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ASSESSING THE IMPACTS OF MUSIC THERAPY ON MENTAL AND PHYSICAL HEALTH OF ADOLESCENTS DUE TO COVID-19 AT SELECTED HIGHER SECONDARY SCHOOL AT JAIPUR, RAJASTHAN

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ABSTRACT

The aim of the present study was toassess the impacts of music therapy on mental and physical health of adolescents due to covid-19 at selected higher secondary school at Jaipur, Rajasthan.Results shows, After Administration of Music therapy, 18 (30.0%) students have poor knowledge level, 28 (46.7%) students have good knowledge level and 14 (23.3%) have excellent knowledge. Demographic variables such as age, parent's occupation, no. of siblings and source of knowledge show statistical significance. Statistical significance was calculated using chi square test. The other variables such as religion, parent's education, family income, type of family, stream of education and mode of education during Covid-19 have no statistical significance. So results suggested that music therapy positively impacts the mental and physical health of adolescence. The findings of this study emphasize the nursing students to conduct further study. This study helps nurse researchers to educate the students to participate in different programmes on impacts of music therapy.Nurses should come forward to carryout studies on internet addiction disorder and publish them for the benefit of public and nursing fraternity.

Keywords: Music Therapy, Mental health, adolescence, covid-19, Jaipur

Introduction

Music has been used as a therapeutic tool for centuries and has been shown to affect many areas of the brain, including the regions involved in emotion, cognition, sensation, and movement. This fact, combined with the engaging nature of music and the diversity of music forms, makes music uniquely effective in the treatment of a wide array of physical and mental problems, including depression, anxiety, and hypertension. When traveling music groups played for hospitalized veterans during and after both World Wars, doctors and clinicians began to realize the powerful effects that music has on the healing process and requested that professional musicians be hired by the hospitals. This created a need for specialized training in the appropriate delivery of music as a therapeutic method (Mofredj*et al.*, 2016; Lehmberg and Fung, 2010).

ISSN PRINT 2319 1775 Online 2320 7876

Researchpaper UGC CARE Listed (Group -I) Journal Volume 11, Iss3, 2022

The intervention methods employed in music therapy can be roughly divided into active and receptive techniques. When a person is making music, whether by singing, chanting, playing musical instruments, composing, or improvising music, that person is using active techniques. Receptive techniques, on the other hand, involve listening to and responding to music, such as through dance or the analysis of lyrics. Active and receptive techniques are often combined during treatment, and both are used as starting points for the discussion of feelings, values, and goals (Davis*et al*., 2008; Koelsch, 2009).

Music therapy (MT) has been shown to play an important role in helping address physical symptoms and psychological distress. MT involves the systematic use of musical experiences aimed at achieving therapeutic goals by a trained music therapist (MTp). It also implies the establishment of a relationship between patient, music and. MT has been shown by some systematic reviews to reduce pain, improve sleep quality, decrease anxiety and tiredness and induce a relaxation response without the use of medication(Chen*et al*., 2021)

Among palliative care patients, MT has been observed to produce positive changes in pain, anxiety, physical comfort, emotional state, social interaction, and spiritual wellbeing dopamine production MT can induce pleasure, relaxing conditions, reduce cortisol levels and therefore stress levels. As reported in the literature, MT is also used to reduce distress at work, to improve mood, performance, attention and concentration. However, no studies have been conducted so far with a focus on MT support intervention administered to CS assisting COVID patients (Situmorang, 2020; Agres*et al*., 2021).

Need of the study

Within the last 20 years, music therapy (MT) has embraced various technologies to try to improve the practice or expand the realm of possibilities offered to patients. Technology may be used to cater to the multifaceted needs of patients, be it in terms of patient capability, or accessibility and portability of digital tools. The primary goal of MT is to help patients achieve higher levels of wellbeing, using musical experiences and interaction with the therapist as dynamic forces of change. With this goal in mind, having a wider scope of digital MT tools available allows music therapists to select tools that will best suit their patients' cognitive, emotional, and/or physical needs. It is widely accepted that utilizing new technology allows MT to become more inclusive to more individuals, often allowing physically limited patients to participate in MT that would not be possible using only traditional instruments. This in turn can result in higher motivation levels to pursue and continue undergoing therapy. Technology also allows a greater degree of feedback to be generated while participating in MT, giving patients a greater sense of agency, participation,

ISSN PRINT 2319 1775 Online 2320 7876
Researchpaper UGC CARE Listed (Group -I) Journal Volume 11, Iss3, 2022

and purpose.

Objectives of the study

- To assess pre interventional mental and physical health of adolescents.
- To assess impacts of music therapy among adolescents on their mental and physical health.
- To find association between pre -test knowledge score and selected demographic variables regarding mental and physical health of adolescents.

