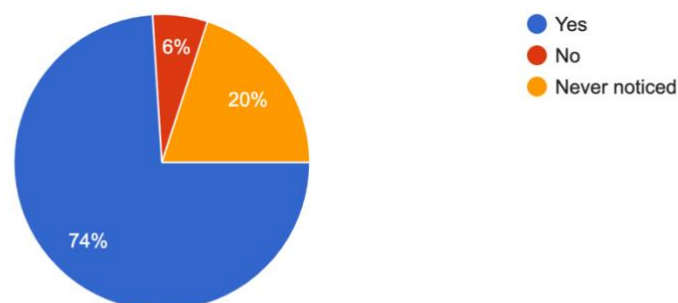
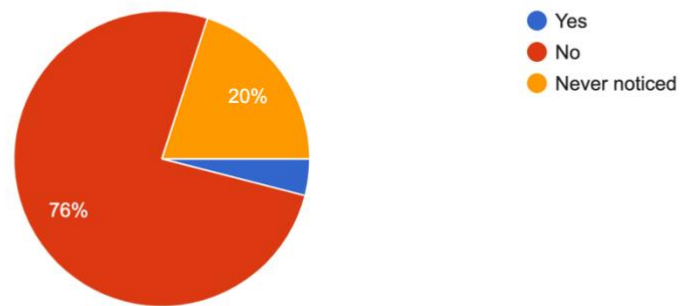


Fig 3.20

More than two third of the respondents think that music helps decrease these negative thoughts and a considerable portion have never noticed this before.

MUSIC HAS A BAD INFLUENC ON YOU

Does music have a bad influence on you
50 responses

**Fig 3.21**

More than two third of the respondents are sure that music doesn't have a bad influence on them, while a considerable portion have not noticed the same.

HOW MUSIC HAS A BAD INFLUENCE ON YOU

How does music have a bad influence on you
50 responses

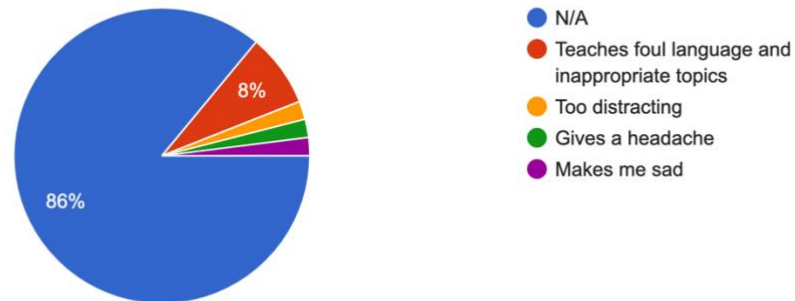


Fig 3.22

A vast majority believed that music does not have a bad influence on individuals, while a considerable portion feel that it teaches foul language, shows inappropriate topics, it's too distracting, or it makes one sad.

CHAPTER 4

MAIN FINDINGS

Introduction

This chapter of the research aims at gathering the fully analysed and interpreted data from the previous chapter and drawing certain conclusions and findings from it. Here, the responses will be thoroughly evaluated and the observations made from it will be related to the objectives of the research.

Overview of the study

This study is intended to review the impact of music on school-going adolescents . The research constituted of 50 respondents, which the researcher collected using random sampling. The researcher passed out an online questionnaire to the respondents.

Personal Demographics

This study covered a range of ages, from 13-18 years. Regarding gender, the split of boys is to girls there was a majority of female respondents. Most of the respondents belonged to the age group of 15-18years.

To understand the effect of music on an individual.

The researcher started the research with the hypothesis that music plays a key role in the life of students and it helps students in various aspects of their life. After thorough analysis of the responses of various adolescents, it is confirmed that music helps make life more meaningful and smooth.

