

Chinese Music Therapy and Clinical Music Education to treat Anxiety Disorders: The PLUS-Model

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Abstract: Anxiety disorders are broadly considered a global epidemic. In China, they rank among the most prevalent mental disorders and are seriously affecting the younger generation, hence the necessity to foster health education and sustainable resilience. Meta-synthetic construction resulted in a music-based therapeutic framework involving psycho-education, abbreviated as ‘P’, learning conditions ‘L’, underlying mechanisms ‘U’ and self-regulation ‘S’, hence the name ‘PLUS-model’. Interactive psycho-education includes information about anxiety disorders as well as interactive anxiety-management and adequate feedback about learning conditions and teaching styles, e.g. deficiency- versus resource-oriented education. Relevant topics also concern underlying mechanisms such as genetic and epigenetic, as well as neurophysiological and psychological processes. In this model self-regulation comprises five domains, according to their initials the so-called ‘A-E-I-O-U-areas’, (i) Aesthetics and the healing power of beauty, (ii) Exposure training based on music-guided trance and imagination techniques, (iii) Immersion in music to enhance self-awareness and cope with obsessive-compulsive cognition, (iv) Organ-rebalancing through methods of Sound Focusing and (v) music-guided access to the unconscious alongside the exploration of one’s individual sources of anxiety. The PLUS-model is part of a comprehensive project to improve mental health in Chinese children and adolescents through arts-based methods for classroom education, which encompasses – in addition to anxiety disorders – attention deficit hyperactivity disorders, oppositional defiant disorders, depression and depressive traits, stress-related disorders and burnout syndromes, eating disorders such as anorexia nervosa or binge eating disorder, as well as disorders related to the COVID-19 pandemic, e.g. syndromes caused by lockdown and social distancing experiences.

Keywords: Chinese music therapy, clinical music education, sound meditation, pathogenic teaching styles, psycho-education, self-regulation techniques

1. Methodology

The main purpose of this study was to develop and provide systemic music therapeutic methods for Chinese classroom education to control and alleviate anxiety in children and adolescents. Although previous clinical and special educational experiences shed light on the efficacy of specific musical interventions, there are two deficiencies that inspired the present investigations.

Firstly, certain influential circles in the realm of music therapy are mainly based on general models such as Nordoff-Robbins music therapy, which goes back to the late 1950s (Kim, 2004), or Guided Imagery and Music, a method to evoke emotions and access the unconscious (Beebe & Wyatt, 2009). These models are well-defined, but not tailored to clear diagnoses such as generalised anxiety or phobic disorders, hence the need for more distinct music therapeutic approaches.

Secondly, standardised methods of evidence-based medicine such as randomised controlled trials (RCT) or meta-analyses of RCTs are broadly accepted means to estimate effect sizes

through inferential statistics. Nonetheless, they inherently ignore correspondence-theoretical distances between the actual object and the corresponding mathematical model, a shortcoming that may considerably affect their reliability, hence the two novel parameters of coherence size and confidence range (Mastnak, 2021a).

Moreover, rigid structures of research designs such as RCTs require standardised non-complex interventions and simple data dimensions. Consequently, corresponding studies frequently associate intervention- and control-groups with ‘liked music’ and ‘disliked music’ or categorisations such as ‘happy music’, ‘sad music’ and ‘angry music’, which is – from a musicological and aesthetic perspective – far too simplistic. Although these studies may fulfil standardised requirements of evidence-based medicine, their inner inadequacy goes hand in hand with critical epistemological weaknesses, hence the likelihood of irrelevant or false results.

Neither RCTs nor meta-analyses or systematic reviews are able to inspire and generate new therapeutic interventions. Regarding that the core of the present study was to develop

new music therapeutic models for the treatment of anxiety disorders and comparable symptoms and syndromes, other scientific approaches are needed, hence the choice of comparative research and deductive reasoning, alongside the principles of systemic meta-syntheses (Mastnak, 2021b).

Key principles of systemic meta-syntheses go back to in-depth analyses of the history of science and the evolution of seminal theories in psychology, psychosomatics and medicine, which witness the power of epistemological syntheses of all sorts of ideas and discoveries and shed light on ground-breaking concepts and innovation. Broadly speaking: great minds discovered the inner logic of data from clinical experience, subjective theories, and interdisciplinary sciences and created consistent frameworks – and this is precisely the way, systemic meta-syntheses are built.

