

Therapeutic Music Creation Based on Soundscape of North Sumatra as a Media for Relaxation amid the Covid-19 Pandemic

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Abstract

One of the effects of the Covid-19 pandemic on humans is a disturbance in the psychological aspect. This study offers music therapy based on the soundscape of North Sumatra as an alternative to balance emotional turmoil amid the new life adaptation of the Covid-19 pandemic. Soundscape is defined as sound or sounds that come from nature (natural sound). The method used in this research is a qualitative approach. The data was collected through audio recording of soundscapes in various regions in North Sumatra, from mountains to coastal areas, which were later combined with sounds from traditional musical instruments to form a complete therapeutic music composition. The creation process includes pre-production and studio work which includes exploration, creation, editing, mixing, and mastering.

Keywords

music therapy, soundscape, North Sumatera, covid-19



I. Introduction

Coronavirus or in the Indonesian term referred to as Corona Virus is a collection of viruses from the subfamilli Orthocoronavirinae in the Coronaviridae family and the order of Nidovirales. This group of viruses basically can cause disease in birds, including human mammals (id.wikipedia.org). In humans, this virus can cause respiratory infections from mild in nature such as colds to those of a severe and deadly nature such as SARS and MERS. Coronavirus is currently developing and experiencing changes in variation which is then referred to as Covid-19. (Saleh, 2020)

The current COVID-19 lockdown situation has had an impact on people's connectedness by limiting their allowed behaviours, resulting in a negative impact on people's mental health and well-being on the whole. The enhancement of human interaction and networking to sustain people's mental health has been on the emergent agenda during the current COVID-19 situation. (Oe, 2020).

The Covid-19 pandemic has had an impact on various aspects. One that becomes biased and needs serious attention is the psychological aspect. The sharp decline in economic conditions, decreased income, layoffs (layoffs), as well as physical distance restrictions that prevent direct communication between individuals, trigger high levels of stress. One type of stress symptom is what researchers call Cabin Fever.

Cabin Fever is an emotion or sad feeling that arises from being isolated in a particular home or place for too long. In addition, feeling cut off from the outside world can also lead to cabin fever. Cabin Fever is identified in a number of symptoms such as anxiety, decreased motivation, irregular sleep patterns, lethargy, emotional instability, and feeling sad and depressed for a long time. These symptoms cause new problems, in addition to exposure to the covid-19 virus itself (KOMPAS.com).

Djohan (2003) describes the use of music as a medium for healing therapy in the Western world at the end of the 18th century. At that time, music was used as a healing medium for post-World War I trauma sufferers in veterans hospitals. Here music is aimed at reducing the perception of pain. Evidently, music for veterans is able to have an impact both psychologically, physiologically and cognitively. The concept of music therapy in World War I inspired researchers to conduct this research.

The term soundscape comes from two words, namely sound which means sound or sound and scape which means landscape or nature. When combined, the soundscape is defined as a sound or sounds that come from nature (Schafer, 2010). Natural sounds or soundscapes are usually associated with calming things. For example, the sound of birds chirping, the sound of gurgling river water, or the sound of crickets, creating a cool and beautiful village image that creates a calm and relaxed impression.

The main target of this research is to produce musical therapeutic innovations as a solution to dealing with the symptoms of cabin fever by presenting environmental music (soundscape) in North Sumatra. The sounds in question are obtained from natural sounds such as the sound of water on the edge of Lake Toba, birds in the protected forest of Bukit Lawang, or the sound of waves on the coast of Serdang, combined with traditional North Sumatra music such as kulcapi, sulim, or humming. These two sound sources are combined and processed so that they become therapeutic music that stimulates the emotional effects of the listeners.

This thinking is reinforced by the community's need for emotional balancing intake in the face of the ongoing Covid-19 phenomenon. Where the situation of uncertainty and adaptation to the possibility of life on the threshold of a new normal has the potential to cause psychological pressure both in the middle of a pandemic and post-pandemic. So this research becomes very relevant to be carried out immediately.

II. Review of Literatures

2.1 Music Therapy

Music therapy is a therapy that uses music and musical activities to facilitate the therapeutic process in helping clients. As with therapy which is an effort designed to help people in a physical or mental context, music therapy encourages clients to interact, improvise, listen to, or actively play music (Djohan, 2006). Treatment in music therapy is carried out in various methods, including by singing and playing instruments, writing songs, choosing songs, musical life reviews, music therapy entertainment, guided imagery, improvisation, and listening to music (Yinger, 2017).