More than three fourth the respondents listen to music very often, and there were zero respondents, who rarely or never listen to music. It is important to note that every student listens to music. A vast majority of the students believe that music has a positive impact on them, and

so they listen to music very often. A considerable portion believe that music has no impact on them. A very minute number of respondents believe that music has a negative influence on them, because i) it teaches unparliamentary language ii) it shows images and videos on inappropriate topics iii) it is sometimes too distracting vi) it gives some a headache v) it bring back some memories and though that make some sad.

More than 75% of the respondents say that music helps change their melancholic mood and helps clear their mood. There remaining respondents also believe that music helps keep the mind stress-free and relaxed. A small portion of the respondents, on the other hand feel that music does not help change one's mood or clear one's head. Thus music has a positive impact on individuals in their daily life.

To understand the impact of music on an individual's quality of life.

According to a vast majority of respondents music always helps improve the quality of their life. A considerable portion believes that music sometimes helps increase quality of one's life. There are no respondents who believe that music does not help improve quality of life. A vast majority also feels that music helps them cope with fallbacks and negatives in their life. It provides instant relief for many. Only a minimal number disagreed with the rest, they did not feel that music helps them deal with drawbacks in life.

Music also retrieves memories and some moments that bring back joy and remorse. One third the respondents think that music only recall memories that cheer you up. According to a high majority of individuals music helps relieve people from stress. It helps people clear out their mind and calms them, and get a break from strenuous thoughts. Music also helps a lot of the respondents sleep. Music helps one sleep better and for a long time. Although a considerable portion of the respondents believe that music rarely helps them sleep. More than two third of the respondents responded that they were while they were in school, although less than one third the respondents have not been bullied.

Less than half of the respondents responded that listening to music when in stress and pain, only sometimes bring negative thoughts such as, anxiety depression and despair. Half of the respondents believed that these thought would occurs very rarely to an individual. More

than two third of the respondents think that music helps decrease these negative thoughts and a considerable portion have never noticed this before. We can say that music helps keep our mind away from negative thoughts. Even if we are depressed, despaired, stressed or possess any kind of negativity we see that music helps us cope with it. Hence we can conclude that music definitely improve the Quality of our life.

To analyse the efficiency of music while an individual is studying.

A considerable portion of people listen to music while studying while, less than one third rarely listen to music while studying. A small portion never listens to music while studying.

Less than one fourth listen to music sometimes while studying but not always. Most of the respondents listen to music while studying. Individuals have different reasons for listening to music while studying some of which are i) keeps the mind calm ii) prevents boredom or sleepiness iii) helps concentrate iv) blocks external interferences v) keeps one motivated for a long time. More than one third the respondents listen to music while studying more than half the respondents do not listen to music while studying because it is very distracting.

A vast majority of the respondents feel that music affects their academic performance. While a considerable portion do not think music has anything to do with how they fair in their studies.

With this we understand that listening to music while studying helps some people concentrate, whereas it may not help others. It is subjective, but we can say that music does improve one's academic performance, if not directly then indirectly. As it helps relieve one from stress and helps calm individual's and think straight.

To infer if music has a positive or negative influence on a person's concentration.

According to my survey, music boosts one's focus most of the times. A vast majority of the respondents believe that music helps the concentrate better whereas, a considerable portion do not think that music helps them concentrate. More than two thirds of the respondents feel that the quality or efficiency of one's work while listening to music depends on the genre of

music one listens too. A considerable portion believe that music makes no difference in the quality of work. Hence we infer that music plays a positive effect on concentration, although for some it may have no effect.

Suggestions by the researcher to readers

- Music may be used in a school's curriculum to help kids cope with stress and improve their overall quality of life.
- People who work long hours or who have illnesses or ailments should be exposed to and learn any type of music in order to relieve pain or stress and improve their quality of life.
- Music may also be used at workplaces for brief periods of time or as seminars to help employees relax and work more effectively as their stress levels reduce.

Limitations of the research

The researcher did not face too many limitations whilst conducting the research. The only limitation that slightly affected the research was the fact that the accuracy of the responses collected from the sample. The interpretation of the questions and the level of honesty of answers may not be absolute.

