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Role of Relational Aesthetics and Impact of Eco-Environmental Psychology on Piano Education Pedagogy

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ABSTRACT

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Purpose Among all art and music majors, piano education is an essential subject and a mandatory requirement. This study aimed to explore the aesthetic characteristics of art in music education in general, and piano instruction, in particular, in the light of eco-environmental psychology and music psychology. The study also examined the factors that made an impact on music education in a pedagogical situation. Methodology. The study adopted a qualitative research design, using the purposive sampling method to identify 20 music teachers teaching aesthetic curriculum. It used an Inquiry-based data collection method through indepth interviews, in which informants' feedback was utilized to educate students about the environment, which may result in an interactive piano classroom for teaching and learning.

Findings. The study findings made evident the facets of music environmental psychology, along with environmental factors, the fusion of aesthetic experiences, the purification of aesthetic perceptions, and musical spatial intelligence, in order to demonstrate the aesthetic value of ecoenvironmental psychology in piano instruction. **Implications for Research and Practice**. This study would provide useful insights to design piano ecology curriculum strategies.

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Introduction

Aesthetics as a discipline is embedded with perception and appreciation of both the artist and the audience (Osborne, 1972). Howes (2006) asserts that aesthetic experiences comprise looking at paintings, listening to music or reading poems, all are linked to perception and appreciation. A study of aesthetics is essential because it gives us the rationale why art existed through the ages and how it contributed to various fields such as philosophy, education, language, and like (Parsons & Blocker, 1993; Smith & Simpson, 1991). In most of these disciplines, particularly in visual arts and music fields, aesthetics is concerned with the artificial beauty that audience can see or hear, and are able to interpret its beauty and features. The observers admire, enjoy and physically experience all such artistic creations. The philosophy of aesthetics depends much upon a few principles like the assembly of colors, forms, and ideas, which combine to give a holistic aesthetic experience.

However, aesthetics is beyond this pleasant and physical experience by a person when it comes to education or pedagogy (Marini, 2021; Todd, Hoveid, & Langmann, 2021; Tursunbaevna, 2021). In Malaysian context, pedagogy and the arts have undergone major paradigm shifts in recent years (Tajuddin, Naili, & Ismail, 2021). This is in response to the western artists who offered a creative reaction to the contemporary world by embracing modernity in their art (Jin, 2021; Shu, 2021; Wang, 2022). There has also been a significant growth in the popularity of postmodern aesthetic practices that are more socially engaged and participative. The term "eco-environmental psychology" refers to a field of study that examines the interplay of human behavior, cognition, technology, and aesthetics in the context of the built environment (Seçim, 2017). Eco-environmental psychology also has a significant impact on human aesthetic and psychological activities, not simply in the area of scientific research. This idea is based on the link between music and surroundings in music environmental psychology (Fan, 2019). Music performance art is characterized by emotional mode and structural form due to melodic and rhythmic patterns in the musical language. Furthermore, it includes its performing gestures, postures, emotions, and skills (Thaut, 2013).

Taking a step ahead, there is another interdisciplinary field that combines environmental psychology with music psychology known as music eco-environment psychology (Hu, 2020). This field differs from environmental psychology as it is scientifically based on musical thinking and musical reasoning. It has therefore been shown that music eco-environmental psychology serves as a foundation for interplay between science and art. Using the aesthetic coincidence of environmental and musical beauty, musical eco-environment psychology makes the environment an aesthetic resource and creative link to be known as relational aesthetics that can be used at anytime and anywhere. Bourriaud (1998) used the phrase "relational aesthetics" for the very first time, who posited that music-making creates a network of connections, and that the act's significance rests in those connections. When seen in this light, music becomes a relational activity. Bourriaud (1998) also stressed upon the potential for knowledge in these encounters, and understanding music beyond its "independent" understanding, for the benefit of music educators. For individuals who are interested in understanding and articulating their connections, the act of musicking gives a vocabulary through which they may develop an educational environment, at institutional level and personality of interest at the individual level.

This study aimed to explore the aesthetic characteristics of art in music education in general, and piano instruction, in particular, in the light of eco-environmental psychology and music psychology. The study also examined the factors that made an impact on music education in a pedagogical situation.