Meanwhile, someone's experience of hearing music is divided into four ways, namely: 1) passive listening, which is a situation where music does not demand full attention from the listener. For example, the music that is heard when people watch movies where the music here is not too much attention, but only as an image / scene enhancer; 2) listening to enjoy, here requires greater attention by the listener. Like when watching an orchestral musical performance, people enjoy the music of the flute, piano, etc., but only at the enjoying stage; 3) perceptive listening, where the listener does not only enjoy music but also tries to understand what is heard, usually done by people who have good knowledge of music; 4) emotional listening, this does not require high concentration, but what the listener is expected to react emotionally to the music they hear (Miller, 2017).

Based on the theory above, in this study the effect that is put forward is the emotional effect and put aside while listening is passive, enjoying, and perceptive. The target research

object is people who listen in the fourth way, namely emotional listening. However, in its development, researchers began to analyze the influence of culture on the effectiveness of music therapy activities, where different cultural backgrounds of the listeners will have different effects on the music they hear. One of them is a research conducted by Argstatter (2016) which tries to examine whether emotions in music are universally felt by listeners with different cultural backgrounds. Research on the emotional perception of music is important because music in its interpretation cannot be separated from emotions.

To provide music that is suitable for use in therapy sessions, a further understanding of the background in music making is needed, especially what emotional messages will be conveyed in music, because it is feared that the message captured by listeners is different from the actual message the writer puts in his music because there is a role for culture. (Argstatter, 2016). Geraldina (2017) revealed about the limitations of music therapy that previously had little attention, namely being tied to the cultural background of the clients involved in it.

Its attachment to this culture makes music therapy need to pay attention to the details of the songs used in therapy by paying attention to the background of the client who will get therapy. This limitation is expected to open up the possibility for the development of advanced music therapy based on traditional arts. This confirms that the creation of therapeutic music by paying attention to certain cultural factors needs to be done in order to achieve a deeper and more targeted emotional approach.

2.2 Soundscape

The term soundscape was first introduced by Canadian composer R. Murray Schafer who is also a writer, music educator and environmentalist who is involved in ecological acoustics. Soundscape is an ecological acoustic discipline that prioritizes the balance of sounds in the environment in an effort to provide an environmental sound design or sonic environment, maintain, maintain and develop it in a systemic network of life (Fretes, 2016).

Soundscape comes from the word landscape, a word introduced by Petrarch, a 14th century Italian poet who walked to the top of a mountain to see the scenery, something he had never seen before that he described it with the new word 'landscape' (Schafer, 2012). Schafer introduced the word soundscape to describe what humans hear in everyday life. In this way, the soundscape or sonic environment can be understood with views in the form of sounds or sounds in everyday human life.

Soundscape music is composed with conventional composition rules, but uses sounds that come from the human environment so that this music returns the sounds that come from the human environment to the humans who listen to it. Schafer classified natural sounds in the following table:

Table 1. Classification of Natural Sounds by Schafer

Natural Sounds	Sounds of Water	Oceans, Seas and Lakes
		Rain
		Rivers and Brooks
		Steam
		Ice and Snow ...
	Sounds of Air	Wind ...
Human Sounds	Sounds of Earth	Trees...
	Sounds of Birds	Sparrow ...
	Sounds of Insects	Flies...
	Sounds of Seasons ...	Spring...
	Sounds of Voice, Body ...	Speaking...
Sounds & Society	Town, Urban, Factories, Domestic Sounds, Parks...	...
Mechanical Sounds	Machines, Aircraft, Constructions
Silence and Quiet	-	*
Sound as Indicators	Bells, Horns, Telephones

Two other researchers, Nakagawa and Sutton, conducted research in Yogyakarta and linked soundscapes to cultural phenomena that exist there. Nakagawa and Sutton reveal the everyday acoustic sights that the people of Yogyakarta hear. Nakagawa (2000) examined acoustic sounds in everyday life of people in Yogyakarta, including the sound of bamboo kentongan during night patrols, the typical sounds of traders in every corner of the city such as bowls of meatball sellers, kentongan of dumplings sellers, small bells of ice cream sellers and so forth. Nakagawa argued that the soundscape in Yogyakarta was related to the anti-conflict culture and social status inherent in Javanese society as well as the sense of security in the community through the sound of environmental crowds both day and night which was also reflected in gamelan music - he called it 'miniature Javanese soundscape'.