Conclusion

Music is not always heard, but music can be played with instruments or even be sung. Music has a satisfying impact on a student's daily life. Music has a positive impact a stress which leads to a better quality of life. Music can decrease negative thoughts and have a positive effect on student's academic performance. Music may not increase every student's concentration, but for those students who listen to music while studying, it helps them focus to a great extent. Listening to, playing music or singing has a calming effect one students. These people who are exposed to a lot of music are satisfied and accepting of everything they have and are happy with their life. This allows them to live their lives to the fullest and they are able to achieve whatever they want.

APPENDIX - I

Reference

- Webb, S. L. (2013, July 13). Retrieved from Colorismhealing: <https://colorismhealing.com/teaching-kids-about-colorism/>
- Gonlin, V. (2021, September 22). Retrieved from UGA: <https://news.uga.edu/history-of-colorism-sheds-light-on-discrimination/>
- Kerrison, L. (2020, April 11). Retrieved from E- International Relations: <https://www.e-ir.info/2020/04/11/critical-reflections-on-ethnicity-and-colourism-in-africa-and-the-diaspora/>
- Mishra, N. (2015). Retrieved from WUSTL: https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1553&context=law_globalstudies
- Keyes, L. (2021, January 20). Retrieved from SSWR: <https://sswr.confex.com/sswr/2021/webprogram/Session11502.html>
- (n.d.). Retrieved from https://www.google.com/search?q=colourism&rlz=1C5CHFA_enIN904IN905&sxsrf=AOaemvJNKoNj9IK36onWNYF4X-tl6ogsZw:1635326295130&source=lnms&tbn=isch&sa=X&ved=2ahUKewj7-J6XoerzAhVPyDgGHR6vC8cQ_AUoAXoECAEQAw&biw=1440&bih=684&dpr=1
- Martina de Witte, A. S. (2020). Retrieved from tandfonline.com: <https://www.tandfonline.com/doi/pdf/10.1080/17437199.2019.1627897?needAccess=true>
- (2018 , Oct 15). Retrieved from NCBI: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6232901/>
- Atmeh, A. A. (2017, Jan 24). Retrieved from roadiemusic.com: <https://www.roadiemusic.com/blog/blog/how-music-improves-your-life/>
- Nopanen, E. (2018, February 1). Retrieved from thetabernaclechoir: <https://www.thetabernaclechoir.org/articles/the-powerful-effect-of-music-on-the-brain.html#:~:text=In%20the%20book%20The%20Power,stimulation%20of%20the%20human%20brain.>
- (2019). Retrieved from <https://www.musicgenreslist.com/>.
- (2017, May 23). Retrieved from medium.com: <https://medium.com/giglu/top-10-genres-of-music-industry-7f19cdb177cb>
- (n.d.). Retrieved from <https://www.who.int/toolkits/whoqol>
- (n.d.). Retrieved from <https://examples.yourdictionary.com/major-types-of-music-from-around-the-world.html>
- Martina de Witte, A. S. (2020). Retrieved from tandfonline.com: <https://www.tandfonline.com/doi/pdf/10.1080/17437199.2019.1627897?needAccess=true>
- (2018 , Oct 15). Retrieved from NCBI: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6232901/>
- Atmeh, A. A. (2017, Jan 24). Retrieved from roadiemusic.com: <https://www.roadiemusic.com/blog/blog/how-music-improves-your-life/>
- Nopanen, E. (2018, February 1). Retrieved from thetabernaclechoir: <https://www.thetabernaclechoir.org/articles/the-powerful-effect-of-music-on-the->