Literature Review

There is no dearth of literature on art and aesthetics to represent eco-environmental psychology or an environment where people may gather to take part in common activities. A large amount of literature is available on music and psychology (or psychopathology), narrating the plight of individual artists and composers; on the nature of creativity and innovative spirits (Sternberg, 1999); on art form Miller (2000); on neuropathology examining the artist's trauma (Cantagallo & Della Sala, 1998); or leading all of them with experimental aesthetics (Berlyne, 1971; Kreitler & Kreitler, 1972). There are also studies about art lovers like concert-goers and amateur musicians playing piano. All these studies have one thing in common, that art is seen as a universal human activity. Art is also involved in culture, language and education, where involvement in art is not seen as a leisure activity but in reading and didactic objectives (Argyle, 1992; Mann & Burgoyne, 1969). When some students like one subject and dislike another; likewise, there are personality correlates of likes and dislikes about different types of music (Dollinger, 1993); and about preference for particular styles of art (Feist & Brady, 2004). Such preferences are linked with the individual's personality in relation to mind and creativity (Barron & Harrington, 1981). Zuckerman (1994) argues that art, music, literature and the media have the capacity to arouse a person to learn them academically. Bogdan (2001) reiterates the postmodern philosophy and looks at this phenomenon as embodied dialogism. Artistry is a metaphor for 'the other,' an experience that is very comparable to that of a personal (actual) other. It's a one-on-one musical experience, from a modernist perspective, focusing on the individual's perspective on the world. As a result, paradigmatic musical artworks invite us to participate in a shared reality by inspiring us to become part of it.

• Relational Aesthetics and music

Relational practices have been used by musicians for a long time, although the term "relational aesthetics" was relatively less common among academicians. Educationists rarely combine aesthetics with individual or group relationships (but not relational aesthetics), and prefer to use the term "relational musicology" Bourriaud (1998) proposed an approach to the study of musical composition in a study that examined multiple social orders in music and the intricate interrelationships among them. The prevailing notion that music is an inherently social function and only a small element of the overall context of sound is challenged. The idea behind Bourriaud's (1998) "relational aesthetics" was that art is not merely for individuals, but rather it connects their shared experiences with one another. Both "old" and "new" generations of musicologists have often overlooked or discounted the artistic importance placed on intersubjective interactions (Cook, 2012).

Music continued to play a vital role both in constructing and negotiating relationships at a personal and group level. Cook (2012) further asserts that when music is viewed in this way, it is not merely a metaphor, but is a metaphor for social interactions, thus referring to Bourriaud (1998) and the understanding that an artwork is not merely its

context, it is also the result of its interactions. Cook (2012) thus argues that musical contacts of any type are essential to musicological theories. An emphasis on relationships, coupled with an emphasis on the local, helps him to demonstrate the spiritual antithesis between people, communities, small groups, states, and the industry.

Relational musicology is central to understanding individual and cultural identities, as well as the intricate relationships between them (Bogdan, 2001). A book entitled Musicking by Small (1998) describes music as an activity, not a thing. Throughout the book, there are scathing criticisms of Western classical music. It may seem a little obsolete now, but Small's influence on music education debate cannot be overstated. As with the notion of activity, his message on the importance of connections has not had the same impact as his message on connections. Up until recently, Scandinavian discourse was unaffected by this. "Relational aesthetics" but Small (1998) rightly argues that individuals gather together to participate in a musical performance "to confirm, investigate, and celebrate their ideas about what are good and suitable relationships." This line illustrates that Small's theory has a strong relational component, characterizing musical materials as contexts and interactions as contents.

Music's essential meanings are not only personal but rather communal. Every musical experience offers us with a set of interactions that are crucial to our understanding of music. Consequently, musicking is defined as an activity that can only take place if a person is given permission to do so. A vital component of our knowledge of ourselves and our interactions with others and other animals with whom we share our planet. This analogy can help to explain the theory that all music is a human interaction. Unlike Bourriaud's (1998) theory, the relevance of social and emotional information gained through music encounters, as well as the necessity of compassion for others. in western civilization is based on the "talent for producing music".

• Communicational (educational) musicality and the relational aesthetics

Bourriaud (1998) claims that aesthetic connections are never questioned before, and cites the lullaby as an ancient musical example. It is noteworthy that melodic, rhythmic expressions and lullabies have long been used to provide emotional control and socialization in children and adults (Espeland, 2011). The unique contribution of music to a baby can be seen as a way to nurture them emotionally. In spite of any lack of attention to children, music offers an integral contribution to relational aesthetics (Yablonsky, 2021). This shows that the concept of quiet or introspective listener was prevalent centuries ago, but newborn studies began to move away from the concept of a 'passive infant'. Infants are thought to be born with a desire to communicate their mental states via their bodies, gestures, and voices from birth. Based on rhythmic patterns of involvement between the parent and child, parent-infant interactions are identified as either musical or dance-like approach. put as an unspoken discourse.

