

Adolescents' Anxiety and Its Multilayered Alleviation Through Music Education: A Systematic Intervention Perspective

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Abstract. Mental health is one of the most pressing issues facing adolescents worldwide today, often silently overlooked and largely unaddressed. Motivated by the challenge that emotion problems prevail among Chinese adolescents, this article explores the correlation between adolescents' anxiety and music interventions by using music curricula. Adopting a narrative literature review combined with comparative case analysis that combines documentary analysis with exploratory research, this study points that even though music has shown its potential as an appropriate tool to improve adolescents' psychological well-being to cope with anxiety, their practices in reality are often unstructured, lacking an overall alleviation methodology and restraining the efficiency. It hence proposes a "pyramid-shaped" music education system focusing on music-based interventions in addition to the traditional aesthetic functions to address the problem at three levels: the classroom, the school, and the broader education system. The outcome of the study is that curricular music interventions should receive higher attention from various parts of the music education system, and new and more efficient teaching methods, which may solve adolescents' emotional issues, should be applied systematically.

Keywords: adolescents, emotion, mental health, music intervention, education system

1. Introduction

Noticing that many Chinese adolescents, including the scholar's own high school classmates, are suffering from emotion problems, such as anxiety and etc., it is necessary to do a study on the very topic on what is causing the emotion problems, how severe these are, and, more importantly, how to solve them from different dimensions. The study is to seek and propose possible ways or ideas that may alleviate adolescents' mental or emotional problems by curricular music interventions, including music lessons and music activities. Aiming to examine how music affects adolescents' emotions and mental health, how the "pyramid theory" may direct the revolution of curricular music education, and what are the avant-garde progresses around the world support the "pyramid theory", the mix-method is aggregated both descriptive and exploratory methods. Moreover, the article considers how these international events and the "pyramid theory" may affect China's education system.

2. Problem overview and analysis among with the "pyramid-shape" systematic approach of music intervention in curriculum

2.1. Background information

It is now well established that Chinese adolescents or high-school students are suffering from serious anxiety and mental health problems. The reasons that lead to these psychological issues include almost everything in their everyday life, from peer pressure due frequent exams at school to family communication pressure afterschool. Although medical treatments and psychiatric consulting are seemingly useful, adolescents often face stigma, scarcity of these resources, and other real-life drawbacks. In this case, western classical music probably has the potential to be applied as an appropriate and internationally-approved tool to release Chinese adolescents' pressure and improve their psychological well-being. Specifically, there are many related research in the area of music decompression. North et al. [1] confirmed that "music is of central importance in the lives of most young people, fulfilling social and emotional as well as cognitive needs" by studying the sample of 2465 adolescents between 13 and 14 years old in the North Staffordshire region of England. Wei et al. [2] demonstrated that "the complexity and diversity of adolescents' emotional reactions to music arrangements, emphasizing the critical role of gender and individual differences in music perception". Kwok [3] indicated that efficient extracurricular music sessions may promote students' mental health, and she concluded "music is an effective medium and provides a secure, comfortable, enjoyable, relaxing environment for the students to acquire hope and emotional competence". These findings may support the development of western classical music decompression for similar adolescents in China.

Even though researchers make considerable amount of progress in understanding the effect of music on adolescents, the methodology is quite problematic, due to the obvious bias that researchers usually only apply western classical music as the experiments' stimuli, which may not represent the whole effects of music on adolescents. Many scholars argue that music is of central importance in the lives of most young people, fulfilling social and emotional as well as cognitive needs [1]. Another study shows that pop music is of higher prevalence among adolescents comparing to classical music (pop music preference 42.5%>classical music 15%). The study also discovered that the original composition, the rock-style arrangement, and the "Bosa nova" arrangement let participants show different levels of emotional responses, which reveals the downside of using Western classical music to represent music in those experiments [2]. Thus, these unarranged, biased music alleviation session in most avant-garde experimental schools may not achieve the predicted positive effects on high-anxiety-suffering adolescents that have quite different emotional issues. Therefore, music alleviation based on background music should transform to systematic forms that properly serve as a way that lower all kinds of adolescence pressure [4].