Hypothesis

- **H_1-** There will be a significant difference between pre-test and post-test scores of adolescents regarding mental and physical health.
- **H_2**-There may be significant association between pre-test score of adolescents with their selected socio demographic variables.

Assumptions

- It is assumed that the music therapy positively impact the mental and physical health due to covid-19.
- It is assumed that the students may willing to participate in the study.

Conceptual framework

A framework is the conceptual underpinning of a study. Not every study is based on a theory or model, but every study has a framework. Nurse researchers have used both nursing and non nursing frameworks as conceptual contexts for their studies. This section briefly discusses several frameworks that have been found useful by nurse researchers.

Conceptual frame work is a theoretical approach to the study of problems that are scientifically based which emphasize the selection, arrangements and classification of its concepts. A conceptual framework states functional relationship between events and is not limited to statistical relationships.

Review of literature

A review of literature is an essential aspect of research. One of the major functions of review of literature is to ascertain what is already known in relation to the problem of interest and will help in developing a broad conceptual framework in to which a research problem will fit.Literature related to music therapy and impacts of music therapy on mental health and physical health of individuals.

Research Methodology

It includes the description of research approach, research design, setting of thestudy, variables

Researchpaper UGC CARE Listed (Group -I) Journal Volume 11, Iss3, 2022

under study, population, sample, sample size, sampling technique, sampling criteria, method of data collection, data collection technique and tool, development of tool, description of the tool, content validity, reliability of the tool, pilot study, procedure for data collection, plan for data analysis and summary.

Research Approach

Research Approach is a systematic, objective method of discovery withempirical evidence and rigorous control. The research approach spells out the basicstrategies that the researcher adopts to develop information that is accurate andinterpretable. The control is achieved by holding condition constant and varying onlythe phenomena under study.

Research Design

In the present study pre-experimental one group pre testpost test design was used to assess the impacts of music therapy on mental and physical health of adolescents due to covid-19 at selected higher secondary school at Jaipur, Rajasthan.

Setting of the study

It refers to the physical location and condition in which data collection takes place for this study. This study has been conducted at Govt girls Sr. Sec school, Rawal ji ka bagh, Jaipur.

Sample & Sampling technique

The sample selected for the present study comprises of students of Govt girls Sr. Sec school, Rawal ji ka bagh, Jaipur.In this study, samples were selected by using Non- probabilityconvenient sampling method.

Data analysis & Interpretation of findings

The analysis of data is done based on the objectives of the study. Organization of the findings the data collected from the subject is organized, analyzed and presented under the following headings.

ISSN PRINT 2319 1775 Online 2320 7876

Researchpaper UGC CARE Listed (Group -I) Journal Volume 11, Iss3, 2022

DESCRIPTION OF DEMOGRAPHIC VARIABLES OF THE SUBJECTS

Table 1: Distribution of Subjects according to Age (In Years)

Demographic variables	Category	N=60	
		Frequency	Percentage (%)
Age in Years	15-16 Years	08	13.3
	16-17 Years	32	53.3
	Above 17 Years	20	33.4
Total		**60**	**100**

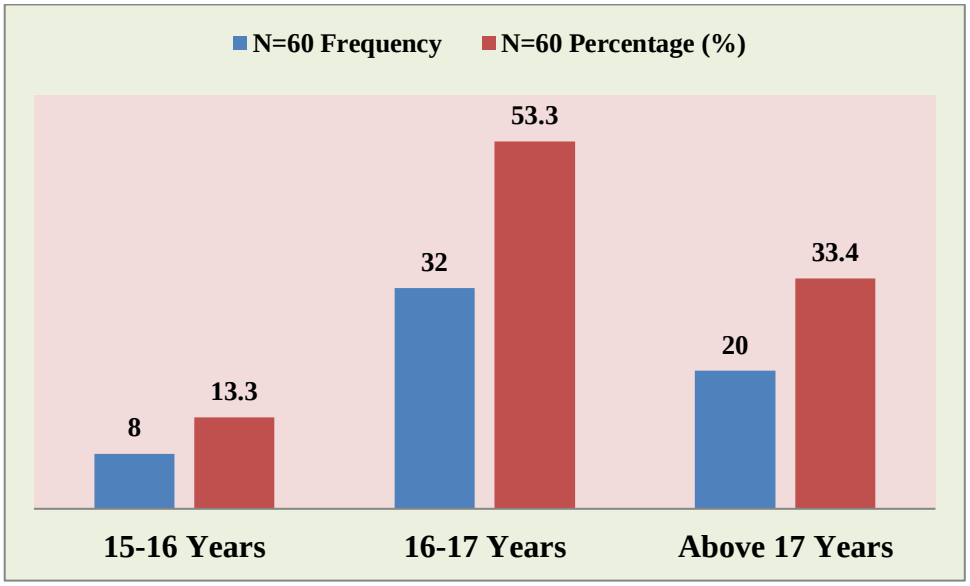

Figure 1: Distribution of subjects according to Age in years

Table 2: Distribution of Subjects according to Religion

Demographic variables	Category	N=60	
		Frequency	Percentage (%)
Religion	Hindu	27	45.0
	Muslim	30	50.0
	Others	03	5.0
Total		**60**	**100**