Sutton (1996) examined popular songs played at a loud volume in a record store, loud voices through loudspeakers at weddings, and the sound of azan in mosques using loudspeakers. According to him, all cities in Java were enveloped by the voices of these loudspeakers, which sound quality was very bad and almost damaged (distorted), thus forming a Javanese soundscape character. Sutton points out the main reasons related to the cultural context of Javanese society: Javanese enjoyment of crowds and the uncontrolled use of modern technology related to the prestige or status symbol of Javanese society. From these two studies, it can be concluded that the soundscape is closely related to a particular region or culture.

III. Research Method

The method used in this research is a qualitative approach. Data observation was carried out as a first step in finding the authenticity of the soundscape sound source which was the raw material for creating therapeutic music. The data were collected through audio recording of environmental sounds in various regions in North Sumatra. In addition, interviews with traditional artists in the area are also needed to enrich the sounds of traditional musical instruments.

The equipment needed is a video camera, photo and audio recording tools that are useful for documenting data. The selection of informants is based on the grouping of key

informants including North Sumatra traditional music artists. The number of informants is not limited as long as the required data is still needed to answer the objectives of this study. The stages and steps to be carried out in this research are:

- 1) The data collection stage (pre-production). Primary data were obtained through interviews and participant observation by recording direct soundscapes in various places for the purpose of collecting data followed by focus group discussions.
- 2) The data analysis stage is carried out by categorizing and analyzing the data then having discussions with experts. Furthermore, to formulate the concept and packaging model of music therapy based on environmental music (soundscape) North Sumatra.
- 3) Production stage of music therapy based on environmental music (soundscape) North Sumatra by doing studio work based on the concept and model of the results of the study that had been carried out.
- 4) The stage of concluding the results and making a report on research findings. At this stage the research results will be concluded, conduct a seminar on the results and make a research report.

IV. Result and Discussion

There are several stages in the process of creating therapeutic music based on the soundscape of North Sumatra. These stages are as follows:

4.1 Pra Production

In the pre-production process, researchers collect initial data for the purposes of the production process. Researchers traced several areas in North Sumatra that represented forest, mountainous, rural and coastal areas and then recorded the soundscapes that were there to be processed as material for the creation of therapeutic music in the studio. Areas explored include forests in Tapanuli, Lake Toba, and beaches on the coast of Serdang Bedagai.



Figure 1. Recording a Forest Soundscape



Figure 2. Recording a Lake Soundscape



Figure 3. Recording a Beach Soundscape

Soundscape sounds in some areas are recorded using a voice recorder to produce wav-shaped recordings which will then be processed and combined with other musical instruments in the studio. Several types of soundscapes obtained during the pre-production process are shown in the table below:

Table 2. Classification of Soundscape Results from Various Places

Classification	Soundscape type
Water	<i>Waterfall</i>
	<i>Surf Beach</i>
	<i>River flow</i>
	<i>Lake water</i>
	<i>Gurgling springs</i>
Animal	<i>Crickets</i>
	<i>The cicadas</i>
	<i>Birdsong</i>
Others	<i>Wind blowing</i>
	<i>forest (wind and trees)</i>

4.2 Production

The production process is the process of processing the found soundscape materials, combining them with other types of musical instruments, to become a complete therapeutic music. The production process is divided into several stages, namely preparation, composing, editing, and mixing-mastering.

a. Preparation

This stage begins with setting the recording device as a composing medium. The tools used in this creation process are as follows:

1. A computer that has music recording software installed
2. Soundcard / audio interface
3. Condenser microphone
4. Stand microphone
5. Pop filter
6. Monitor speakers
7. Headphones

The recording tools settings are as shown in the image below:



Figure 4. Setting Recording Tool

The software used in this production process is Cubase 10.5 from Steinberg. After all the tools are installed neatly, the step taken is to open the Cubase 10.5 software by double-clicking the Cubase 10.5 icon () on the desktop, then the process box will appear as below.