This also explains the use of the word ‘systemic’. Given that tangible entities have their very unique characteristics, holistic truth-philosophical representation strives for a most adequate isomorphism between the actual object in the real world and its theoretical representation in the realm of science. Distinct from research on single perspectives, dimensions, or parameters, systemic meta-syntheses try to take the complexity of phenomena into account, hence the term ‘systemic’.

In general, there are two different ways to create a systemic meta-synthesis: a bottom-up and a top-down mode. In bottom-up mode studies on a given issue or thematic field are taken into account and explorative comparative processing tries to trace down general principles as well as their inner logic and coherence. This process generates hypotheses, which usually appear more robust than results of single hypothesis-generating studies.

The top-down mode starts with a given hypothesis and goes on searching for confirmatory or contradictory evidence. While the whole process reminds of conventional hypothesis testing, the ‘timeline inversion’ makes the decisive difference: What supports or destroys the hypothesis is derived from previous studies. The advantage of this approach lies in the enormous pool of relevant data, which have to be re-evaluated though.

In addition to these two main types, the notion ‘systemic meta-synthesis’ encompasses all approaches (i) that respect epistemology and philosophy of sciences and (ii) integrate data and results from various types of studies (iii) to create a novel theory or theoretical framework. And there are basically no discipline-related limitations or apodictic exclusion criteria.

The present study combines bottom-up and top-down approaches and uses various forms of inductive and deductive reasoning to suggest a comprehensive model consisting of four

main components: (i) psycho-education, (ii) mindful science-based teaching styles, (iii) interactive discovery of pathogenic conditions of anxiety and (iv) music-based self-regulation techniques.

2. Introduction

2.1. Evolution of anxiety and history of anxiety disorders

Anxiety responses belong to the human behavioural repertoire. However, they can escalate and become pathologic – anxiety disorders belong to the most common mental illnesses today. From an evolutionary perspective, the function of the human anxiety response is to prepare the individual to sense danger and deal with threats: ‘We use a signal detection framework to show that the threshold for expressing the anxiety response ought to vary with the probability of threats occurring, and the individual’s vulnerability to them if they do occur. These predictions are consistent with major patterns in the epidemiology of anxiety’ (Bateson et al., 2011). These processes have neurophysiological roots as John S. Price (2003, 223) summarised:

Danger and harm are avoided by strategic decisions made at all three levels of the triune forebrain: rational (neomammalian), emotional (paleomammalian), and instinctive (reptilian). This applies also to potential harm from conspecifics, which leads to a choice between escalating and de-escalating strategies. Anxiety is a component of de-escalating strategies mediated by the paleomammalian and reptilian forebrains. When the neomammalian (rational) brain fails to deal with the threat of conspecific danger, these more primitive de-escalating strategies may be activated and may present as anxiety disorders. The capacity for concealment of anxiety and other forms of negative affect has also evolved, and excessive concealment may lead to psychopathology by breaking the negative feedback loop of excessive motivation, leading to impaired performance, leading to signals of distress, and leading to reduced exhortation to succeed on the part of parents and teachers.

These perspectives are highly relevant to the music-therapeutic model presented in this article and explained why we do not only refer to cognitive-behavioural psychotherapy but also focus on pre-cognitive entities such as emotion and spiritual ‘instinct’. Bergstrom and Meacham (2016, 214-215) shed light on the relationship between depression and anxiety and explained their pathological features as ‘maladaptive byproducts of adaptive mechanisms’.

Referring to Trimmer et al. (2015) they pointed out that behaviours associated with mood disorders and anxiety

disorders are not themselves adaptive, but may arise from adaptive mechanisms that have become dysregulated by the stochastic inputs they received: 'Depression appears to be an extreme and persistent form of ordinary low mood, clinical anxiety an extreme and often persistent form of justified anxiety'. And they raised two key issues: 'First, we must understand the adaptive significance of these mental states when they are functioning properly [...] Second, we need to explain why they are prone to malfunction'. Interactive psycho-education as inhering in our music-therapeutic model involves these topics.