Researchpaper UGC CARE Listed (Group -I) Journal Volume 11, Iss3, 2022

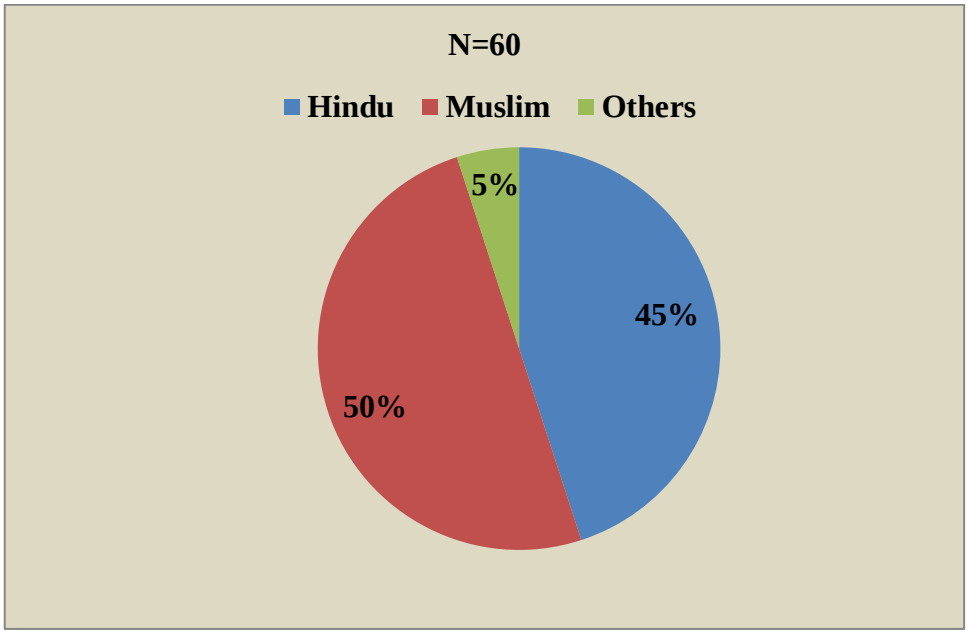

Figure 2: Distribution of subjects according to Religion

Table 3: Distribution of subjects according to Parents education

Demographic variables	Category	N=60	
		Frequency	Percentage (%)
Parents education	No formal education	23	38.3
	Primary/Secondary	17	28.3
	Higher secondary	01	1.7
	Graduation	19	31.7
Total		**60**	**100**

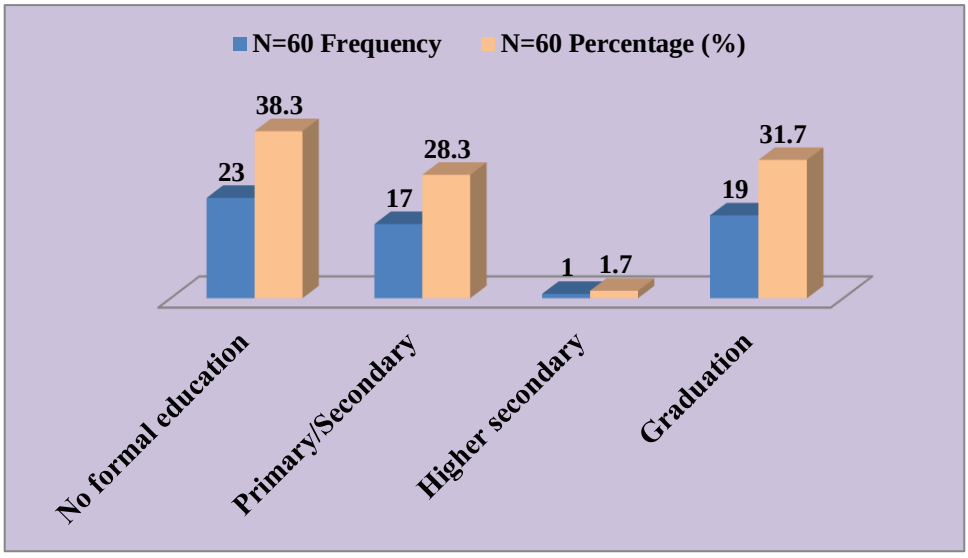

Figure 3: Distribution of subjects according to Parents education

Table 4: Distribution of subjects according to Parents occupation

Demographic variables	Category	N=60	
		Frequency	Percentage (%)
Parents occupation	Government	17	28.3
	Private	26	43.4
	Business	15	25.0
	Others	02	3.3
Total		**60**	**100**

