ISSN: 2959-3867

Integrating music education to enhance the well-being of elementary school learners in Karachi: An action research pilot study.

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Abstract: This study aimed to use music education to improve the well-being of elementary students at GBPS National Ideal School in Karachi. The research was qualitative and focused on fifth-grade students. Over the course of a month, students participated in a twenty-four-hour music integration program, meeting twice a week. The study found that integrating music education and using music therapeutically was crucial for students from marginalized backgrounds. It helped them succeed in school and in life. Students showed increased attendance and happiness about coming to school. Group singing and playing the National Anthem on the keyboard reduced academic stress and anxiety, encouraging students to take responsibility for their learning. The findings indicated that music literacy and the therapeutic use of music improved students' academic well-being. It helped them face academic challenges with a positive attitude and manage their studies more comfortably. Listening to relaxing music aided their self-regulation and emotional management. Techniques like coherent breathing and progressive muscle relaxation helped students deal with fatigue, reduce school avoidance, and handle stress during class tests and exams. The rhythmic aspects of music, such as clapping and moving to their favorite songs, also supported coping mechanisms. Engaging with music provided students with tools to set aside their worries, allowing them to approach challenges positively.

Key words: Learners' Academic Well-being, Music Literacy, Music Therapy.

Introduction

The challenges of education in the digital age highlight the pressures on learners to perform academically and the various factors that influence their success. (Rana, 2023)

One study aims to explore the effects of integrating music education and the therapeutic use of music to enhance the well-being of elementary school students at a government boys' primary school in Liaqatabad, Karachi, Pakistan, who come from diverse backgrounds. It emphasizes the disparity between elite private schools that offer music education and marginalized schools that lack such resources. While singing competitions are common, music literacy and therapeutic applications are often absent for underprivileged learners.

The study references the PERMA model of well-being, introduced by Martin Seligman, which includes positive emotions, engagement, relationships, meaning and accomplishments as key indicators of well-being. (Kovich et al., 2022).

It points out the lack of music education in Pakistan's core curriculum and advocates for its integration to improve students' well-being. Various studies support the effectiveness of music education and therapeutic music use in academic settings for fostering well-being. The "desuggestopedia" technique is proposed as a method to enhance learning experiences through music., (Jones, 2010).

Problem Statement: The concept of well-being, especially among students, encompasses various factors, including satisfaction, functionality, positive emotions, sense of purpose, and supportive relationships. (Maqbool & Cremin, 2023). This highlights that while music education and the therapeutic use of music contribute positively to the well-being and academic success of students in elite schools in Pakistan, Jeffery, 2012).

Such opportunities remain largely inaccessible to marginalized students at the secondary level. This inaccessibility is attributed to issues such as a lack of resources, poorly constructed classrooms, and a shortage of qualified music teachers. The aim of the study is to investigate the effectiveness of integrating music education and music therapy to enhance the well-being of these marginalized learners.

Objectives:

General Objective:

- To integrate music literacy in order to promote the academic well-being of elementary students in Karachi.

Specific Objectives:

- To assess the effectiveness of group singing and rhythmic performance on students' academic well-being.

- To evaluate the efficacy of using music therapy to help students manage academic stress and test anxiety at the secondary education level in Karachi.

Significance

This study will improve researchers' understanding of music education and its benefits for students' well-being. It will give schools important information about how music education supports learners. On a national level, the study will back the Sindh government's recent decision to add music education to the main curriculum. This pilot study will also help schools and policymakers create effective music education plans for secondary students.

Research Questions/Hypotheses

- 1. How does music literacy affect the well-being of elementary students in Karachi?
- 2. How effective are group singing activities in improving students' academic well-being?
- 3. How does performing rhythm help enhance students' academic well-being?

How does using music therapeutically impact academic stress and anxiety for elementary students in Karachi?

Literature Review

The well-being of marginalized students in Pakistan's educational landscape is a significant concern. This literature review examines the potential of using music as a transformative tool to support the well-being of students facing socio-economic challenges. Music, as a universal language, can enhance emotional expression, social cohesion, and cognitive development. The review highlights the unique challenges of marginalized students in Pakistan and explores existing research on music and well-being. It aims to identify gaps and opportunities for implementing music interventions that cater to the specific needs of these students. (Ruggeri, K. et al., 2020).

Many children go through difficult experiences during their childhood. These experiences can harm their mental, social, and cognitive development, making it harder for them to achieve their academic goals later in life. (Nijs & Nicolaou, 2021)

Well-being means feeling good and functioning well. It includes several key factors. These factors are feeling satisfied with life, having positive emotions, a sense of purpose, and control over one's life. Good relationships with others also help improve well-being. (Ruggeri et al., 2020) The well-being during one stage of life affects well-being in later stages (Ruggeri et al.,

2020) People with high well-being are more productive and more creative in their learning. Music has powerful qualities that help strengthen the factors that build resilience and provide support. (Nijs & Nicolaou, 2021).