Through music, thus, relations between linguistic and affective components can be investigated and interpreted. As Bourriaud (1998) puts it, "works of art" are judged on the basis of inter-human connections when they are studied by youngsters. The 'cradle' of music, dance, and theatre may be found here, where musicality and inter-subjectivity are intimately intertwined. Both infants and adults appear to be able to understand implicit emotional meanings through these musical rituals of human connections. Children and

parents may both contribute to the formation of the meaning of an arrangement by contributing equally to it, giving it life, and complementing it in this way. Such a communicative musicality is seen as a basis of interaction, a type of musical conversation that allows people to gain knowledge of each other through each other's company. Similarly, it is believed that the same kind of interactions resurface throughout a person's life in free-form environments. As a precursor to early childhood music education, communicative musicality has the ability to make apparent key meanings in music education that extend beyond the early years.

• *Inter subjectivity and Musical Aesthetic Perception*

Aesthetic practice is rooted in inter subjectivity, and this is evident in the artwork as a social interstitial. According to our perspective, this alters or extends what is often referred to as "music experience," "musical interactions," or "musical aspects." The viewer/audience/ function spectator's and behaviors are further altered through inter subjectivity. An arrangement was given life by inviting "beholders," according to Bourriaud (1998). The "beholder" is asked to participate in the work's meaning by taking up a position inside it and adding to it. This means that the audience—or student—comes into play. Equal treatment amongst contributors and a shift away from the artist's role as the work's only genius is essential for this concept to come to fruition. Furthermore, the United Nations benefits from this since these reaches beyond the teacher's traditional role of being the only expert in classroom music education.

The environment also acts as an aesthetic interface for the art as well as subjective time and space (Choi, Lee, & Lee, 2010). Music aesthetic experience fusion is fundamentally based on the emotional context in which it occurs (Mody & Bhoosreddy, 1995). In the aesthetic perception of music, emotional situation aesthetics have a significant and evocative role. Using aesthetic associations and emotional stimulation of the physical surroundings, it generates a unique music atmosphere (Garg, 2021). This is why musical context serves as the ultimate goal of music aesthetics. Consciousness produces a sound whenever this perceptual coincidence is in sync with the movement of an external force. As a result, the total experience of "sound", "scene", "emotion", "will", "force", "shape", and "melody" is an artistic link of power (Ahmed & Ali, 2020).

Nature and harmony may be seen in how music is perceived as a whole, and how it is perceived by the listener (Shahabaz & Afzal, 2021). It could be said that art sound has three levels of significance in music aesthetics, namely "a stimulation of the physiological system", "the stimulation of the mind", and "emerging power" (Bo & Wen, 2022). The level of reaction to the music topic varies throughout the three levels. There are several aspects to consider when it comes to determining a performer's ability to play music, but the most important is the capacity to recognize and respond to music, as well as how well the performer understands it (Salihu & Iyya, 2022). According to Schmidt (2014), if this threshold purification mentality is disrupted in artistic performance, the aesthetic expectation in art perception would be lost. The relationship between music composition and sound is chaotic, numb, or disorganized due to an impaired excitability of the auditory internal basement membrane. Single-repetition trainers of lower quality are more likely to have this issue. Unless they have a fundamental aesthetic sense for the combination of sound and melody, as a result of repeated training, auditory or environmental music aesthetics will be lost.

When it comes to performing, some people lack the ability to express themselves enthusiastically or passionately in order to convey the distinctive attractiveness of art (Fang, Liu, & Li, 2016). As we observe in the signals of diverse musical performances, aesthetics in the music environment has a psychological basis. Environmental energy's self-organizing structure may elicit associations with music and space intelligence, as well as many establishments of intelligent quality via order and harmony. Material and spiritual energies are linked via a selforganizing environmental tone system that grows out of environmental philosophy and its aesthetic investigation. Scientific, rational, logical and spiritual aspects of environmental thinking may be achieved via the use of this matching thinking framework. Music space intelligence standards define the microenvironment system as an orderly movement between systems of the material and auditory worlds. In these ways, the intelligent structure of "point", "line", "surface", and "body" can be systematically incorporated into the orderly flow of music. Music environment aesthetics in motion may be characterized as a dot line and a soundscape arrangement. Visual image memory is converted into auditory imagery and sound coding using dot line tracing, which creates the contour of the soundscape image.