From a hermeneutic perspective, mental disorders are not considered absolute entities, and their diagnoses require comparison to reference standards and interpretation, which depends on sociocultural traditions as well as subjective, philosophical, spiritual, ideological or occupational views of health. These phenomena are mirrored across the history of psychiatry. In this context, Marc-Antoine Crocq (2015, 319) gave a concise overview of the history of (pathological) anxiety from Hippocrates until today's diagnostic standards:

Greek and Latin physicians and philosophers distinguished anxiety from other types of negative affect and identified it as a medical disorder. Ancient Epicurean and Stoic philosophers suggested techniques to reach an anxiety-free state of mind that are reminiscent of modern cognitive psychology. Between classical antiquity and the late 19th century, there was a long interval during which anxiety was not classified as a separate illness. However, typical cases of anxiety disorders kept being reported, even if under different names. In the 17th century, Robert Burton described anxiety in *The Anatomy of Melancholy*. Panic attacks and generalized anxiety disorder may be recognized in the "panophobias" in the nosology published by Boissier de Sauvages in the 18th century. Also, anxiety symptoms were an important component of new disease constructs, culminating in neurasthenia in the 19th century. Emil Kraepelin devoted much attention to the possible presence of severe anxiety in manic-depressive illness, thereby anticipating the "anxious distress" specifier of bipolar disorders in DSM-5.

While Crocq was dealing with Western features of anxiety disorders, Hofmann and Hinton (2014) shed light on cross-cultural, ethnopsychological, and ethnophysiological issues of anxiety such as associated with racism and discriminatory events, the socioeconomic status, sociocultural rules and psychophysiological beliefs, for example, the Cambodians' multiple anxiety-related syndromes, fears of disturbed 'inner wind' and 'wind attacks', which are intertwined with a broad

spectrum of issues such as worry, anxiety, fear, depletion or poor sleep. As the present article focuses on music-based management of anxiety in Chinese children and adolescents, culturally sensitive psychopathology and psychiatry is of crucial importance.

2.2. Prevalence

Escalating anxieties and anxiety disorders have become a global burden. Borwin Bandelow and Sophie Michaelis (2015, 327) from the Department of Psychiatry and Psychotherapy of the University Medical Centre Göttingen in Germany speak of an epidemic of anxiety disorders in the 21st century. Pointing out that one-third of the population may experience pathological anxiety during their lifetime, the authors summarised:

Anxiety disorders, including panic disorder with or without agoraphobia, generalized anxiety disorder, social anxiety disorder, specific phobias, and separation anxiety disorder, are the most prevalent mental disorders and are associated with immense health care costs and a high burden of disease. According to large population-based surveys, up to 33.7% of the population are affected by an anxiety disorder during their lifetime. Substantial under recognition and under treatment of these disorders have been demonstrated [...] In cross-cultural comparisons, prevalence rates are highly variable. It is more likely that this heterogeneity is due to differences in methodology than to cultural influences. Anxiety disorders follow a chronic course; however, there is a natural decrease in prevalence rates with older age. Anxiety disorders are highly comorbid with other anxiety disorders and other mental disorders.

The statement that cross-cultural differences of prevalence rather depend on methodological issues than on cultural influences is, at least in terms of qualitative research, contradictory to the previous ethnopsychological views. Regarding such conflicting positions, the present study recommends distinguishing between quantitative and qualitative results and to consider the high variation of individual experiences, including intensities and dynamics, subjective perception, as well as the will and the way of expressing anxiety.

Anxiety disorders in Chinese children and adolescents are considered a serious and urgent problem and a study about the situation in northeast China (Xiaoli et al., 2014) substantiates these concerns: The overall prevalence of DSM-IV disorders was 9.49% and anxiety disorders with 6.06% were the most common, followed by depression, oppositional defiant disorder and attention-deficit hyperactivity disorder. The authors

concluded that approximately one in ten Chinese school children has psychiatric disorders and pointed out that prevention, early identification and treatment of these disorders are urgently needed and pose a serious challenge in China.