- brain.html#:~:text=In%20the%20book%20The%20Power,stimulation%20of%20the%20human%20brain.
- (2019). Retrieved from <https://www.musicgenreslist.com/>.
- (2017, May 23). Retrieved from medium.com: <https://medium.com/gigglue/top-10-genres-of-music-industry-7f19cdb177cb>
- Stanborough, D. R. (2020, November 10). Retrieved from healthline: <https://www.healthline.com/health/benefits-of-singing>
- Cherry, K. (2019, December 10). Retrieved from verywell mind: <https://www.verywellmind.com/surprising-psychological-benefits-of-music-4126866>
- Welch, G. (2019, August 7). Retrieved from singup: <https://www.singup.org/blog/article/1390-the-benefits-of-singing/>
- (n.d.). Retrieved from <https://www.who.int/toolkits/whoqol>
- (n.d.). Retrieved from <https://examples.yourdictionary.com/major-types-of-music-from-around-the-world.html>
- (n.d.). Retrieved from <https://www.singup.org/blog/article/1390-the-benefits-of-singing/>
- (n.d.). Retrieved from <https://www.nammfoundation.org/what-we-do/music-research>

APPENDIX – II

Personal Demographics

Gender:

Male
Female
Prefer not to say

Age:

13 – 15 years
15 – 18 years

Questionnaire

1. How often do you generally listen to music?

Very often
Often
Sometimes
Rarely
Never

2. Music has (a) _____ impact on you

Positive
Negative
No

3. Music helps change your mood or clear your head

Yes
No
Sometimes

4. Do you think listening to music in the background helps improve your overall concentration while performing certain tasks? (E.g. Studying, working, drawing)

Yes
No
Sometimes

5. How often do you listen to music while studying?

Very often
Often

Sometimes
Rarely
Never

6. What are your reasons for listening to music while studying?

Helps concentrate
Keeps mind calm
Prevents sleepiness
Blocks external interference
Helps keep one motivated for a long time
N/A

7. What are your reasons for not listening to music while studying?

Too distracting
N/A

8. Do you find listening to music while studying or working on other tasks to be helpful?

Always
Not at all
Sometimes

9. Do you feel that listening to music positively impacts your academic performance?

Yes
No
Sometimes

10. "What are some of types of music you typically prefer listening to while doing tasks?"

Loud and upbeat lyrical songs
Soft lyrical songs
Classical, non-lyrical music
Relaxing or instrumental music
A mixture of different genre based on my mood
N/A
Other

11. If there is music playing in the background, how does it affect the quality or efficiency of your work?

It makes no difference

It depends on the music that is

I produce higher quality work, no matter what type of music it is

I produce lower quality work, no matter what type of music it is

12. Does music help you cope with your fallbacks?

Yes

No

Sometimes

13. Does music improve the quality of your life?

Yes

No

Sometimes

14. Music bring back memories, which cheer you up.

True

False

It brings back both sad and happy memories, so depends.

15. Do you feel a decrease in or relief from stress when singing or listening to music?

Singing

Listening

Both

Maybe sometimes

No difference

16. Does music help you sleep?

Yes

No

Sometimes

17. When listening to music (when you are in pain or stress), how often do you have negative thought like anxiety, despair, and depression?

- Never
- Seldom
- Sometimes
- Very Often
- Always

18. Do you feel like the music helps decrease these negative thoughts?

- Yes
- No

- Never noticed

19. Does music have a bad influence on you

- Never noticed
- Yes
- No
- Sometimes

20. How does Music have a bad influence on you

- N/A
- teaches foul language
- too distracting
- gives a headache
- others

APPENDIX – III

Consent form

Dear Respondent,

Namaste! I invite you to participate in a Study on the impact of music on students. The purpose of this research project is to understand the effects of music and its impact on concentration and quality of life. This is a research project being conducted by Uttara of Grade XI, Chettinad Harishree Vidyalayam. The data collected will be reported in my Grade XI ISC Psychology Research Paper. I would really appreciate it if you could take some time out, and participate in this survey.

Your responses will be confidential and information such as your name, email address, etc. will not be asked, your response will be completely anonymous.

Your participation in this research study is voluntary. You may choose not to participate