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EXPLORING THE EFFECTS OF MUSIC THERAPY ON LIFE SKILLS AMONG ADOLESCENT STUDENTS- A RANDOMIZED CONTROLLED STUDY

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ABSTRACT

Adolescence is a crucial period for emotional development and life skill acquisition, making music therapy a potential avenue for fostering psychosocial competence and well-being. The research aimed to assess whether participation in music therapy could lead to improvements in social skills, coping skills, and survival skills among students aged 13 to 16 years. The study was conducted in a CBSE school in Puducherry and involved 60 randomly selected students from grades 8th, 9th, and 11th, forming both control and experimental groups. The experimental group received ten consecutive music therapy sessions focusing on objectives to enhance self-awareness, empathy, effective communication, interpersonal relationships, coping with emotions, and coping with stress. Baseline evaluations were conducted using the Life Skills Assessment Scale (LSAS) and the Adolescent Wellbeing Scale. Music therapy interventions included warm-up techniques, vocal recreation, music collage, songwriting, and improvisation techniques. Pre and Post intervention

tests exhibited changes in life skills and adolescent well-being. Quantitative analysis revealed that the experimental group exhibited higher mean scores for total life skills before and after the intervention, suggesting potential advantages in life skills development. Qualitative analysis enriched comprehension of self-awareness, empathy, effective communication, coping with stress, and emotions, closing gaps in understanding. Despite non-significance in quantitative results, qualitative data indicated positive impact on these skills, highlighting subjective growth beyond statistics. Moreover, music therapy positively impacted adolescent well-being, with the experimental group experiencing greater improvements compared to the control group.

Keywords: Adolescence, life skills, music therapy, wellbeing, Life skills assessment scale

INTRODUCTION

Music is a universal phenomenon deeply rooted in human existence, known for its potential to enhance psychological skills and foster human development [1]. Across cultures and history, music has been recognized as possessing therapeutic properties, promoting physical and psychological well-being [2]. Music therapy, a specialized field, utilizes the unique qualities of music and the therapeutic relationship between the therapist and client to support individuals in achieving therapeutic goals and enhancing overall well-being [3].

Adolescence is a critical period characterized by intense emotional changes and the need for developing life skills [4]. Life skills, such as self-awareness, empathy, effective communication, and coping with emotions and stress, are crucial for adaptive and positive behavior, contributing to psychosocial competence and well-being

throughout life [5]. As the number of adolescents worldwide continue to grow, it becomes increasingly important to provide them with tools to navigate the challenges they face during this transformative stage [6]. Research on music therapy has demonstrated its potential benefits in various settings, including improvements in cognitive functions, motor abilities, emotional development, behavior, and social skills [7]. In the context of mental health, music therapy has shown promising results in enhancing social connectivity, promoting engagement in health-promoting behaviors, and facilitating identity formation and resilience [8].

This current research aimed to explore the impact of music therapy sessions on the life skills of adolescent students in a school environment. The primary objectives focus on investigating whether participation in music therapy intervention can lead to changes in

social skills, coping skills, and survival skills among the students. Specifically, the study focused on enhancement of self-awareness and empathy for peers, develop coping strategies for managing emotions and stress, fostering interpersonal relationships and effective communication with peers.

MATERIALS AND METHODS

Methods:

This current research employed a pre post between group design to explore the effects of group music therapy on the life skills of adolescent students. The data collection was conducted in a CBSE school in Pondicherry, with an annual volume of over 800 students. In a span of six months, data collection and music therapy intervention were carried out as part of the study.

Participants:

Adolescent students between the ages of 13 and 16 years were randomly selected from grades 8th, 9th, and 11th of the school. The total sample size was 60 students, comprising 30 in the experimental group (25 females and 5 males) and 30 in the control group (14 females and 16 males). 10 students from each grade were included in both the groups.

Sampling Process:

The participants were randomly selected from the three grades using the Microsoft Excel formula RAND. The control and experimental

groups were then formed, each consisting of 30 students. To optimize the group music therapy intervention, the experimental group was further divided into three sub-groups based on age and grade.

Data Collection:

Data collection included various assessments and questionnaires. Before the intervention process, an initial assessment was conducted to establish baseline data. Participants' musical profiles were collected to understand their musical interests and engagement. The Life Skills Assessment Scale (LSAS) and the Adolescent Wellbeing Scale were administered before and after the intervention to gauge alterations in life skills and overall well-being.

Music Therapy Intervention:

The experimental group received ten consecutive music therapy sessions, each lasting 60 minutes, twice a week in the school premises. The sessions included various therapeutic techniques such as warm-up activities, songwriting, music collage, and improvisation techniques. These experiences were used as an attempt to improve specific life skills, including self-awareness, empathy, coping with emotions and stress, effective communication, and interpersonal relationships.