Theoretical Background

Several educational theories have been evolved from behaviorism to highlight cognitive to socio-cultural relationship between art and the human life. Art is not only a form of expression, but also a way to improve the lives of the humans. It is important to remember that music is a social, cultural, and intersubjective phenomenon. Relational creative behavior may now be traced across all art forms and genres. Music education has contributed towards the development and evolution of social contexts, Bourriaud (1998) posited the theory of relational aesthetics, which considers art not only as a form, but a philosophy. In addition to relational art and aesthetics, art was defined as "based upon the inter-human relations that it portrays, produces, and causes" and "a set of artistic practices that make use of human relations and their social context as their conceptual and practical starting points, rather than independent and private ones (Bourriaud, 1998).

The field of music eco-environmental psychology also makes use of a variety of novel theories and concepts. With the continued development of music, numerous musical disciplines have emerged, such as environmental iconology, structural mechanics, acoustics, spatial intelligence, structural mechanics, psychological aspect of emotions in the environment, thus creating a theoretical framework for music eco-environment psychology itself. Such a music aesthetics provides an overall account of how music and the environment interact in terms of aesthetics, Figure 1 illustrates five modes of arts participation, based on level of creative control and was chosen as the framework of this study. As seen in the figure, there are five modes of art participation: inventive, interpretative, curatorial, observational and ambient. All these modes control the creativity exercised in the performance of any type of art over the creation of an environment.



Figure 1. Five modes of arts participation

There are many points in the artistic creative environment where the sound point may be found, and it specifies the fundamental character and synthesis of musical feelings. There are unique coordinates throughout the musical thinking region in this prototype of an artistic creative environment. However, each node in the network acts as a node and a force in its own right. Combining points and lines creates a vivid spatial vision via their spontaneous interplay in music's point-and-line combination. Both time and space are intertwined in sound movement, which is to say that time and space are environmental psychological domains that are symbiotic. Its dynamic structure's unending potential always results in an artistic journey of time and space. The action tension in dynamic structure creates the dynamic foundation of environmental sound interaction in the symbiotic zone of the musical environment in aesthetic attention.

Based on this theoretical framework, the current study aimed to investigate whether teaching aesthetics, in general, and piano teaching, in particular, posed any challenges. The rationale behind this objective was to examine how students got motivated towards piano education, and how instructors cultivated and improved students' skills in the classroom, what were the teaching approaches and how they aroused students' instinct for aesthetic experience through piano education.

Methodology

Research design

This research study sampled through a purposive sampling method 20 music teachers employed under the UITM teaching aesthetic curriculum. The research design constituted an Inquiry-based data collection method through in-depth interviews, in which informants' feedback was utilized to educate students about the environment, which may result in an interactive piano classroom for teaching and learning.

• Research Instrument

The primary data collection instrument was in-depth interviews with open ended questions, attended by all 20 informants. The objective was to investigate whether teaching aesthetics in general and piano teaching, in particular, posed any challenges. Secondly., the study also examined how students were motivated to go further into the subject and discover new ways to approach and solve the problem. The interview questions focused on piano education, and how instructors cultivated and improved students' skills in the classroom, what were the teaching approaches and how they aroused students' instinct for aesthetic experience through piano education.

Data Analysis

Qualitative methods were used to analyze the data collected in interview transcripts. There were two primary approaches to teaching piano in a classroom: first, the teachers began by presenting students with interesting problem. By becoming interested in the challenges surrounding piano instruction, students were motivated to go further into the subject and discover new ways to approach and solve the problem. Second, teachers set up an issue that necessitated investigation. Since the piano is a solo instrument, instructors focused on cultivating and improving students' ensemble skills in the classroom. The use of various teaching approaches, such as group competition, were used in a piano classroom. Through a content analysis approach, several themes were identified. It was evident that music teachers showed a diligent effort in imparting piano education

Results and Discussion

• Factors Involving the Environment in Piano Education

There are several factors that consolidate the environment for piano education including family environmental factors, parental education, peer influence, social environmental factors, and impact of teachers and the study curriculum. The family environmental factors comprise all such elements that are in a child's contact with the outside world as well as with its family ever since its birth. Home or family is the place where children's first experiences in life, habits of behavior, and moral standards are formed, where they spend the majority of their time. A child's psychological development is influenced by both school and society, but the effect of family is long-lasting and significant. In order for children to learn the piano from their parents, they must have clear learning goals, expectations, instructional ideals, and an accompanying role.