Of course, in order to solve the realistic problems that are revealed above, schools should not only apply proven theoretical methods, take related research into account, and imitate the successful course designs in some of these avant-garde schools. Educators should ponder then, what psychological theory should be applied, how should these theories direct real-world actions that can positively affect adolescents in various cases, and why are these actions so important.

2.2. How to solve adolescents' emotion problems driven by renovating the music education system

2.2.1. From "unstructured efforts" to "systematic approach" toward adolescents' music alleviation and education interventions

Even though established research and experiments confidently substantiated music, in its broadest definition, is an efficient tool to intervene adolescents' emotional issues, most real-world actions are still staggering at the "passive listening" stage of approach, which, not to mention the seemingly "successful attempts", lacks the precise intervention timing, music-emotion relativity, and the exhaustive consideration of the courses' environments. Indeed, these "episodic interventions" are often used by expertise therapists in clinical treatments. However, this approach may hardly be employed pervasively in the mainstream schools. As Freitas et al. [5], it is true that proper musical treatments do have non-threatening nature, which promote adolescents' ability of non-language conversation and the sense of social belonging, the method largely depends on the expertise of the medical and clinical knowledge and time costs. By contrast, incorporating music intervention into curriculum in mainstream schools is a more efficient method. Researchers Carr and Wigram indicated that "within mainstream schools, children with mild emotional, behavioural or social problems were found to be the main recipients of music therapy, and one of the main aims of music therapy within this category is to address behaviour within the classroom", instead of practicing music alleviation and therapies in extracurricular sessions as a sort of "compensation" [6]. Obviously, the education itself should include the function of active identification of adolescents' emotional problems and the ability to alleviate stress. However, existing music courses often overemphasis the cultivation of aesthetic views and values of artworks, but the temporal organization of curriculum that may potentially affect adolescents' emotions is overlooked. Merely arranging music classes into the curriculum cannot substitute systematic intervention: lacking considerations of music types, circadian rhythms and the precise stress timing may lead the curriculum to inefficiency because of the deviation from students' psychological needs at the very moments. Therefore, music intervention at schools must switch from "occasionally effective" to "longitudinal effective" by giving up unstructured activities and put structured curricular scheduling into practice. This requires educators not only to plan "what should be taught" but also "when to teach" and "how to teach" rationally, which establishes the basis of the "education intervention model" that extract from several research.

2.2.2. The theoretical "music education pyramid"

Noticing the downsides of extracurricular and episodic music sessions, one of the ways to solve the problem of inefficiency and inaccuracy is constructing a multi-level intervention and teaching model. In time, when the music-teaching framework transforms from traditional, aesthetic-focusing ways to efficient, emotion-issue-aimed ways that establish its role in the education system, students may feel distress and study in a more casual environment. A "new music education pyramid" that consists of three layers of top-down relations may epitomize the new system.

Education system or the superstructure of education stands on the summit. Researcher Arostegui observes that the education systems around the globe are excluding music courses from the core curriculum due to many reasons, such as the value of STEM for the growth of the economy [7]. When the music education system is "declining", the author suggests that all social members should ponder one particular question: what makes us humans? By that, do STEM learning, artificial

intelligence programing, or financial analyzing show we are human beings but not artificial intelligence itself? No. What truly identify ourselves as humans is the innate spirit, the emotions, the imaginations, the hope, the passion, and the unique "humanistic" values. Interestingly, enjoying and appreciating music proves that we are competent of these aspects. Thus, music education as a whole should renovate or even revolute in order to let the students have the true feeling of being themselves. After all, it is important to let students have the notion that they will enjoy their lives, realize their dreams, and build the society from the perspective of "humans". In this case, students' preferences should be taken into account, music classes should revive its status as a core curriculum, and educators around the globe should reconsider their views on music courses.