Moreover, a study from Xi'an (Liu et al., 2018) aggregated data from ten different school-level surveys conducted in rural areas of five provinces – Qinghai, Gansu, Ningxia, Shaanxi, and Anhui – between 2008 and 2015. A total of 50,361 students was evaluated using a variation of the Children's Manifest Anxiety Scale and concluded: 'Seven percent of students were at risk for overall anxiety. However, over half of the students were at risk for at least one subcategory of anxiety. Students at higher risk for anxiety included students from poorer counties and families, female students, secondary school students, and students with lower levels of academic performance. Many students in rural China are at risk for anxiety, and certain student subpopulations are particularly vulnerable'. Counterbalance strategies to improve public health equality is needed, alongside general educational measures to reduce anxiety levels in children and adolescents – and this is an explicit aim of the present study.

Today, anxiety disorders in the Chinese younger generation are inextricably intertwined with complex COVID-19 dynamics. Pointing out that the epidemiology of emotional disorders is greatly influenced by stressful events, Zhou et al. (2020, 749) conducted a cross-sectional study among Chinese students aged 12-18 years during the first COVID-19 epidemic period:

An online survey was used to conduct the rapid assessment. A total of 8079 participants were involved in the study. An online survey was used to collect demographic data, assess students' awareness of COVID-19, and assess depressive and anxiety symptoms with the Patient Health Questionnaire (PHQ-9) and the Generalized Anxiety Disorder (GAD-7) questionnaire, respectively. The prevalence of depressive symptoms, anxiety symptoms, and a combination of depressive and anxiety symptoms was 43.7%, 37.4%, and 31.3%, respectively, among Chinese high school students during the COVID-19 outbreak. Multivariable logistic regression analysis revealed that the female gender was the higher risk factor for depressive and anxiety symptoms. In terms of grades, senior high school was a risk factor for depressive and anxiety symptoms; the higher the grade, the greater the prevalence of depressive and anxiety symptoms [...] These findings suggest that the government needs to pay more attention to psychological health among adolescents while combating COVID-19.

Moreover, a study from Changsha (Wu et al., 2021) highlighted that lockdown policies during the COVID-19

pandemic have a potential adverse psychological impact on the youth and showed a significant increase in adolescent PLEs [psychotic-like experiences] scores after the lockdown, as well as the positive correlation between changes of PLEs and changes of anxiety/depression. Given that this is not only a Chinese but also an international problem, approaches such as the PLUS-model may help to improve mental health through integrated educational and therapeutic approaches, particularly in the realm of music and physical education.

3. Findings and discussion

The amount of Chinese children and adolescents with anxiety disorders is not only challenging psychiatric and psychotherapeutic capacities but also calls for enhanced health education in primary and secondary schools – and this is precisely what a recent resolution of the Ministry of Education of the People's Republic of China is about (MOE, 2021):

According to the joint circular issued on the Ministry of Education's website, China must make maintaining the health of its youth the number one priority, as well as be responsible to every single student primarily through prevention, intervention, and problem-oriented principles. The circular calls for the establishment of a comprehensive education, service, and management process that is both from the people and for the people. In order to construct a powerful nation in education and meet the criteria of a healthy China, all schools should achieve basic modernization in areas such as public sanitation, physical education devices, and health awareness by 2035, it said. The health knowledge, methods, views, awareness, and self-regulation capabilities of students should be one of the primary focus, said the circular, adding that starting from elementary schools, China aims to foster green, healthy, and civilized school culture on a national scale [...] The circular also suggested measures to improve students' mental health and pressure coping skills and enhance the education and training of students in recognizing the value of life, establishing self-esteem, and maintaining positivity.

Completely coinciding with these aims, the present article suggests the music-based PLUS-model to manage anxiety syndromes in Chinese pupils. The term 'PLUS' consists of the initials of the model's key constituents: Psycho-education, learning conditions, underlying mechanisms and self-regulation.

3.1. Psychoeducation

Although medical explanations helping patients and relatives to better understand and deal with diseases have a long tradition, psycho-education in its current form goes back to C.M. Anderson (1980), who developed this method as a sort of

family treatment of adult schizophrenic patients. Meanwhile, her approach has become a certain standard in the domain of psychotic diseases, and systematic reviews (Xia et al., 2011) suggest that psycho-education reduces relapse, readmission, encourages medication compliance and reduces the length of hospital stay.