The notion of parental education is significant because children benefit from a more effective piano-learning experience in a proper home education environment. First and foremost, piano playing may facilitate the coordination of the left and right hemispheres of the brain by promoting regular engagement between the two limbs. Secondly, piano lessons may help youngsters nurture their emotions in the early stages of comprehending the world, as well as enhance the sensory world. Children who practice the piano both at the school and at home, need the parent's support. A child's nerve system is not yet completely matured; it is therefore common for youngsters to struggle with visual spatial awareness. A child's ability to comprehend the five-line spectrum and other fine learning information is limited during this time period. In general, piano instructors are unable to spend a significant amount of time with children; thus, parental companionship may be beneficial in improving children's piano learning.

Another factor is the interaction of children with their peers and how the peer influence affects their piano study. Interaction with peers significantly affects a child's psychological, social, moral, and cognitive development. Children who learn to play the piano are more likely to engage socially with their classmates. The peer-to-peer environment refers to the interaction between children on a daily basis, both in terms of their thoughts and behavior. Some of a child's negative social tendencies may be cured by positive peer contact. Emotional motivation is a key component in music education as group learning is much better than Individual training, when young children get peer support to work as a technical and attitudinal model. Learning the piano through peer support may help youngsters have a greater sense of both life and psychological maturity. The piano is a performing art, and the piano tutoring school organizes monthly piano recitals for the students to practice their performance skills.

Peer support boosts their desire to learn the piano, this will also provide them additional possibilities to socialize with their friends. In piano concerts, children progressively learn how to work together only through peer support and peer appreciation. The peers appreciate, trust, and understand their friends as a result of this process. There are several benefits of peer support for teaching youngsters how to play the piano, such as increasing their life and emotional experiences, as well as teaching them how to work with others. The social environmental factors are significant when, as a result of societal developments, children learn the piano to earn a social recognition. Parents' views children learning to play the piano as to make a heavy impact on the social environment. The children get appreciation and also earn a lot of motivation when their knowledge of piano is recognized and appreciated.

Finally, there is the impact of teachers and the study curriculum on students learning the piano. The quality of the curriculum and good teaching increases the melody, tone, and exquisite playing style. Due to the spread of piano education widely, there is also a need for professional piano instructors who could teach the piano as per the latest curriculum. There is no dearth of professional music instructors, who switch to piano instruction, but they are not really trained and talented. Besides, there are a majority of art grads who studied music majors and attended music schools of repute. These could prove better piano instructors, who could maintain improved teaching standards, and use a high-quality piano teaching curriculum to create an ideal learning environment (Kawase, 2013).

• Construction Strategies of Piano Ecology Curriculum

Teachers and students are two of the most important ecological themes to consider in the development of a piano ecology curriculum, and we offer ways to include these two viewpoints into the curriculum. Figure 2 depicts the vision of music teacher educator's vision. This vision encapsulates good teaching of music pedagogy, teachers' development, curriculum, tradition versus reflective practices and challenges of labor market and vocational areas.

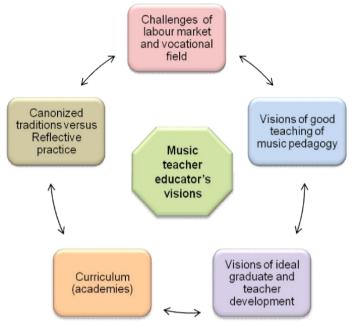


Figure 2. Music teacher educator's visions

Such an educator's vision requires a few prerequisites such as generative method of teaching, constructing the teaching content, formulation of teaching thoughts, and designing teaching scheme. The generative method of teaching is necessary for the creation of an ecological classroom. In order to successfully enhance classroom teaching, instructors who use generative teaching must constantly monitor and adapt their lesson plans and lesson material based on their observations of students' ideologies and learning needs. The constructing of teaching content emphasizes the need of spotting and using any unexpected piano teaching materials that may arise. It is impossible to forecast everything that will happen in the classroom, but if instructors are able to manage, piano instruction would not be an art form in the first place. To a significant part, piano instructors are capable to cope with unforeseen events, which reflects their ideologies and flexibility (Fine, 2018).

Likewise, formulating of teaching thoughts requires that piano instructors should help an individual to address challenges they encounter in events such as piano playing and piano sight-seeing by encouraging them to discover and help them find ways to address them. Students get fully engaged in the piano classroom teaching process by analyzing the questions. Students may be able to effectively build their own knowledge structures with this approach. Lastly, designing teaching scheme is a product of a piano teacher's after-class reflections on his or her lessons. A successful post-class reflection can be compared to a complete work record. Piano ecological classroom teaching can also be seen as an extension of this concept, and it is important for teachers to utilize these methods to establish "classroom teaching procedures". It is imperative to evaluate teaching information, recapitulate teaching experiences, and reflect on teaching deficiencies, among other things (Zhao, Wang, & Zhou, 2016).