Individual schools appear in the middle level. Specifically, the decision of arranging appropriate numbers and intervals of music lessons largely depends on the schools but not individual music teachers. As Anttila [8] pointed out that mainstream schools usually arrange limited numbers of music classes, and "because of large learner groups and few lessons, it's difficult to systematically develop playing skills" so that students are sort of "wasting" their time on music classes that make no music learning progresses nor efficient emotion interventions by music. In that case, schools should arrange more music classes throughout students' high school lives, and educators should take adolescents' preference, personal emotion conditions, and efficiency of music teaching into account, instead of using fixed or even utopian textbooks for classroom applications.

Music classes are on the base. Traditionally, music teachers at mainstream schools depend on fixed textbooks to teach students how to appreciate music and singing together. This method of teaching negatively affected adolescents by lowering both their interest in music learning and their musical self-esteem [8]. By contrast, adolescents show happier mood, increase in hope, higher emotional competence, and better understanding of the problems with their family [3] when they are involved in renovation music teaching, which includes playing various music games and trying different instruments. Therefore, including higher proportion hands-on activities may not only activate the music lessons' atmosphere but also help students establish positive moods.

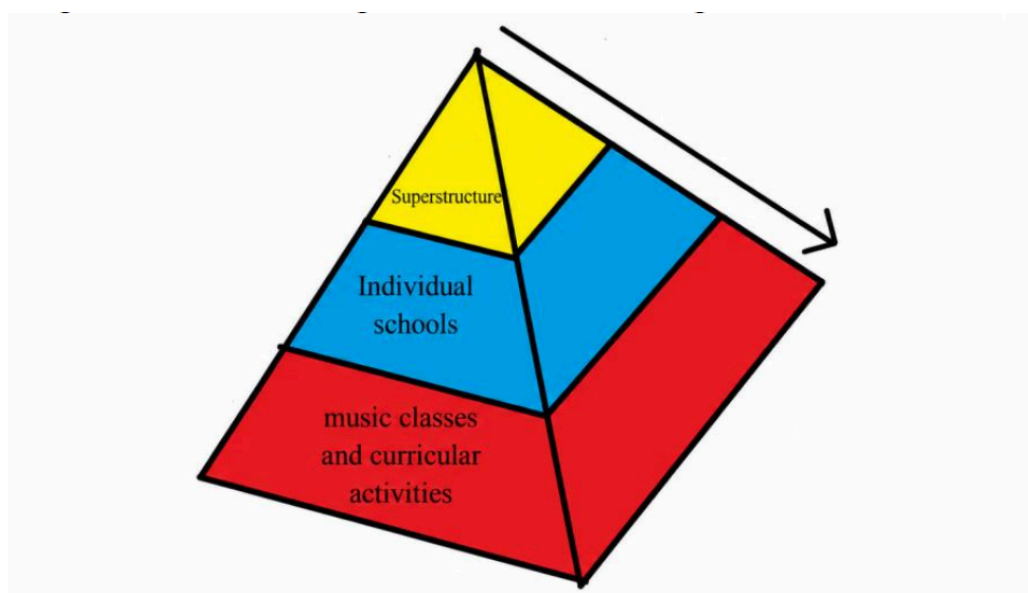


Figure 1. The new pyramid-shaped music education system

2.2.3. Real-world examples of the "pyramid-shaped" music education system

In the discussion above (2.2.2), one may well understand what is represented by the three layers of music education: music classes (the base)-school music course arrangements (the middle layer)-music education system (the summit). In this part (2.2.3), I'm going to show this "music education pyramid" using real-world examples around the globe by top-down sequence.