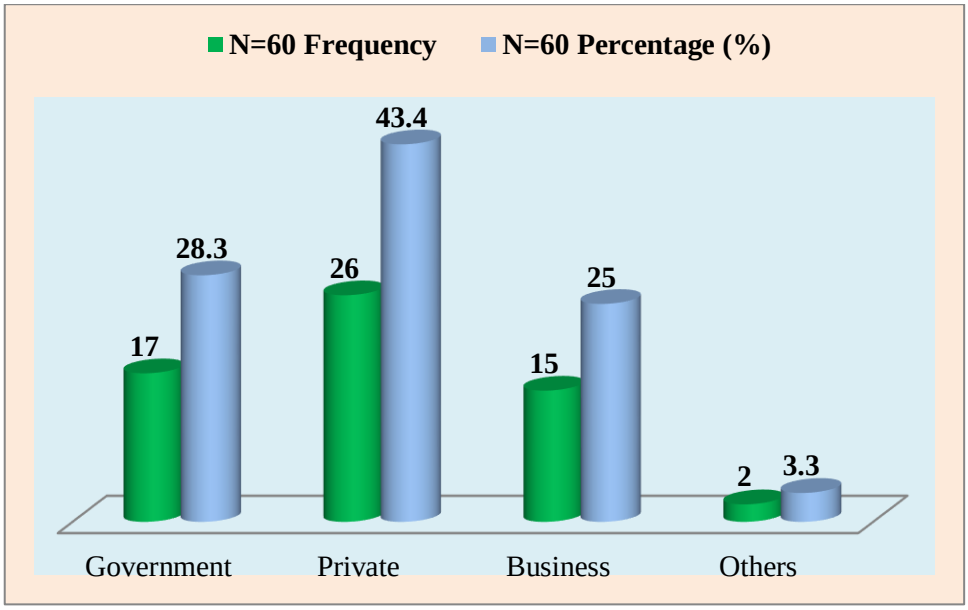

Figure 4: Distribution of subjects according to Parents occupation

Table 5: Distribution of subjects according to Family income (Per month in Rs.)

Demographic variables	Category	N=60	
		Frequency	Percentage (%)
Family income (Per month in Rs.)	5000	1	1.7
	5001-10000	32	53.3
	10001-15000	23	38.3
	Above 15000	04	6.7
Total		**60**	**100**

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ISSN PRINT 2319 1775 Online 2320 7876

Researchpaper UGC CARE Listed (Group -I) Journal Volume 11, Iss3, 2022

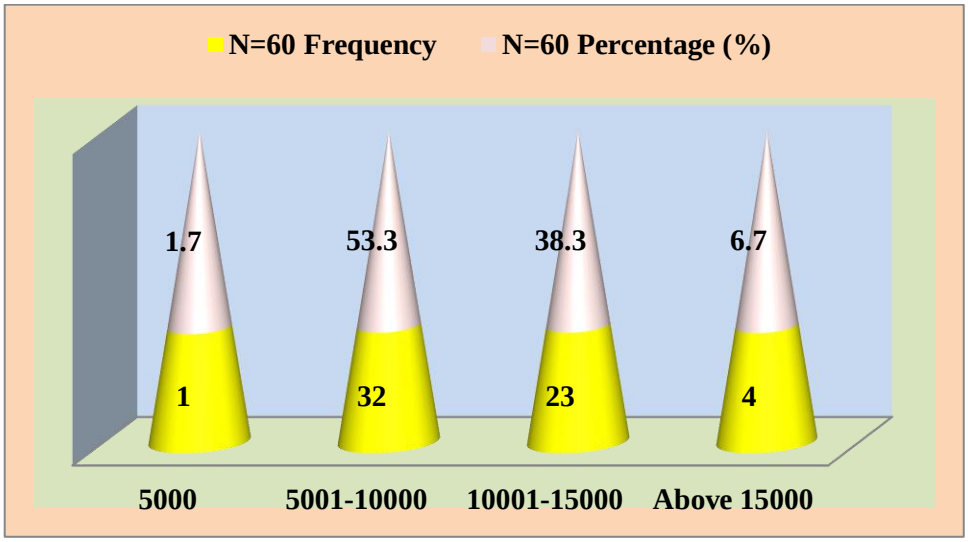

Figure 5: Distribution of Students according to Family income (Per month in Rs.)