One of the classic indoctrination teaching techniques is the inquiry teaching method, in which instructors conduct their teaching activities by examining textbook contents as a primary object of inquiry. In addition, it is a teaching method that encourages student independence while still allows for group activities. There are two primary approaches to teaching piano in a classroom: first, the teacher should begin by presenting lessons with interesting problem. By becoming interested in the challenges surrounding piano instruction, students will be motivated to go further into the subject and discover new ways to approach and solve the problem. Second, the teacher should set up an issue that necessitates investigation. The piano is a solo instrument, thus instructors must focus on cultivating and improving students' ensemble skills in the classroom. The use of various teaching approaches, such as group competition, might be used in a piano classroom. Such cooperative piano exercises and analysis are necessary to identify appropriate answers in a challenging circumstance like this one; on the other hand, it may help students develop their cooperative abilities.

Piano has benefited greatly from the fast advancement of computer and network technologies. As a result, it may both improve the resources available to piano instructors and expand the range of options available to pupils (He et al., 2017). Teacher efforts can be focused on the following areas: guiding students to access authoritative piano learning websites where they can stay up to date on the latest developments and exchange piano learning experiences; encouraging students to enter competitions for their chosen instrument; and, finally, recommending to students the learning experiences of well-known piano masters and personal blogs in order to broaden their outlook. In addition to providing relevant information about piano in popular media, teachers should encourage students to pay greater attention to television, radio, professional periodicals and other channels.

By empowering students to take part in the inquiry process and encouraging their creativity, teachers can promote positive outcomes. Collaboration and competition are frequently necessary for sharing of creative ideas. Because of this, piano instructors may develop a rivalry and collaboration mechanism in the classroom instruction process (Shi et al., 2016). During class, the piano instructor asks a question that may be difficult for certain pupils to answer, and then recognizes it by grouping them and selecting the best response. Teachers can conduct comprehensive assessments based on their "students' piano foundation. In order to implement the model, the assessment factors include "analytical abilities", "Performance on the piano", and other associated skill indicators first, followed by the establishment of a coordinator in the group (Gong et al., 2016; Yablonsky, 2021).

Conclusion

This study examined whether relational aesthetic theories can be applied to music education. Additionally, it focused on relational aesthetic in or around musicality, communication, and relational thinking in musicology and music therapy. A central tenet of current music education was found wherein music was an ever-evolving human activity that was endowed with a vast array of meanings and values. For the purpose of enhancing modern music education practices and for the purpose of recognizing relational aesthetics as a pedagogical and intersubjective resource within music education, it was necessary to grow and refine interpersonal and intersubjective aspects within music education.

The topic of music eco-environmental psychology was also examined in this study. In recent years, the field of environmental science has effectively penetrated ecological environment psychology from the ecological environment circle to the social behavior environment circle, largely because technology and science have advanced so rapidly. As part of the overall exploration of education in piano through the lens of music ecoenvironmental psychology, this paper examined the fundamental framework of music environmental psychology in order to determine the aesthetic value of eco-environmental psychology in the musical environment. Following that, we examined the effects of environmental factors on piano instruction from an ecological perspective. Based on this, we came up with a set of guidelines for the development of a piano ecology course.

Using the generative teaching technique, it was suggested that piano instructors may establish a community of learners. Inquiry-based teaching methods could also be utilized to educate students about the environment, resulting in an interactive piano classroom for teaching and learning.