Hendricks (2023) highlights that the relationship between teachers and students is important for student well-being. Music education and music educators play a key role in promoting well-being, human flourishing, care, and compassion. These factors help create a positive and healthy student-teacher relationship during the learning process through music education.

Research by Cheng and Lin (2023) shows that academic stress significantly predicts academic burnout among adolescents in China. They found that higher academic stress is linked to increased internet addiction. Early signs of academic burnout are connected to how well adolescents feel about their lives.

Research by Cheng and Lin (2023) shows that academic stress is a major cause of academic burnout in adolescents in China. They found that higher academic stress is linked to more internet addiction. Early signs of academic burnout relate to how adolescents feel about their lives. Klapp et al. (2023) state that education should not only focus on academics but also support the well-being of learners. This helps them grow into valuable citizens with strong social and emotional skills.

A study by Morrison et al. (2023) shows that the physical and financial health of learners affects their well-being based on factors like age, gender, personality, resilience, and personal values. Martin et al. (2022) note that to feel good about themselves, people need to let go of guilt. Guilt and shame greatly influence a person's state of well-being and ill-being.

Traditionally, the education system focused on short-term benefits, such as graduating, but long-term benefits were ignored. (EdTech Books, 2019, p.20) Happiness is an emotional capital.

Theories of Well-being

Various theories on well-being suggest perspectives on living a good life. Such theories underlie hedonism, desire theories and objective-list theories, which overlap because individuals only desire objectively worthwhile things. Moreover, happiness and wellbeing are achieved by achieving what we desire. (*Theories of Wellbeing*, 2023)

Pleasures and avoidance of pain intellectually, emotionally, and physically... Based on choosing pleasure over pain comes under the theory of wellbeing, "Psychological Hedonism", based on Socratic

principles that nature has put two masters' over human 'Pain' and 'Pleasure' now; this is upon the person to choose following what he wants to do. Hedonists consider well-being as 'Pleasure over pain'. Questions such as what is good for me? Something that gives more pleasure despite what is good or harmful, pleasure, is the principle. (Crisp, 2021). Based on the Desire theory is the desire-fulfilment theory of wellbeing, or called desire theory, based on simply getting what we want. Primarily, all the welfare and what is suitable for people is based on these desire theories. Desire theorists suggest that the stronger the desire, the greater its satisfaction. There needs to be more consensus over how long the desire is held and how long the satisfaction is. (Heathwood, 2014) The 'present desire theory' is based on the idea that the more desires are fulfilled, the more well-being there is. (Crisp, 2021)

Based on the valuable things that are objectively good and contribute to one's well-being, such as health, knowledge, friendship, and personal achievement (*Theories of Wellbeing*, 2023). Subjective well-being is based on the emotional experience of the well-being of an individual based on personal subjective criteria of positive emotions, absence of negative feelings, and life satisfaction. (*Theories of Wellbeing*, 2023)

Based on various researchers' use of the PERMA model, researcher chosen this technique to study the Well-being of learners as an outcome of music integration. Music education has two types of goals: musical and non-musical goals; through music education, academic and non-academic goals are achieved (Hoffer, 2017)

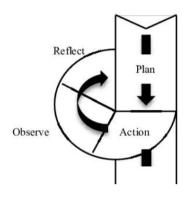
Significance of Music Education on Learning

Ahmed (2023) suggests that music education starts at an early stage, which enhances memorisation skills in the learner as the way they tend to memorise notes, melodies, and movements helps them in the later stages of their academics. Gabrielsson (2011) states that Music transforms the tedious nature of academics into enjoyable experiences so that a complex subject, such as physics, math, history, etc., becomes dragging for learners, with the use of music in any setting making the challenging subjects engaging. Creo et al. (2021). Music improves learners' social skills and develops their communication and teamwork skills and abilities as they participate in the school choir, play instruments, and participate in various music competitions and activities. Kozii (2020) mentions that music also develops learners' imaginative skills. The more they listen to music, the more innovative and creative ideas they can think of, ultimately enabling them to be creative in their academic challenges. Widerman (2013) states that the neuronal function of the brain while listening to music becomes more organised, and an excitatory cortical firing pattern is induced in the brain. Music-involving