Table 6: Distribution of subjects according to No. of siblings

Demographic variables	Category	N=60	
		Frequency	Percentage (%)
No. of siblings	1	41	68.3
	2	10	16.7
	3	07	11.7
	4	02	3.3
Total		**60**	**100**

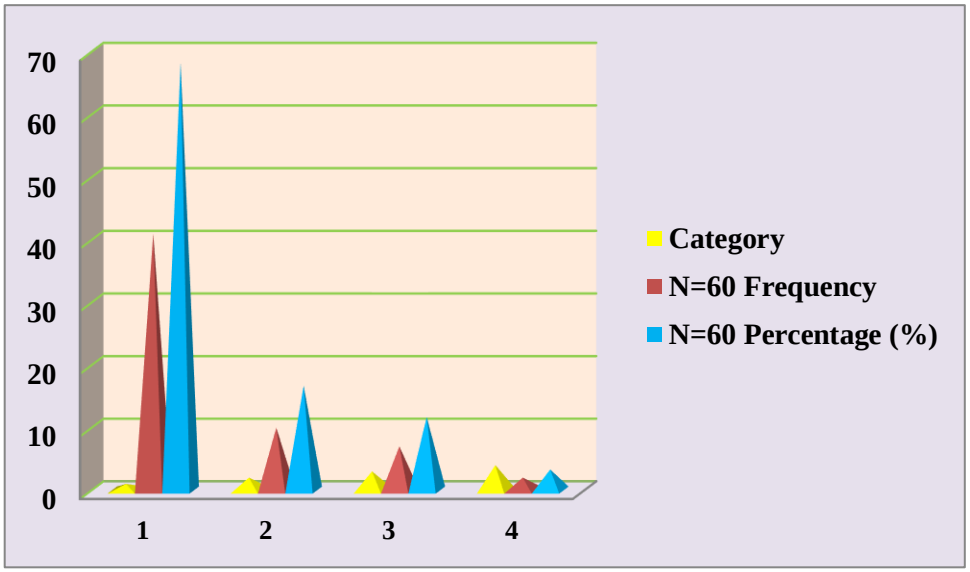

Figure 6: Distribution of Students according to No. of siblings

ISSN PRINT 2319 1775 Online 2320 7876

Researchpaper UGC CARE Listed (Group -I) Journal Volume 11, Iss3, 2022

Table 7: Distribution of subjects according to Type of family

Demographic variables	Category	N=60	
		Frequency	Percentage (%)
Type of family	Joint family	12	20.0
	Nuclear family	19	31.7
	Extended family	29	48.3
Total		**60**	**100**

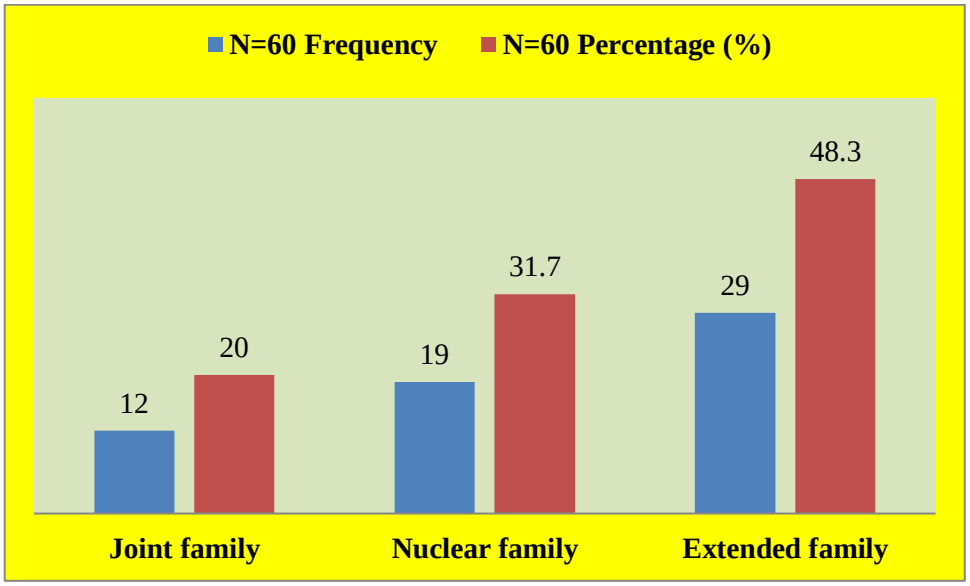

Figure 7: Distribution of Students according to Type of family

Table 8: Distribution of subjects according to Stream of education

Demographic variables	Category	N=60	
		Frequency	Percentage (%)
Stream of education	Science	27	45.0
	Commerce	23	38.3
	Arts	04	6.7
	Others	06	10.0
Total		**60**	**100**

