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Managing Your
SOUNDSCAPES

Why your personal soundscape matters

Part of the *Managing Your Soundscapes* series provided by Akoio

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Why your personal soundscape matters

Sound affects nearly every part of your life. That's why some noises drive you to distraction or make you angry, while other noises lull you to sleep. Managing sound, and its counterpart we call silence, can help you think better, reduce stress and anxiety, and generally enhance quality of life. Conversely, excessive noise can cause mental distress, incite anxiety and contribute to physical conditions such as high blood pressure, diabetes, heart disease, and more.

What is a soundscape?

Taking control of what you hear and what you don't — your soundscape — changes everything. Our sense of hearing is always "on" and active — even when we are

asleep or aren't paying attention to the noises around us. Our auditory systems are constantly monitoring our personal soundscapes. Your personal soundscape is created by the sounds of your environment at home, at work, or at play.

To a large extent, the sounds you encounter in your daily life are a reflection of who you are, how you live, and what is important to you. Are you surrounded by the exciting hustle and bustle of the city? Do you enjoy camping in solitude, surrounded by the tranquility of nature? The sound of children talking and laughing in the next room may bring a smile to your face. Maybe the mix of conversation, jazz, and espresso machines, at your local coffee shop helps you focus



and tap into your creativity. Sounds can evoke different emotions, moods, and memories. Sound has a powerful impact on our lives, and yet we often do not take time to actively construct and manage our personal soundscapes.

Positive Sounds

Meaningful sounds can have positive effects on your thoughts, moods, and actions. [Researchers](#) have investigated the numerous benefits of surrounding yourself with “positive sounds.” Pleasant sounds can encourage relaxation and lead to measurable improvements in health and wellbeing. For example, [nature sounds](#), like water and birdsong, can calm anxiety, reduce annoyance, and even soothe physical pain.

How soundscapes affect brain activity

Brain activity measurement after exposure to pleasant, positive sounds has shown increased activation of the parasympathetic nervous system, which helps [calm the body](#) after experiencing perceived danger and stress. Additionally, researchers observed reduced activity in the area of the brain that is responsible for triggering the fight-or-flight response (i.e., the sympathetic nervous system) after listening to soothing natural sounds. Other physiological responses that are consistent with [reduced stress](#) have been measured after listening to positive sounds, including changes in heart rate, blood pressure, and cortisol levels. In addition to reduced pain and stress levels, researchers have found that listening to natural sounds may have many positive mental and physical benefits, such as improvements in mood and cognitive function.

A positive soundscape often includes sounds that align with an area’s character. Sounds that are present in a given area, like

waves crashing at a beach or traffic in the city, can function as a backdrop for other pleasurable sounds in your soundscape.

Sound has a powerful impact on our lives, and yet we often do not take time to actively construct and manage our personal soundscapes.

Although pleasant sounds in your environment can be beneficial, it’s important not to overlook the value of “quietness” when intentionally creating a positive soundscape. Researchers find most people desire some degree of quietness, regardless of factors such as gender, age, or whether they live in rural or urban areas. To satisfy the need for quiet, some people create quiet-focus areas in their home or select a naturally quiet space in a park garden, or woods.

Negative Sounds (“Noise”)

Even though sound can have positive effects, we must be aware of the potential negative impact of sound. One major concern regarding exposure to hazardous sounds is the possibility of noise-induced hearing loss. Exposure to loud sounds over a long period of time, or even a brief exposure to an intense sound like an explosion, can cause permanent hearing loss. The louder the sound, the shorter the exposure needs to be to cause hearing loss. Noise-induced hearing loss is the only type



that can be prevented. Hearing protection like ear plugs or muffs in noisy situations can protect your hearing. Extended exposure to 85 decibels (dBA) or louder can result in permanent hearing loss ([NIDCD, 2019](#)). Repeated exposure to loud sounds can also cause ringing or buzzing in your ears, a condition known as tinnitus. Some common sources of hazardous noise exposure include loud music, lawnmowers, and power tools.

Disturbing, disruptive, and damaging

Besides possible hearing loss, there are other potential adverse outcomes from noise exposure. Researchers have found that [noise can negatively impact health](#) and cause mental distraction. Noise has been associated with increased levels of anxiety and can cause disturbances in your ability to sleep or to focus. One study showed that noise levels and noise annoyance are linked to [risk for depression](#). A study by the World Health Organization ([2011](#)) found that noise can cause heightened stress in the body. The problem isn't limited to loud sounds; physiological changes in the body can appear when sounds (at any volume level) disturb your ability to relax, concentrate, or sleep. Additionally, studies have shown a relationship between [cardiovascular issues](#) (e.g., high blood pressure, diabetes, and stroke) and noise exposure.

It's all relative — and individual

Older individuals and people with health concerns may be more sensitive to the effects of noise in their environment. Tolerance level for different types of sounds and volume level varies from person to person. If you've ever heard someone say "That sounds like fingernails on a chalkboard," it probably means they find that sound unpleasant or irritating. Some people require higher amounts of quiet time to be at their best and function optimally. Similarly, some people experience more

annoyance due to the presence of unwanted [background noise](#) in their soundscapes, while others are more productive when there is background noise.

What's in your personal soundscape?