Measures to improve the availability of psycho-education has brought about new therapeutic formats such as smartphone-based psycho-education to reduce postnatal depression among first-time mothers (Chan et al., 2019). Online-settings are also relevant for the purposes of the present article, e.g. in times when home-schooling has become necessary.

Psychoeducation is also used in the context of anxiety disorders (Rodrigues et al., 2018) as well as specific anxiety-associated conditions, such as in women undergoing their initial breast cancer screening mammography (Lungulescu et al., 2018) or to diminish anxiety in women with subsequent pregnancy after stillbirth (Azogh et al., 2018). Mastnak and Tiëschky (2017a & 2017b) have established psychoeducation in the realm of psychiatric music therapy and clinical music education, which directly concerns the essence of this article.

The PLUS-model suggests an enlarged concept of psycho-education which substantially encompasses (i) interactive learning, (ii) relevant and realistic feedback about actual classroom education, which may also result in modified teaching styles, and (iii) sustainable skills to cope with anxieties and prevent anxiety disorders across the life span after school.

3.2. Learning conditions

‘Der Schüler Gerber’ [The student Gerber], a semi-autobiographical novel by the Austrian writer Friedrich Torberg from 1930, tells the tragic story of a student-teacher power struggle. Oppression, denigration and anxiety in educational contexts look back over a sad history, and already in 1968, Esther Marine spoke of ‘school phobia’ and called ‘school refusal’ a relatively common phenomenon. And while an Italian study (Mazzone et al., 2007) discussed the frequent issue of anxiety symptoms in school performance, Australian researchers (Werner-Seidler et al., 2017, 30) pointed out that ‘the school environment provides an ideal context to deliver prevention programs, with potential to offset the trajectory towards disorder’.

The present study combines both perspectives and suggests interactive analyses in classroom education to explore pathogenic factors and promote health education, particularly concerning anxiety syndromes. On the basis of informally obtained data and their systemic analysis, conventional

classroom education, not least in China, may include the following potentially harmful features:

- Deficiency- versus resource-orientation, which is characterised by a dominant focus on errors and shortcomings, while positive outcomes and special talents are ignored or trivialised;
- Inferiority versus empowerment, which is likely to cause extremely low self-esteem and self-confidence, in Chinese expressed as 自卑感 zībēigǎn, literally inferior self-feeling, which is in sharp contrast to empowerment-enabling school environments (cf. Simonsen et al., 2020);
- Existential anxiety versus encouraging visions, which consolidates the expectation of a shipwrecked career and stranded life;
- Exhaustion versus equilibrium, where obsessive-compulsive maximisation of drill and repetitive exercising inhibits the equilibrium of psychosomatic energy, cognitive attention and healthy relaxation for optimised learning outcomes;
- Quantity versus identity, which obstructs genuine immersion in a subject, as well as the discovery of one’s intrinsic motivation, hidden talents and sense of life;
- Algorithm versus creativity, indicating swift acquisition of standardised techniques instead of supporting the development of one’s ingenuity, in other words: accumulation versus flow, as well as compulsion versus open-minded orientation. This also negatively impacts on scientific inventiveness;
- Extraversion versus introversion, not in the sense of personality traits, but as a nearly exclusive focus on external objects (e.g. topics of the curriculum), while inner processes (e.g. the nature of one’s desires) sink into oblivion. These processes go hand in hand with heteronomy instead of self-determination and may harm personal growth and identity.

Given that such imbalanced conditions contradict human nature, they are likely to also cause a broad spectrum of anxieties. Interactive and feedback-guided re-adjustment of learning conditions and school environments may contribute to optimised individual development as well as a significant decrease in school-associated pathogenesis, anxiety disorders included.