ISSN PRINT 2319 1775 Online 2320 7876

Researchpaper UGC CARE Listed (Group -I) Journal Volume 11, Iss3, 2022

Table 9: Distribution of subjects according to Mode of education during Covid-19

Demographic variables	Category	N=60	
		Frequency	Percentage (%)
Mode of education during Covid-19	Online classes	24	40.0
	Internet	19	31.6
	Self study	07	11.7
	Others	10	16.7
Total		**60**	**100**

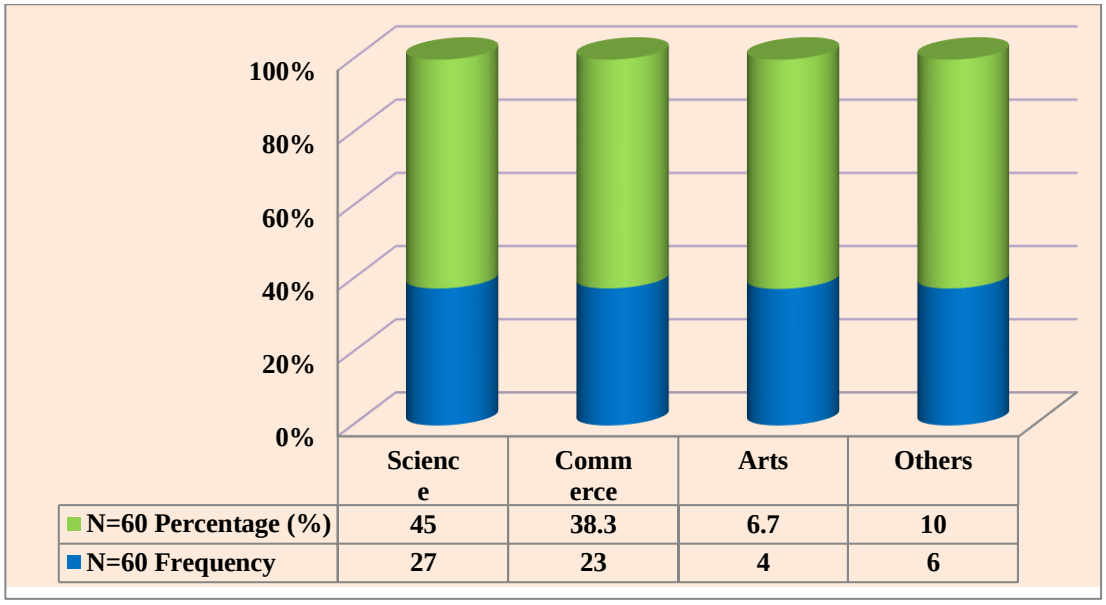

Figure 8: Distribution of Students according to Stream of education

Table 10: Distribution of subjects according to Source of knowledge about physical and mental health

Demographic variables	Category	N=60	
		Frequency	Percentage (%)
Source of knowledge	Mass media	12	20.0
	Family	20	33.3
	Friends/Relatives	18	30.3
	Others	10	16.7
Total		**60**	**100**

ISSN PRINT 2319 1775 Online 2320 7876

Researchpaper UGC CARE Listed (Group -I) Journal Volume 11, Iss3, 2022

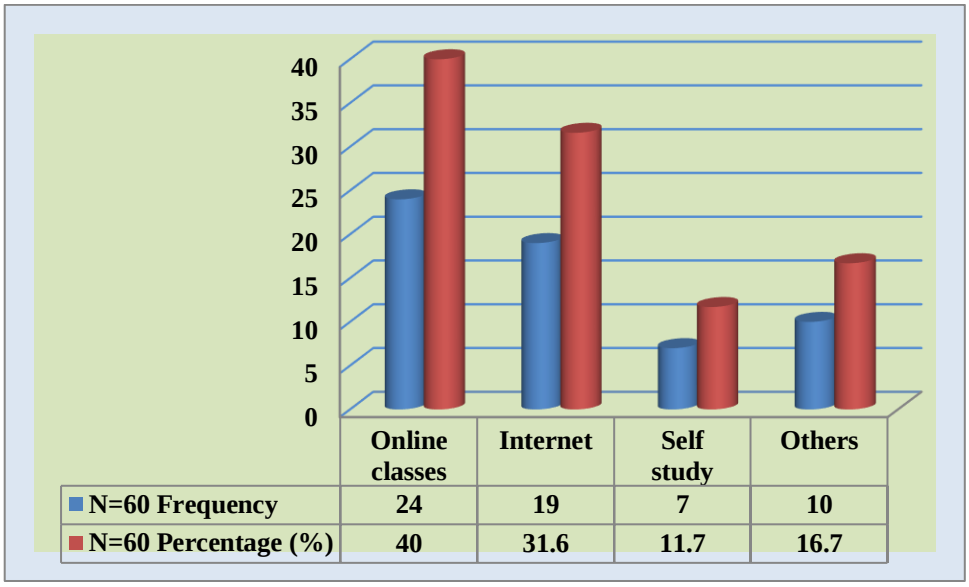

Figure 9: Distribution of Students according to Mode of education during Covid-19