References

- Ahmed, B., & Ali, A. (2020). Usage of traditional Chinese medicine, western medicine and integrated Chinese-western medicine for the treatment of allergic rhinitis. *Official Journal of the Zhende Research Group*, 1(1), 1-9. https://sprjonline.com/wp-content/uploads/2021/03/1.pdf
- Argyle, M. (1992). *The social psychology of everyday life*. London: Routledge. https://psycnet.apa.org/record/1992-98408-000
- Barron, F., & Harrington, D. M. (1981). Creativity, intelligence, and personality. *Annual review of psychology*, 32(1), 439-476. https://doi.org/10.1146/annurev.ps.32.020181.002255
- Berlyne, D. E. (1971). *Aesthetics and psychobiology*. New York: Appleton-Century-Crofts. https://psycnet.apa.org/record/1973-00821-000
- Bo, Y., & Wen, W. (2022). Treatment and technology of domestic sewage for improvement of rural environment in China. *Journal of King Saud University-Science*, 34(7), 102181. https://doi.org/10.1016/j.jksus.2022.102181
- Bogdan, D. (2001). Musical listening and performance as embodied dialogism. *Philosophy of Music Education Review*, 9(1), 3-22. https://www.jstor.org/stable/40495449
- Bourriaud, N. (1998). Relation Aesthetics. Dijon: Les Presse Du Réel.
- Cantagallo, A., & Della Sala, S. (1998). Preserved insight in an artist with extrapersonal spatial neglect. *Cortex*, 34(2), 163-189. https://doi.org/10.1016/S0010-9452(08)70746-9
- Choi, A.-N., Lee, M. S., & Lee, J.-S. (2010). Group music intervention reduces aggression and improves self-esteem in children with highly aggressive behavior: A pilot controlled trial. *Evidence-Based Complementary and Alternative Medicine*, 7(2), 213-217. https://doi.org/10.1093/ecam/nem182
- Cook, N. (2012). Anatomy of the encounter: Intercultural analysis as relational musicology. In Critical Musicological Reflections: Essays in Honour of Derek B. Scott (pp. 193-208). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9781315575056-20
- Dollinger, S. J. (1993). Research note: Personality and music preference: Extraversion and excitement seeking or openness to experience? *Psychology of music*, 21(1), 73-77. https://doi.org/10.1177/030573569302100105
- Espeland, M. (2011). A Century of music listening in schools. In S. B. Margaret (Ed.), *A Cultural Psychology of Music Education* (pp. 143-178). Oxford Academic. https://doi.org/10.1093/acprof:oso/9780199214389.003.0007

- Fan, J. (2019). Research on piano education from the perspective of music eco-environment psychology. *Ekoloji*, 28(107), 3281-3289. http://www.ekolojidergisi.com/article/research-on-piano-education-from-the-perspective-of-music-eco-environment-psychology-5968
- Fang, C., Liu, H., & Li, G. (2016). International progress and evaluation on interactive coupling effects between urbanization and the eco-environment. *Journal of Geographical Sciences*, 26(8), 1081-1116. https://doi.org/10.1007/s11442-016-1317-9
- Feist, G. J., & Brady, T. R. (2004). Openness to experience, non-conformity, and the preference for abstract art. *Empirical Studies of the Arts*, 22(1), 77-89. https://doi.org/10.2190/Y7CA-TBY6-V7LR-76GK
- Fine, G. A. (2018). *Talking art: The culture of practice and the practice of culture in MFA education*. University of Chicago Press. https://doi.org/10.7208/9780226560359
- Garg, H. (2021). Digital twin technology: Revolutionaryto improve personalized healthcare. *Science Progress and Research (SPR)*, 1(1), 32-34. https://doi.org/10.52152/spr/2021.105
- Gong, J., Huang, M., Ma, Y., & Sun, J. (2016). Cultural background, eco-environment awareness and pesticide application behavior of farmers. *Journal of Ecology and Rural Environment*, 32(4), 546-551. https://www.cabdirect.org/cabdirect/abstract/20163290966
- He, J., Wang, S., Liu, Y., Ma, H., & Liu, Q. (2017). Examining the relationship between urbanization and the eco-environment using a coupling analysis: Case study of Shanghai, China. *Ecological Indicators*, 77, 185-193. https://doi.org/10.1016/j.ecolind.2017.01.017
- Howes, G. (2006). The art of the sacred: an introduction to the aesthetics of art and belief. Bloomsbury Publishing. https://ixtheo.de/Record/511046308
- Hu, G. (2020). Eco-Translatology: Research Foci and Theoretical Tenets. In *Eco-Translatology: Towards an Eco-paradigm of Translation Studies* (pp. 47-85). Singapore: Springer Singapore. https://doi.org/10.1007/978-981-15-2260-4_3
- Jin, J. (2021). The Reform of Piano Teaching in Music Education Major under the Guidance of the New Curriculum Concept. *International Journal of Frontiers in Sociology*, 3(15), 44-49. http://dx.doi.org/10.25236/IJFS.2021.031505
- Kawase, S. (2013). Factors influencing audience seat selection in a concert hall: A comparison between music majors and nonmusic majors. *Journal of Environmental Psychology, 36*, 305-315. https://doi.org/10.1016/j.jenvp.2013.08.002
- Kreitler, H., & Kreitler, S. (1972). Psychology of the arts. Durham, NC: Duke University Press.
- Mann, P. H., & Burgoyne, J. L. (1969). Books and reading. London: Andre Deutsch.
- Marini, G. (2021). An introduction to everyday aesthetics in education. *Studies in Philosophy and Education*, 40(1), 39-50. https://doi.org/10.1007/s11217-020-09740-x
- Miller, G. (2000). *The mating mind: How sexual choice shaped the evolution of human nature*. London: William Heinemann. https://psycnet.apa.org/record/2001-16105-000
- Mody, R., & Bhoosreddy, A. (1995). Multiple odontogenic keratocysts: a case report. Annals of Dentistry, 54(1-2), 41-43. https://europepmc.org/article/med/8572545
- Osborne, H. (1972). *Aesthetics and art theory: An historical introduction*. EP Dutton. https://muse.jhu.edu/article/597033
- Parsons, M. J., & Blocker, H. G. (1993). *Aesthetics and education*. University of Illinois Press. https://www.press.uillinois.edu/books/?id=p062933
- Salihu, S., & Iyya, Z. (2022). Assessment of Physicochemical parameters and Organochlorine pesticide residues in selected vegetable farmlands soil in Zamfara State, Nigeria. *Science Progress and Research (SPR)*, 2(2), 559-566. https://doi.org/10.52152/spr/2022.171