- El Sistema of Venezuela

In 1975, Jose Antonio Abreu created El Sistema based on 11 students in Caracas. In 1979, the Venezuelan Congress formally recognized El Sistema as the "national complementary education system) through enabling legislation. In 2025, El Sistema was incorporated into "the state-led anti-poverty cultural program, and the official booklet revealed that 443 societies was established which covered over 1.3 million children and adolescents [9]. This movement's most groundbreaking renovation is the way it values music courses: orchestra and instrument practices and performances are transformed from "extracurricular hobbies" to the "legitimate public cultural infrastructure", which require no pre-participate trainings, ensure fix rehearsal schedules, and include various music styles from western classical music to folk music. This action corresponds with Bronfenbrenner's [10] "macro system view" of music sessions: music intervention and alleviation achieve the status that is equal to other "core curriculums" for the first time. It is the best instance to support the claim made in 2.2.2 "students' preferences should be taken into account, music classes should revive its status as a core curriculum". Moreover, this is the "superstructure" that led many later movements internationally.

- In Harmony of England

In Harmony is the "middle layer" revolution of the music education system. Established in 2008, In Harmony was inspired by Venezuela's El Sistema, and its value includes the transformation of extracurricular choral practices to weekly-scheduled activities. This upgrade of music activity for adolescents is arranged by the headmasters themselves who participated in the program, and choral practices became a usual curricular that is placed in the "core classes". Ten years after the program born in Everton, a longitudinal research reported by Liverpool Philharmonic showed that over 2000 children was continuously involved in the program, and, astonishingly, the literacy of some schools increased from 35% to 80%+ while 95% parents replied positive changes in family interactions over these years [11].

- Mindful Music Moments of Ohio, USA

Established in 2013, Mindful Music Moments (MMM) was created at Cincinnati by Sims, cooperating with The Well Music & Arts (The Well) and Cleveland Orchestra. This course fits into the K-12 curricular: the morning school radio includes the mindfulness prompt which lasts for 3 to 4 minutes, and there is also a piece of global music that would cover orchestral, jazz, world music and a wide range of genres. The program is covers in over 300 schools and over 55,000 students in Cincinnati, Monroe, and Dayton. The effect of the program seems to be positive: a student from Monroe Junior High reported that she is "relax the rest of the day" after listening the morning radio; besides, teachers observe that students can regain their attention in class faster in the afternoon than before. Therefore, the example shows that the when music activities are well-arranged in the everyday curricular and cover different music styles, students' may feel mentally distressed ("emotional well-being") and be more attentive in studying other courses [12].

These three programs clearly show that the "pyramid theory" is plausible for the education revolution. Obviously, when revolution is done on every layers of the pyramid, students, which is

the center of education, can certainly be benefited because of mentally distress and physically attentiveness.

2.3. The application of the "pyramid theory" in china's education system

Recently, Chinese government and educators are paying more and more attention to students' mental and physical health, and several policies and advance theories are proposed. Specifically, the number of music classes every week increases and more advanced teaching methods like instrumental training are put into use. However, though the progress is seemingly affective in the short run, the longitudinal stress of adolescents still exists. That is, exams are still too much, and the university entrance examination for the "core subjects" is of the highest priority for every Chinese adolescent. When these exams still hold its "supreme value" in adolescents' lives, the situation will never improve—the revolution of the education system in order to value arts (music) must be directed from the top. To summarize, educators in China should pay more attention on how to reconstruct the superstructure in order to realize the status art classes should earn.

3. Conclusion

Clearly, as many studies in the above passages show, adolescents' emotion issues should receive more attention. In that case, how the researchers are going to distress adolescents largely depends on how the education system reconstructs from every layers of the theoretical "music education pyramid". Indeed, adolescents' emotion states may not be easy to change in only a period of time or even few decades, but the later the new education system establishes, the later the adolescents' emotion problems alleviate. To conclude, China and all those countries that are still using the comparatively old music education notion should react quickly in order to distress their adolescents and improve adolescents' mental (and also physical in some cases) health before the dilemma worsen.

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