SECTION-II

PRE TEST KNOWLEDGE SCORE OF THE STUDENTS BEFORE MUSIC THERAPY INTERVENTION

Table 11:- Frequency and percentage of pre-test knowledge score

N=60

Pre test knowledge level	Frequency	Percentage %
Poor	30	50.0
Good	24	40.0
Excellent	06	15.0
Total	**60**	**100**

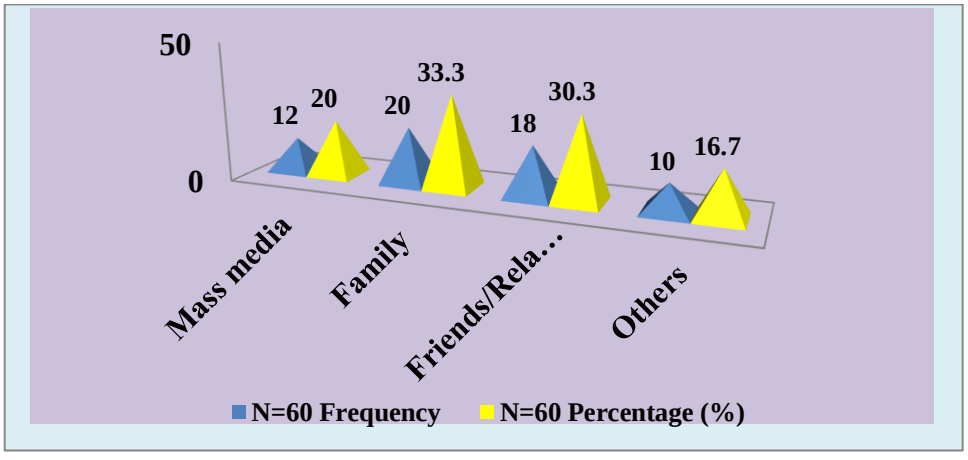

Figure 10: Distribution of Students according to Source of knowledge

ISSN PRINT 2319 1775 Online 2320 7876
Researchpaper UGC CARE Listed (Group -I) Journal Volume 11, Iss3, 2022

SECTION-III

POST TEST KNOWLEDGE SCORE OF THE STUDENTS AFTER MUSIC THERAPY INTERVENTION

Table 12:- Frequency and percentage of post-test knowledge score

N=60

Post test knowledge level	Frequency	Percentage %
Poor	18	30.0
Good	28	46.7
Excellent	14	23.3
Total	**60**	**100**

SECTION-IV

IMPACTS SCORE OF THE MUSIC THERAPY

Table 13:- Comparison of pretest and posttest level ofknowledge level

N=60

Post test knowledge level	Pretest		Posttest		Chi-square test
	Frequency	Percentage %	Frequency	Percentage %	
Poor	30	50.0	18	30.0	χ^2=45.89 P=0.001*** DF=2
Good	24	40.0	28	46.7	
Excellent	06	15.0	14	23.3	
Total	**60**	**100**			

SECTION- V

COMPARISON OF PRETEST AND POSTTEST SCORE

Table 14:- Comparison of Mean, SD of pretest and posttest score

N=60

Score	Frequency	Mean ± SD	Mean Difference	Student's paired t-test
Pre test	60	16.72±3.88	8.42	t=20.62 P=0.001***
Posttest	60	8.30±2.16		

ISSN PRINT 2319 1775 Online 2320 7876

Researchpaper UGC CARE Listed (Group -I) Journal Volume 11, Iss3, 2022

SECTION-VI

ASSOCIATION BETWEEN THE IMPACTS OF MUSIC THERAPY WITH SELECTED DEMOGRAPHIC VARIABLES

Table 15:-Association between the knowledge score with selected demographic variables