Statistical Analysis:

The collected data was entered into Microsoft Excel 2011 and analyzed using SPSS version 19.0. Descriptive statistics, mean, standard deviation, paired t-tests, and ANOVA were used to assess the impact of music therapy on life skills and wellbeing.

RESULT AND DISCUSSION

The findings of the study revealed a significant improvement in total life skills and well-being among adolescent students who

underwent music therapy interventions. Notably, statistically significant improvements were observed in the domains of empathy, effective communication, and coping with stress. These results indicate that music therapy can be a valuable intervention for fostering crucial life skills in adolescents, leading to overall improvements in their psychological and emotional health (**Table 1, 2**).

Table 1: Difference between Experimental and Control group on the total score of Life Skills (paired t test)

	Experimental group(n=30)		Control group (n=30)	
	Pre assessment	Post Assessment	Pre assessment	Post Assessment
Mean	200.47	215.47	192.73	203.07
Std. deviation	15.86	22.39	19.55	10.83
df	29		29	
Sig (2 tailed)	0.001		0.006	

Table 2: Difference between Experimental and Control group on the total score of Adolescent Wellbeing (paired t test)

n= 30	Experimental group(n=30)		Control group (n=30)	
	Pre assessment	Post Assessment	Pre assessment	Post Assessment
Mean	13.40	11.33	12.10	11.37
Std. deviation	2.92	2.96	2.92	2.73
T	-3.542		3.095	
df	29		29	
Sig (2-tailed)	0.004		0.313	

In the experimental group, the mean score for total life skills exhibited a noteworthy increase from 200.47 during the pre-assessment to 215.47 in the post-assessment, accompanied by a standard deviation (SD) of 15.86 pre-assessment and 22.39 post-assessment. Conversely, the control group demonstrated mean scores of 192.73 pre-assessment and 203.07 post-assessment, with an SD of 19.55 pre-assessment and 10.83

post-assessment. The paired t-test indicated a significant enhancement in total life skills for the experimental group ($p < 0.05$, $p\text{-value} = 0.001$). Concerning adolescent well-being, the experimental group displayed mean scores of 13.40 pre-assessment and 11.33 post-assessment, with SD values of 2.92 and 2.96 respectively. In comparison, the control group exhibited mean scores of 12.10 pre-assessment and 11.37 post-assessment,

accompanied by SD values of 2.92 and 2.73. The paired t-test further substantiated a substantial improvement in adolescent well-being within the experimental group ($p < 0.05$), while the control group demonstrated no significant differences in pre and post-test measures ($p > 0.05$, $p\text{-value} = 0.313$).

The significant enhancement in empathy and effective communication skills highlights the potential positive impact of music therapy on adolescents' emotional regulation and interpersonal relationships. Music therapy sessions likely provided a safe and creative space for students to express their emotions and connect with others through music, thereby strengthening their empathetic abilities and communication skills. Adolescents are at a critical stage of social development, and enhancing these skills can contribute to healthier relationships and better social interactions.

Moreover, the statistically significant improvement in coping with stress is of particular significance. Adolescence is a period marked by significant changes and challenges, and the ability to cope with stress effectively is essential for overall well-being. The music therapy interventions likely facilitated emotional expression and provided coping strategies, leading to reduced stress levels among the participants.

The qualitative analysis provided valuable insights into the experiences and perceptions of the participants, bridging the gap and enriching our understanding of self-awareness, empathy, effective communication, coping with stress, and emotions. While some domains did not show statistical significance in the quantitative analysis, the qualitative data revealed meaningful changes in these areas. This suggests that music therapy had a positive impact on these life skills, even if not statistically significant. The qualitative findings emphasized the importance of considering the subjective experiences and individual growth that may not be fully captured in quantitative measures.

Song-writing in music therapy refers to the collaborative process of creating, writing, and recording lyrics and music between the therapist and the client, aimed at addressing the client's psychosocial, emotional, cognitive, and communication needs within a therapeutic context [9]. It has been linked to enhanced psychological and emotional well-being, as well as the clarification of thoughts and emotions, leading to a reduction in negative feelings [10]. Music therapy researches concluded that using songs is beneficial in addressing substance abuse problems among adolescents [11]. Song

therapy, often involving the analysis of lyrics, has also proven helpful in assisting clients with various issues, such as child sexual abuse and coping with grief and loss [12]. For adolescents, major themes addressed through music therapy include self-esteem, self-confidence, decision-making, and exploring the connections between feelings and thoughts related to life issues, spirituality, and interpersonal relationships [12].

During the current study period a total of six songs were written and collected. The most prominent themes emerged were as follows (Table 3).

The emergence of these themes through songwriting process among adolescents highlights the relevance and therapeutic potential of song writing technique in

addressing various aspects of their life skills development and well-being. Each theme represents a unique dimension of adolescent experiences and emotions, providing valuable insights into their inner world and struggles. The discussion on the relevance of these themes can shed light on the transformative power of music therapy as an effective intervention for supporting and promoting adolescent mental health.