- Schmidt, P. (2014). NGOs as a framework for an education in and through music: Is the third sector viable? *International Journal of Music Education*, 32(1), 31-52. https://doi.org/10.1177/0255761413488707
- Seçim, G. (2017). A study on substance abuse prevention. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(6), 2485-2504.
- Shahabaz, A., & Afzal, M. (2021). Implementation of High Dose Rate Brachytherapy in Cancer Treatment. *SPR*, 1(3), 77-106. https://doi.org/10.52152/spr/2021.121
- Shi, X., Wang, X., Yang, J., & Sun, Z. (2016). Electric vehicle transformation in Beijing and the comparative eco-environmental impacts: A case study of electric and gasoline powered taxis. *Journal of Cleaner Production*, 137, 449-460. https://doi.org/10.1016/j.jclepro.2016.07.096
- Shu, Y. (2021). Influence of piano playing on logical thinking formation of future musicians. *Thinking Skills and Creativity*, 42, 100961. https://doi.org/10.1016/j.tsc.2021.100961
- Small, C. (1998). *Musicking: The meanings of performing and listening*. Wesleyan University Press. https://muse.jhu.edu/book/1837
- Smith, R. A., & Simpson, A. (1991). *Aesthetics and Art Education*. University of Illinois Press, 54 East Gregory Drive, Champaign, IL 61820. https://www.press.uillinois.edu/books/?id=p061417
- Sternberg, R. J. (1999). *Handbook of creativity*. Cambridge University Press. https://psycnet.apa.org/record/1998-08125-000
- Tajuddin, T. I., Naili, R., & Ismail, M. J. (2021). Tracing Art Music Compositions and Composers in Malaysia. *International Journal of Innovation, Creativity and Change*, 15(10), 542-560. https://www.ijicc.net/images/Vol_15/Iss_10/151040_Tajuddin_2021_E1_R.pdf
- Thaut, M. (2013). *Rhythm, music, and the brain: Scientific foundations and clinical applications.*Routledge. https://doi.org/10.4324/9780203958827
- Todd, S., Hoveid, M. H., & Langmann, E. (2021). Educating the Senses: Explorations in Aesthetics, Embodiment and Sensory Pedagogy. *Studies in Philosophy and Education*, 40(3), 243-248. https://doi.org/10.1007/s11217-021-09776-7
- Tursunbaevna, B. K. (2021). The Importance of Aesthetic Education in the Formation of Performance and Creative Skills of Students in Music Lessons in Secondary Schools. *JournalNX*, 7(05), 69-72. https://dx.doi.org/10.17605/OSF.IO/9CQSF
- Wang, Y. (2022). Design and innovation of piano impromptu accompaniment for college music performance majors under the information environment. *Journal of Environmental and Public Health*, 2022. https://doi.org/10.1155/2022/5245256
- Yablonsky, D. (2021). Transforming Pittsburgh's Economic Ecosystem and Clusters. *Journal of Commercial Biotechnology*, 26(1), 48-51. https://doi.org/10.5912/jcb969
- Zhao, Y., Wang, S., & Zhou, C. (2016). Understanding the relation between urbanization and the eco-environment in China's Yangtze River Delta using an improved EKC model and coupling analysis. *Science of the Total Environment*, *571*, 862-875. https://doi.org/10.1016/j.scitotenv.2016.07.067
- Zuckerman, M. (1994). *Behavioral expressions and biosocial bases of sensation seeking*. Cambridge University Press. https://psycnet.apa.org/record/1994-97961-000