3.3. Underlying mechanisms

Anxieties are individual experiences or psycho-affective phenomena, which are usually – and subjectively – associated with threatening objects. However, what are the underlying mechanisms of the human ability to sense fear and why are

there such huge intersubjective differences? Today we assume a triple anxiety constellation comprising cognitive, environmental and genetic risk factors (Loken et al., 2014). By way of illustration, a deletion in tropomyosin-related kinase B is discussed as a factor of the development of human anxiety (Ernst et al., 2011) and human microRNAs such as miR-22 or miR-138-2 are considered to be associated with panic disorder and to regulate several anxiety candidate genes and related pathways (Muiños-Gimeno et al., 2011).

However, the ‘anxious genes’ should not be understood as an inevitable destiny, but rather a controllable disposition. From a genetic perspective, particularly stress and stress-related disorders such as post-traumatic stress disorders, anxiety disorders, and depression come into play (Smoller, 2016). In this context, animal models of anxiety-related disorders have provided strong evidence for the role of stress on the epigenetic control of the hypothalamic-pituitary-adrenal (HPA) axis, as well as of stress-responsive brain regions (Bartlett et al., 2017) – and neuroepigenetics are expected to explain individual variation in susceptibility to environmental perturbations and consequently anxious behaviour.

Research on anxiety and related therapies are facing a highly interdisciplinary future: music has an impact on epigenetic mechanisms – listening to music, for instance, regulates human microRNA expression (Nair et al., 2021) – and epigenetic dynamics between genes and environments may pave the way to music-based resilience against anxiety-generating conditions (cf. Schiele & Domschke, 2018), hence the epigenetic dimension of the self-regulation techniques we present in the following section.

Genes can be – in a sense – understood as elements of the plan, and the central nervous system as the biological framework of our mind. This also relates to the mechanisms underlying anxiety such as neural circuit intricacies or neural circuit perturbations (Calhoun & Tye, 2015), anxiety cells in a hippocampal-hypothalamic circuit (Jimenez et al., 2018) or the crucial role of the amygdala anxiety circuitry (Babaev), particularly its activation or inhibition.

Such interdisciplinary genetic, epigenetic, neurophysiological, etc. considerations are typical for the construction of music- and arts-therapeutic frameworks, such as the PLUS-model, which makes them different from subjective or purely heuristic music- or dance-therapeutic concepts: there are good scientific reasons for their shape, although subsequent research to estimate positive outcomes is still needed. Broadly speaking, arts-therapeutic research at Beijing Normal University focuses both on the science-based generation of techniques and adequate research on effect sizes, but not mainly (or only) on

evidence-levels. Regarding the global scene, the meta-synthetic construction of intervention-patterns seems to be significantly underrepresented.

We follow the triple step ‘genetics – neurosciences – psychology’ and focus on cognitive factors of anxiety and anxiety disorders, which is, in general, closer to common explanations of arts-therapeutic effects. But also in this area, we have to be careful to clearly distinguish between subjective theories (cf. Parfit, 2015) and research-based theories. From the perspective of philosophy of science, we have to keep in mind that a good deal of well-known concepts of music- or dance-therapy are based on subjective theories, which might be ingenious, but also erroneous, alongside the tendency that within certain schools of music therapy such ideas are used as an explanation, which leads to circular reasoning and a sort of tautology.

There is a broad spectrum of relevant psychological theories about anxieties and anxiety disorders, such as cognitive-behavioural views of social cognition and metacognition in social anxiety (Gkika et al., 2018). It is not the goal of this article to provide a survey of relevant psychological theories, but to give insights into the mode of multidisciplinary construction of therapeutic models and consequences for the generation of arts-therapeutic frameworks and techniques: from the classical contradiction between James-Lange’s physiological theory and Cannon-Bard’s neuro-psychological thesis (cf. Weisfeld & Goetz, 2013) to the complementarity of cognitive-behavioural therapy and short-term psychodynamic psychotherapy (Zlotnick et al., 2020), for instance, and finally our PLUS-model. Broadly speaking: we suggest understanding scientific approaches as epistemological tools, but not as the source of absolute truth or the complete representation of a research object.

3.4. Self-regulation

The following self-regulation programme shall be integrated in regular music classroom-education, particularly in secondary schools, and is designed for application across the life span after leaving school. It requires personalised techniques and intrinsic motivation for robust sustainability and shall contribute to the strategic programme of Healthy China 2030, which aims at co-building and sharing health for all. The initials A-E-I-O-U stand for Aesthetics, Exposure training, Immersion in music, Organ rebalancing and Unconscious sources.