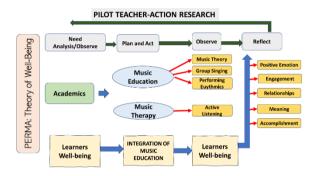
activities have underlying neural firing patterns with other cognitive functions in the As mentioned by Lashari et al. (2023), in the twenty-first century, music education is the most ignored and least implemented element in the education system of Pakistan; music education and instruction of music are essential in dealing with intolerance and extremism scenarios of the country. Music and academic success are both interlinked. conducted by Ali et al. (2020) in Khyber Pakhtunkhwa reveals that exam stress among Pakistani students causes stress and well-being issues to students that lead them to drop out or at excessive levels of suicidal thoughts because of exam phobia, along with high levels of stress and lack of confidence. One of the reasons is that exams are taken in English, which is inconvenient for non-English speakers. Pakistan, where diverse languages are spoken, but exams are taken in English medium, causes Stress and anxiety among students, which causes dropouts and, at excessive levels, leads to suicidal situations. Music and developing aesthetic learners also benefit students in terms of their memory, retention, focus, and motivation, leading to academic success. Singing activities are essential to music education and develop social communication skills and self-confidence. In terms of well-being, music education develops life-long learning in the students in such a way that improves their mental and academic well-being. Muhammad et al. (2021) suggest that music is an integral part of Pakistani culture and is not part of the education scenario. Hassan & Saigol (2023), while studying the relationship between people from diversified languages and music, suggest that music is such a language e that individuals from diverse backgrounds connect, and despite other people not speaking the language of others, the music brings in a way to communication and social wellbeing. Noshaba & Mushtaq (2020). Suggests the use of suggestopedia, which suggests that using music in the learning environment can effectively cope with psychological hindrances and barriers during the learning process and help students learn faster. Music listening is an essential activity in human life and helps regulate emotions and feelings more than before; every person listens to music to regulate mood and emotions to maintain and sustain happiness. To answer the question, what makes life happy? Music listening is the intervention. Music listening and the flourishing of students are co-related. Also, the study shows a relationship between the use of music and the flourishing of students, maintaining their emotional regulation and cognitive abilities, having joyful experiences, and regulating feelings and emotions (Faran et al., 2021). A survey study by Fariha et al. (2023) reveals the problems faced by secondary-level students, including increasing academic workload and mental health. Parents' perception is that they spend money and do everything possible for their children's academic success.

Methodology

This pilot study focuses on integrating music education and music therapy to enhance the academic well-being of fifth-grade students at GBPS National Ideal School in Karachi. Researcher adapted Kermis's spiral model of classroom action research (2007) to combine music education with literacy, conducting only the first cycle at this stage. The spiral modelis referenced from Haryono, E. & Abdurrahman (2020), p. 56.



Research Methodology



(Shehzad's proposed Model)

Phase 1: Pre-assessment

After assessing students, we identified academic challenges. A discussion session revealed that students struggle with memorizing complex concepts, particularly in mathematics and Sindhi. The shift from Urdu instruction to English testing increases stress, and perceived support from the school is inadequate. To alleviate stress, the principal organized recreational activities like collaborative games. Students reported using strategies such as relaxing games, favorite foods, music, and TikTok for stress management.

Phase 2: Plan

Lesson Plans were designed and validated by the National Academy of Performing Arts, integrating Music Education with Music Therapy.

Phase 3: Action

Music education and therapy were integrated through 24 hours of lesson implementation across four units.

Phase 4: Observe

A reflective journal was maintained, with written and verbal feedback from learners and teachers collected. After the music activities and performance, a focus group of nine participants was formed for further discussion.

Population and Sampling

- Population: Elementary level learners in Karachi.
- Sampling Framework: Secondary level students from GBPS National Ideal School, Karachi.
- Sampling Technique: Criterion and purposive sampling targeting marginalized learners open to music education, with consent for video recording.
- Sample Size: Focus group of 9 participants.
- Research Instrument: Questions aligned with the PERMA model (positive emotions, engagement, relationships, meaning, accomplishment) to assess student well-being (Seligman & Csikszentmihalyi, 2000).
- Data Collection Method: Consent was obtained during the focus group while responses were recorded and reflection diaries maintained. The study was conducted in four stages: Pre-Assessment, Plan, Action, and Observation, with reflections from learners and teachers. Chapter 4 will analyze the integration of music education in promoting learners' well-being through narrative analysis.

Research Design: Qualitative, quantitative, or mixed methods.

Participants/Sample: Who or what is being studied.

Instruments/Tools: Surveys, interviews, experiments, etc.

Procedures: Step-by-step description of how the study was conducted.

Data Analysis: The analysis includes reflections on lessons, personal insights, and reflections from the learners. Data triangulation has been performed by incorporating feedback and reflections from the teacher interviews.