N=60

Sr. No.	Demographic Variables	Score				Total	Chi square test
		Below average(≤8.42)		Above average(>8.42)			
		Frequency	Percentage %	Frequency	Percentage %		
1.	**Age in Years**						
	15-16 Years	2	25.0	6	75.0	8	χ^2=8.12 P=0.02* DF=2
	16-17 Years	13	40.6	19	59.4	32	
	>17 Years	15	75.0	5	25.0	20	
2.	**Religion**						
	Hindu	10	37.0	17	63.0	27	χ^2=4.28 P=0.11 DF=2
	Muslim	19	63.3	11	36.7	30	
	Others	1	33.3	02	66.7	03	
3.	**Parents education**						
	No formal education	13	56.5	10	43.5	24	χ^2=1.92 P=0.58 DF=3
	Primary/ Secondary	9	52.9	08	47.1	17	
	Higher secondary	8	42.1	11	57.9	19	
4.	**Parents occupation**						
	Government	12	70.5	5	29.5	17	χ^2=11.89 P=0.01** DF=3
	Private	15	57.7	11	42.3	26	
	Business	3	20.0	12	80.0	15	
	Others	0	0.0	02	100	02	
5.	**Family income (Per month in Rs.)**						
	5000	1	100	0	0.0	1	χ^2=6.13 P=0.10 DF=3
	5001-10000	20	62.5	12	37.5	32	
	10001-15000	8	34.8	15	65.2	23	
	Above 15000	1	25.0	03	75.0	04	
6.	**No. of siblings**						
	1	0	00.0	2	100.0	2	χ^2=7.91
	2	2	28.6	5	71.4	7	

	3	20	48.8	21	51.2	41	P=0.05*
	4	8	80.0	2	20.0	10	DF=3
7.	**Type of family**						
	Joint family	6	50.0	6	50.0	12	χ^2=4.26
	Nuclear family	6	31.6	13	68.4	19	P=0.11
	Extended family	18	62.1	11	37.9	29	DF=2
8.	**Stream of education**						
	Science	13	48.1	14	51.9	27	χ^2=0.74
	Commerce	11	47.8	12	52.2	23	P=0.84
	Arts	2	50.0	2	50.0	4	DF=3
	Others	4	66.7	2	33.3	6	
9.	**Mode of education during Covid-19**						
	Online classes	9	37.5	15	62.5	24	χ^2=4.62
	Internet	13	68.4	6	31.6	19	P=0.20
	Self study	4	57.1	3	42.9	07	DF=3
	Others	4	40.0	6	60.0	10	
10.	**Source of knowledge**						
	Mass media	5	41.7	7	58.3	12	χ^2=8.02
	Family	6	30.0	14	70.0	20	P=0.05*
	Friends	11	61.1	7	38.9	18	DF=3
	Others	8	80.0	2	20.0	10	

Conclusion

- In pretest, students have 16.72 score where as in posttest they have 8.30 score, so the difference is 8.42. This difference between pretest and posttest is large and it is statistically significant.
- The result shows post test knowledge level that 18 (30.0%) students have poor knowledge level, 28 (46.7%) students have good knowledge level and 14 (23.3%) have excellent knowledge.
- Before Administration of Music therapy, 30 (50.0%) students have poor knowledge level, 24 (40%) students have good knowledge level and 06 (15.0%) have excellent knowledge. After Administration of Music therapy, 18 (30.0%) students have poor knowledge level, 28 (46.7%) students have good knowledge level and 14 (23.3%) have excellent knowledge
- The results of the study revealed that in pretest, students have 16.72 score where as in posttest they have 8.30 score, so the difference is 8.42. This difference between pretest and posttest is large and it is statistically significant.
- Demographic variables such as age, parent's occupation, no. of siblings and source of knowledge show statistical significance. Statistical significance was calculated using chi square test. The other variables such as religion, parent's education, family income, type

ISSN PRINT 2319 1775 Online 2320 7876
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of family, stream of education and mode of education during Covid-19 have no statistical significance.So results suggested that music therapy positively impacts the mental and physical health of adolescence.

References

- Mofredj A, Alaya S, Tassaioust K, Bahloul H, Mrabet A. Music therapy, a review of the potential therapeutic benefits for the critically ill. Journal of critical care. 2016 Oct 1;35:195-9.
- Lehmberg LJ, Fung CV. Benefits of music participation for senior citizens: A review of the literature. Music Education Research International. 2010;4(1):19-30.
- Davis WB, Gfeller KE, Thaut MH. An introduction to music therapy: Theory and practice. American Music Therapy Association. 8455 Colesville Road Suite 1000, Silver Spring, MD 20910; 2008.
- Koelsch S. A neuroscientific perspective on music therapy. Annals of the New York Academy of Sciences. 2009 Jul;1169(1):374-84.
- Chen X, Li H, Zheng X, Huang J. Effects of music therapy on COVID-19 patients' anxiety, depression, and life quality: A protocol for systematic review and meta-analysis. Medicine. 2021 Jul 7;100(26).
- Situmorang DD. Music therapy for the treatment of patients with addictions in COVID-19 pandemic. Addictive Disorders & Their Treatment. 2020 Dec 1;19(4):252.
- Agres KR, Foubert K, Sridhar S. Music therapy during COVID-19: Changes to the practice, use of technology, and what to carry forward in the future. Frontiers in Psychology. 2021 May 21;12:647790.