3.4.1. Aesthetics

Although the experience of beauty belongs to the most characteristic features of the human race (cf. Bunn, 2018), its psychological roots are still a mystery, although disciplines

such as cross-cultural empirical aesthetics (Che et al., 2018) or neuroaesthetics shed light on its enigmas. Being enchanted by beauty may lead to surprisingly spontaneous mood-brightening, akin to similar reactions to positive events experienced by individuals with a generalised anxiety disorder (Khazanov et al., 2019), but differently triggered. The therapeutic power of beauty is widely used in arts-based therapies, while beauty can also be regarded as an inner entity, such as related to the health-enhancing potential of Zen aesthetics (Lomas et al., 2017).

The present study suggests the mindful discovery of one's aesthetic sense, an approach which is closely intertwined with the music educational research on aesthetic education at the Shanghai Conservatory of Music. Anxiety-modulating aesthetic settings may use receptive approaches, e.g. listening to the mysterious and soothing sound of the traditional Chinese zither Guqin, or sound spheres created by the own voice. From a Daoist perspective closely related to the universal principle of harmony, this may help practitioners to gradually reach inner calmness. Individuals reported three phases: (i) initial problems to bridge the gap between their external focus on objects such as music and inner processes, followed by rather immediate perception of wholeness, (ii) a persistent awareness of anxiety or anxiety-associated objects, while their penetrating and disturbing nature was fading, and (iii) an aesthetic feeling of bliss and an unexpected extension of consciousness.

3.4.2. Exposure

Exposure training ranks among the classical and most efficient methods of cognitive behavioural therapy to treat anxiety disorders, and today also virtual reality exposure therapy is applied to treat pathological fear and related medical conditions (Carl et al., 2019).

Different from external virtual worlds, the present study suggests imaginary exposure training consisting of five phases: (i) verbal methods to select specific anxious feelings or anxiety triggers, as well as to initiate priming processes, (ii) light music-induced trance, which shall also create a feeling of comfort and safety, (iii) according to principles of systematic desensitisation gradual exposure to anxiety-associated inner visualisation, (iv) by means of enhanced hypnotic creativity search for individualised coping strategies, (v) after the music-guided hypnotic séance cognitive-behavioural reflection, adaptation and consolidation of achievements.

Depending on the anxiety's characteristics and aggressiveness usually several sequences are needed, and a transition from guided hypnosis to self-hypnosis is intended. In this context, music-guided hypnosis must not be understood as a form of

manipulation, but a natural state of altered consciousness with enhanced possibilities to activate adaptive self-regulating systems (cf. Alter & Sugarman, 2017). From an anthropological perspective, music and trance are deeply interconnected (cf. Pilch, 2004) and music educators should be aware of the possibility that also common music experience in classroom education may trigger trance processes in pupils.

3.4.3. Immersion

Predominant mental extraversion can cause a loss of self-awareness, alongside pathological sequelae, and mindful approaches in holistic healthcare are about to gain importance, as well as spiritual immersion (Glicksohn & Ben-Soussan, 2020). The present study suggests musical immersion, either through listening or music-making. Both modes differ sharply from the casual perception of background music or mechanical exercises and require inner readiness to get absorbed by the aesthetic experience of sound and rhythm.

Individuals reported three main experiences of music immersion, which considerably alleviate anxieties or even make them vanish into thin air: (i) a mystical union of music and the self, akin to love fusion or moments when the soul is made one with God, (ii) a moment of aesthetic joy in which the obsessive-compulsive power of anxiety falls apart, alongside a feeling of liberation and redemption, and (iii) the revival of the feeling of being alive and genuine self-actualisation, in contrast to being permanently haunted by anxiety and frozen by panic.

3.4.4. Organ rebalancing

Anxieties may have a negative impact on the physiological system such as the anxiety stomach's cramp and pain, and anxiety-related traumatic stress is likely to influence the autonomic brain-gut connection (cf. Kolacz et al., 2019). Moreover, anxiety disorders and cardiovascular diseases are interconnected, and while cardiac diseases are likely to cause (understandable) anxieties, generalised anxiety disorders, post-traumatic stress disorders and panic disorders can cause adverse cardiac outcomes (Celano et al., 2016). Pathological responses to anxiety cover a broad spectrum and clinical experience shows that in many cases anxiety, especially chronic anxiety, also leads to back pain (cf. Hoy et al., 2010).