Population: Elementary learners in Karachi.

Sampling Framework: Secondary students from GBPS National Ideal School, Karachi.

Sampling Technique: Criterion and purposive sampling focusing on marginalized learners interested

in music education, with consent for video recording.

Sample Size: 9 participants in a focus group.

Research Instrument: Questions based on the PERMA model to evaluate student well-being (Seligman & Csikszentmihalyi, 2000).

Data Collection Method: Consent was obtained during the focus group, with recorded responses and reflection diaries. The study involved four stages: Pre-Assessment, Plan, Action, and Observation, including reflections from learners and teachers. Chapter 4 will analyze how music education enhances learners' wellbeing through narrative analysis.

Before developing the integrated music education course aimed at enhancing student well-being, we conducted a pre-assessment to identify learners' academic challenges. Many students reported difficulties with memorization and exam performance, alongside feelings of frustration and fatigue, indicating a need for stress management strategies.

In response, we designed the course to emphasize music education while directly and indirectly supporting students' academic and emotional needs. The course focuses on helping students manage stress during exam preparation and improve their memorization skills.

Main Findings

How does music literacy impact students' well-being at the elementary level of education in Karachi?

Students expressed a desire for at least one music class each week, noting that music integration has enhanced their happiness both at school and at home. They suggested continuing these activities, remarking that music helps alleviate academic stress. One student inquired whether these activities would continue, while another proposed dedicating a specific time for music listening and activities. Others shared that music assists them with chores and studying, improves their understanding of concepts, and reduces stress, emphasizing the positive impact of music on their learning and overall well-being.

What is the effectiveness of group singing activities in promoting the academic well-being of learners?

Group singing activities, including the collective singing of the national anthem during the daily morning assembly along with other music and prayer songs, have enhanced the overall school experience. Additionally, students became aware that singing aloud promotes proper oxygen flow and functioning of the body, leading them to utilize singing to improve their experiences and manage stress, anxiety, and challenging situations. Engaging with therapeutic, relaxing melodies while listening has also contributed positively to their well-being.

What is the influence of performing rhythm in promoting the academic well-being of learners?

Through the integration of music literacy, students expressed joy in playing the national anthem melody on keyboard and using percussion with their bodies and classroom objects. This experience has enabled them to analyze abstract concepts such as rhythm and music, steady beat and tempo, and to listen and respond in real-time. They have engaged in activities like eurhythmics, which involves moving to the rhythm of words through non-mobility actions such as swinging, stretching, and twisting, as well as mobility actions like walking, running, and moving around the classroom.

How does the therapeutic use of music affect learners' academic stress and anxiety at the elementary education level in Karachi?

Many students reported experiencing stress in both their home and academic lives, particularly during tests and exams. However, they found that the therapeutic benefits of music have improved their coping strategies and self-management skills. Some students mentioned being inspired by observing family members studying with music, which they found motivating and helpful for memorization. For instance, they noted that singing along to songs makes challenging concepts easier to remember.

Listening to calming music, such as "Celebration" by Secret Garden, in conjunction with techniques like progressive muscle relaxation, has had a positive impact on their well-being and academic performance. Furthermore, singing the national anthem and other songs has enriched their overall school experience. Ultimately, the integration of music education has significantly improved students' attitudes toward school and their readiness to learn.

How does music literacy impact the learner's well-being at the elementary level of education in Karachi?

Students want at least one music class each week, as music integration has made them happier both at school and home. They suggested continuing these activities, noting that music can alleviate academic stress. One student asked if these activities would continue, while another proposed a dedicated time for music listening and activities. Others shared that music helps them with chores and studying, improves their understanding of concepts, and reduces stress, highlighting the positive impact of music on their learning and overall well-being.

What is the effectiveness of group singing activities in promoting the academic well-being of learners?

Group singing as an activity that expanded to the collective singing of the national anthem in the daily morning assembly with music and prayer songs has

enhanced the school experience. Also, the awareness of how singing aloud helps in the proper functioning of breathing and body becomes why students now utilise singing to improve their experiences and manage stress, anxiety, and challenging situations. Singing the therapeutic, relaxing music melody while hearing it in their head was also a source of wellbeing.

What is the influence of performing rhythm in promoting the academic well-being of learners?

With the integration of music literacy, students were always happy with playing the National anthem melody on the keyboard keys with the percussion of both the body and classroom objects; this has enabled them to analyze abstracts such as rhythm and music, steady beat and tempo, listen and respond in real-time, performing eurhythmics, i.e. the rhythm of the said words, including moving to music in non-mobility, i.e. swinging, stretching, twisting, jumping and mobility movement as walking, running, moving around the room space etc.

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