Figure 5. Cubase 10.5 Initial Display Process Box

Then the "Project Assistant" dialog box will appear. Click "More" and select "Empty" and click "Create" to start a new project page.



Figure 6. The Starting New Project Page Dialog Box

To ensure that the project is stored in the folder, the researchers carried out the storage stage at the beginning of the process, namely by clicking CTRL + S and giving the folder the name "Soundscape Therapy Music" for easy search.

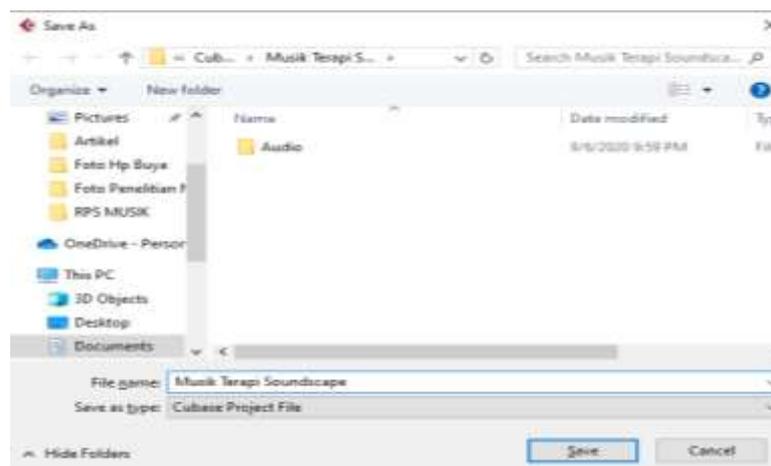


Figure 7. The Save Project Dialog Box

Furthermore, the researcher did the input process of wav-shaped audio soundscape into Cubase 10.5 software as a first step in looking for creation ideas. Go to the dialog box at the top then select "Project-Import-Audio". Then go to the folder where the soundscape data is stored, then choose one of them.

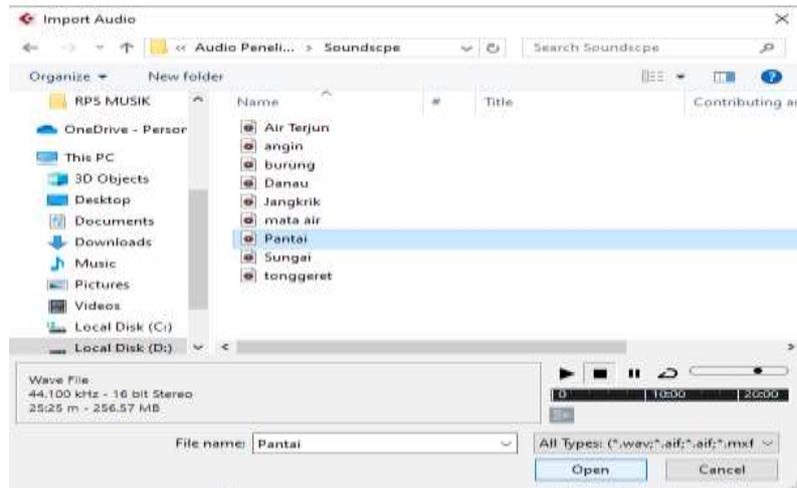


Figure 8. Audio Input Dialog Box

b. Creation

The creation process begins with an exploration stage. Where at this stage the researcher tried to combine the soundscape with several possible variations of the melody produced by several kinds of traditional musical instruments. This mixing process is based on the suitability of the instrument, the choice of tone and type of melody, with the existing culture in the area where the soundscape originates. One of them, to get a Malay atmosphere in the coastal soundscape on the coast of Serdang Bedagai, the researcher tried to incorporate the rhythmic elements of the Malay drum (pakpong) and the humming-style lute melody. This is done so that when listeners listen to this music, there will be serdang beach nuances in their mind.



Figure 9. Gambus Melayu Exploration Process

This exploration model is also applied to the types of soundscapes that represent other regions. For example, the use of the Toba Batak tagging for the sound of forest crickets and Lake Toba water, and other areas. After finding the right type of melody and rhythm, the next step is to arrange the music structure. The structure is arranged by doing repetitions (repetitions), developing musical motifs, adding bridges (musical bridges), and determining hard and soft to produce good musical dynamics.