Music Collage is a technique under receptive music therapy and art media. No literatures were found on the use of this technique among adolescents and other population. During the current study period a total of four collage were made and collected. The most prominent themes emerged were as follows (Table 4).

Table 3: Songs and themes emerged

Songs	Themes emerged
1. Self	<ol style="list-style-type: none"> 1. Understanding of Self-Awareness and Self-Love 2. Embracing Individuality and Self-Expression. 3. Recognizing the Brave Nature of Love 4. Appreciation of Meaningful Aspects of Life 5. Selfless Self-Love and Empathy
2. Life of a ghost	<ol style="list-style-type: none"> 1. Loss and Grief: 2. Longing for Connection 3. Invisibility and Isolation 4. Acceptance and Farewell 5. Memories 6. Emotional Expression and Catharsis
3. Infinite Contrast	<ol style="list-style-type: none"> 1. Embracing Contrasts 2. Self-Acceptance and Self-Love 3. Empowerment and Self-Expression 4. Finding Purpose and Meaning 5. Imperfections and Perfection 6. Beauty of Life
4. From fear to gear	<ol style="list-style-type: none"> 1. Academic pressures 2. Self-awareness and inner peace 3. Facing challenges in life 4. Parental pressure 5. Adopting self love for coping

	6. Coping mechanisms
5. Embrace the journey within	<ol style="list-style-type: none"> 1. Self-Discovery and Personal Growth 2. Positivity and Happiness 3. Embracing Individuality and Confidence: 4. Empowerment and Independence: 5. Embracing Imperfections and Self-Love 6. Inspiration and Motivation
1. Surviving the storm	<ol style="list-style-type: none"> 1. Academic Stress: 2. Social Challenges 3. Parental Expectations and Uncertain Future 4. Low Confidence and Emotional Struggles 5. Coping Mechanisms 6. Relationship Challenges 7. Resilience and Survival 8. Positive and Healthy Coping

Table 4: Music collage and themes emerged

Collage	Themes
1. Kutty Story	<ol style="list-style-type: none"> 1. Self love and happiness 2. Embracing present mood
2. Self	<ol style="list-style-type: none"> 1. Happiness and positive attitude 2. Importance of friendship 3. Self love 4. Resilience 5. Love for family 6. Celebration of achievements
3. Myself	<ol style="list-style-type: none"> 1. Music as a passion 2. Enjoyment and happiness 3. Philosophical reflections 4. Creativity and resousefullnes 5. Imperfectly perfect world 6. Hope and inner peace 7. Belief in Nirvana
4. Vibe and Music	<ol style="list-style-type: none"> 1. Positive experience 2. Music as a life essence 3. Relaxation and calmness 4. Mindfulness

The emergence of these diverse themes through the music collage technique among adolescents highlights the relevance and significance of using creative and expressive arts in therapeutic interventions. Each theme represents a unique aspect of adolescent experiences, emotions, and perceptions, providing valuable insights into their inner world and psychological well-being.

The results demonstrate that music therapy

can be an effective and holistic intervention for adolescents, supporting their emotional and psychological well-being. The positive outcomes suggest that music therapy techniques can be integrated into school settings to foster life skills development and promote overall adolescent well-being.

Limitations:

Despite the valuable insights gained from this study on the impact of music therapy on life

skills development among adolescents, several limitations must be acknowledged.

- The population distribution was not equal in terms of sex, with a skewed representation of either boys or girls. Additionally, the age group distribution was uneven due to academic reasons, which may have influenced the generalizability of the findings. The relatively small sample size might have limited the ability to detect statistically significant effects of music therapy.

- Life skills development is a complex and ongoing process, and the limited number of therapy sessions (only 10 sessions) might not fully capture the long-term effects of music therapy on the participants' life skills.

- Lack of extensive literature on music therapy techniques specifically tailored to adolescents highlights the need for more research in this area.

- The qualitative analysis was conducted by the principal investigator. Lack of secondary analysis by another investigator might introduce potential biases.

CONCLUSION:

Findings of the current study support the potential benefits of music therapy in promoting life skills development and enhancing well-being among adolescents. The significant improvements in empathy, effective communication, and coping with

stress, along with meaningful changes observed in other domains, highlight the importance of music therapy as a valuable intervention for adolescents. By focusing on emotional regulation and interpersonal relationships, music therapy can positively influence adolescents' overall well-being. The results emphasize the need to consider both quantitative and qualitative data to gain a comprehensive understanding of the impact of music therapy on adolescents' lives. Integrating music therapy into school curricula can offer a holistic approach to supporting adolescents' mental and emotional health, promoting their well-being during this critical developmental stage.

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Ethical issues - Yes – approved

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