In accordance with this article's focus on self-regulation techniques, Rudolf Hoehn-saric (2007) suggested that 'the ultimate goal of treatment for somatic symptoms in patients with GAD [generalised anxiety disorders] is to help the patients become self-sufficient without the need for medication. However, a minority of patients who have GAD need continuous pharmacotherapy, including benzodiazepines. It would be shortsighted and insensitive to deny such patients

medications that could improve their quality of life’.

Sound Work (Mastnak, 2018) is a comprehensive music-body-oriented therapeutic model consisting of four components: Sound coping, Sound Focusing, Sound Balancing and Sound Energising, which were not simultaneously developed. Sound focusing is historically seen the first component (Mastnak, 1992): with a mental focus on distinct body-zones, vocal techniques are used to impact on psychosomatic circuitries linking feelings and organs such as anxiety and the heart or stress and the low back. Although underlying mechanism are still unclear, clinical outcomes are encouraging. Multifaceted exploration of the own voice being a topic of music education, Sound Focusing can be easily implemented to improve mental and psychosomatic health in regular primary, secondary and tertiary schools.

3.4.5. Unconsciousness

Many music therapeutic concepts involve depth psychological theories or psychoanalytic thought, e.g. Regulative Musiktherapie (Schwabe, 1979), analytical music therapy (Aigen, 2021), and Guided imagery and music (Beebe & Wyatt, 2009), usually referred to as ‘GIM’. Classical psychoanalysis as well as contemporary psychodynamic approaches to treating anxiety (Pitman & Knauss, 2020) highlight the importance of unconscious processes and involve the question of how to access and deal with the unconscious.

The present study recommends music-guided approaches, which must not be confused with music-induced trance as mentioned above; and they are – according to culturally sensitive music therapy – different to, e.g., Helen Lindquist Bonny’s GIM. Although we assume that the sphere, which is called ‘unconscious’ in Western depth psychology, belongs to the mind of the human race, cross-culturally theories and views differ, as well as the unconscious contents.

Regarding anxiety disorders, traditional Chinese thought may play a significant role. One of the most important ideas in Daoism is the prestabilised harmony between heaven and humans (Kidd, 2020, 118):

My aim is to show how exercising the virtues of spontaneity enables one to live authentically and so ‘follow the Way of Heaven’, thereby realizing the aspiration to emulation. To do this, I describe striking parallels between those virtues and certain qualities of *Dào*, which are best explained in terms of an emulative relationship between *zhēnrén* and *Dào*.

From this perspective, anxiety may be understood as the loss of this harmony, a loss of one’s true nature, a loss of being safe

and sound. Regarding these views, mindful psychiatry and the principle of respecting a patient’s cultural and spiritual background come into play. Music of the Guqin, the most traditional Chinese zither (cf. the section about aesthetics above), which looks back over a history of 5000 years and is deeply connected with the spirituality of Daoism, may be a viable means to facilitate the access to the unconscious roots of anxiety as a key to therapeutic changes.

4. Conclusion

This model-generating study is part of a comprehensive Chinese project to improve mental health in children and adolescence and to alleviate syndromes through arts-based interventions in educational areas. The relevant spectrum includes, according to Chinese psychiatric epidemiology and mental public health studies, most prevalent conditions in the Chinese younger generation, i.e. in addition to anxiety disorders also attention deficit hyperactivity disorder, oppositional defiant disorder, depression, stress and burnout syndromes, eating disorders, and mental disturbances caused by measures to control the COVID-19 pandemic such as social isolation.

The next steps include qualitative exploratory studies, studies to generate standardised models and quantitative multicentre studies, as well as feasibility studies which shall help to provide these educational-therapeutic facilities throughout the People’s Republic of China. Moreover, cross-cultural studies shall help to adapt them in different cultures and contribute to intermodal culturally sensitive creative and aesthetic therapies.

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