Figure 10. Structure of Coastal Soundscape Therapy Music

c. Editing

The editing stage includes the process of cutting (cutting), removing unnecessary parts, compression, adding effects such as reverb, chorus, etc., reducing noise, etc. to produce good audio quality. The use of the effect on soundscape-based music therapy is shown in the following image:



Figure 11. Equalization and effects on the editing process

d. Mixing and Mastering

The production process ends with the Mixing and Mastering processes. Mixing is the stage used to mix all the results that have been recorded into one. Frequency adjustment, equalizer settings, adding a compressor, on each track so that the recording results are more harmonious. The Mastering stage is the stage where you adjust the equalizer, compressor and to increase the volume of the sound on the recording that has passed the mixing stage first.



Figure 12. Soundscape Music Mixing-Mastering Process

V. Conclusion

Music creation therapy based on North Sumatra's soundscape is an alternative approach in the music creation process. Where many variations of sound are found that stimulate the birth of new ideas in creating music that is more dynamic and has novelty value. Therapeutic music based on the soundscape of North Sumatra is an alternative solution as a medium of relaxation in the midst of the Covid-19 pandemic that is sweeping the world today.

References

- Argstatter, H. (2016). Perception of basic emotions in music: culture-specific or multicultural? *Journal of Psychology of Music*, 44(4), 674–690.
- Djohan. (2003). *Psikologi musik*. Yogyakarta: Buku Baik.
- Djohan. (2006). *Terapi musik: teori dan aplikasi*. Yogyakarta: Galangpress.
- Frete, D.D. (2016). Soundscape: musik dan lingkungan hidup. *Jurnal promusika*. 4(2). 117-125. ISSN 2338-039007.
- Geraldina, A.M. (2017). Terapi musik: bebas budaya atau terikat budaya?. *Jurnal Buletin Psikologi*. 25(1). 45-53. DOI : 10.22146.
- Kholid, D. M. Bumi Siliwangi. Dewa Ruci: *Jurnal Pengkajian dan Penciptaan Seni Surakarta: STSI*. Hal.364-368.
- Miller, H.M. (2017). *Apresiasi musik*. Yogyakarta: Thafa Media.
- Nakagawa, S. (2000). *Musik dan kosmos: sebuah pengantar etnomusikologi*. Jakarta: Yayasan Obor Indonesia.

- Oe, H. and Weeks, M. (2020). How to Support Vulnerable Citizens during the COVID-19 Lockdown: A Community Initiative from Ubiquitous Network Perspectives. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*.P. 1369-1377
- Reynolds, R. (2002). *Form and method: composing music*. New York: NY.The Rothschild Essays.
- Routledge, W. G. (1926). *The art of thought*. London, UK: C.A. Watts & Co.
- Saleh, A. Mujahiddin. (2020). Challenges and Opportunities for Community Empowerment Practices in Indonesia during the Covid-19 Pandemic through Strengthening the Role of Higher Education. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*.P. 1105-1113
- Schafer, R. M. (2012b). *Soundscape studies: the early day and the future*. *Soundscape: The Journal of Acoustic Ecology*. 12(1), 113-132
- Sunarto, B. (2013). *Epistemologi penciptaan Seni*. Jogjakarta: Idea Press.
- Wiflihani, W. (2016). Fungsi Seni Musik dalam Kehidupan Manusia. *Anthropos: Jurnal Antropologi Sosial dan Budaya (Journal of Social and Cultural Anthropology)*, 2(1), 101-107. doi:<https://doi.org/10.24114/antro.v2i1.7503>
- Wiflihani, W., Silitonga, P.H. and Hirza, H. (2019). Digitalization of North Sumatera Malay Ritual Music Using Cubase 5 Software. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 2(4), pp.556-566.
- Wiflihani, W., Widiastuti, U. and Sembiring, A.S.(2017). Pengembangan Musikalitas Melalui Bunyi-Bunyi Alam pada Mahasiswa Program Studi Pendidikan Musik Universitas Negeri Medan. *Gondang: Jurnal Seni dan Budaya*, 2(1), pp.20-27.
- Yinger, O. S. (2017). *Music therapy: research and evidence-based practice*. NY: Elsevier.