Sounds in your environment have the power to significantly impact your wellbeing. For that reason, it is important to be intentional about managing your personal soundscape. Taking steps to optimize your soundscape could improve your mood, productivity, and general health.

Personal soundscape journal

To optimize your soundscape, first take a “[personal sound inventory](#)” to determine what positive and negative sounds are present in your environment. Some factors, such as hazardous sound levels, are definitively negative and need to be addressed. Other factors may be more subjective and specific to you. For example, a person who enjoys the busyness of the city may find comfort in the presence of low-level traffic noise. Others may find the symphony of insects that can be heard in rural areas to be more soothing. Crafting your personal soundscape is an opportunity to infuse your environment with elements that support your mental health and physical wellness.

Here are some steps to conduct your “personal sound inventory”:

1. Keep a journal of the sounds you observe in your environment over the course of a week. To help you keep track, download the free Akoio Soundscape Journal from akoio.com.
2. Make note of the sounds you hear in your environment multiple times throughout the day. Try for at least three specific time periods (morning, afternoon and night), if not more. Be as specific as possible.

- Note how you feel (physically and mentally) at different points during the day and how those feelings may be related to the sounds you hear.
- As we grow accustomed to sounds that occur on a regular basis (e.g., the hum of a refrigerator, the air conditioner, etc.), they often fade to the background and become less noticeable to us. For this exercise, we want to bring your attention to those sounds. Here are some examples of sounds that you may notice in your environment, but this is certainly not an exhaustive list.
 - Nature sounds (water, insects, birds chirping)
 - Machine noise
 - Traffic
 - Plumbing
 - Heating and cooling systems
 - Appliances
 - Conversations
 - Office music
 - Device notifications (sounds or haptic feedback from smartphones, computers, or health devices)
- Take note of situations that require you to yell in order to be heard over the noise because that may indicate potentially

It's important to be intentional about managing your personal soundscape, optimizing your mood, productivity and general health.



dangerous noise levels that could damage your hearing. There are [sound level meter apps](#) that you can download to your phone or tablet to measure environmental noise.

3. Review the information you collected and highlight sounds that you find to be unpleasant, distracting, or stressful. Also highlight sounds that bring you joy or tranquility. This information will be essential as you continue to construct your personal soundscape.

Optimizing your own soundscape

After you have conducted an inventory of the sounds in your environment, you can use that information to manage your soundscape. The goal is to increase the amount of pleasant and soothing sounds in your environment while eliminating or reducing unpleasant, detrimental and hazardous sounds.

Here are some tips for managing noise and incorporating positive sounds to create your ideal soundscape:

Acoustic treatments may be helpful if outdoor noise (e.g., traffic, construction) is bothering you while you are inside. There are many different options, including acoustic curtains, noise-reducing wall tiles, and acoustic paneling.

Preferred music can be an enjoyable addition to your soundscape. You can either listen through a speaker or headphones. However, if you listen with headphones, be sure to keep the volume at a safe level. You should generally be able to hear people talking around you while listening to music with headphones (unless they are specially designed noise-canceling headphones). People around you should not be able to clearly hear your music while you are using headphones. That is a definite indication that the volume is too loud. Do not turn the volume to 100 percent. Ideally, set the volume level at or below two-thirds of the maximum available volume. Some listening devices have a beneficial function that caps the maximum volume so that you do not accidentally listen at dangerous volumes. Consider taking advantage of that function.


Nature sounds have been shown to induce relaxation and other positive responses. If your environment does not allow access to authentic natural sounds, consider listening to recordings and sound machines that produce sounds such as babbling brooks, bird songs, insects, waves crashing, etc.

Sound baths and **sound therapy** are [meditative experiences](#) that have been shown to benefit both mental and physical health. They often involve listening to music from singing bowls, gongs, and other types of soothing, peaceful musical instruments.

Noise machines can be useful to cover low-level environmental noise that may be distracting, like the sound of a coworker shuffling papers or distant conversation. These devices play sounds that are often called “white noise” and are designed to cover up sounds that may cause annoyance.

Earplugs and **earmuffs** can be useful forms of hearing protection in situations with hazardous noise levels. They also serve as a way to block distracting environmental noises like side conversations.

Hearing tests are strongly recommended if you experience difficulty hearing sounds that were once easily audible or if you have difficulty understanding people when they talk. Audiologists can conduct a comprehensive evaluation of your hearing ability and make recommendations to ensure that you are able to communicate as well as possible. Some audiologists may recommend assistive technology options to make it easier to hear in difficult listening situations.

Managing your soundscape can help improve health, happiness and overall quality of life. These strategies can help you create a personal soundscape that allows you to be your very best. Since your ears are always listening, you owe it to yourself to ensure that the sounds in your environment help you thrive — and help you conquer life. 

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Keep a journal over the course of a week. Record the sounds you hear in your environment multiple times throughout the day, and note how you feel, physically and mentally.

- outside traffic |||| 
- refrigerator hum || 
- wind/breeze |||| 
- train || 
- phone alerts #||| 

DAY 1 DATE

DAY 2 DATE

DAY 3 DATE

DAY 4 DATE

DAY 5 DATE

DAY 6 DATE

DAY 7 DATE

NOTES
