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**THE EFFECT OF HEADPHONES ON THE HEARING APPARATUS
AND THEIR CLASSIFICATIONS**

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Earbuds and headphones have become increasingly popular in recent years. Advancements in technology have made them smaller, more comfortable, and portable. These devices undoubtedly have many benefits, but despite this hearing health can be damaged with them. Headphones can have both positive and negative effects on the hearing apparatus, depending on how they are used and at what volume levels.

Headphones can negatively affect the hearing apparatus in several ways, especially when used improperly or for extended periods at high volumes. Considering the main kinds of harm they can cause, it is worth mentioning such types as:

1. Noise-Induced Hearing Loss (NIHL): Exposure to loud sounds, such as high-volume music through headphones, can lead to the hair cells damage in the inner ear. Prolonged or repeated exposure to loud noises can result in permanent hearing loss.

2. Tinnitus: Listening to music or sounds at high volumes through headphones result in the tinnitus development. Tinnitus is characterized by perceiving ringing, buzzing, or other noises in the ears, which can be persistent and bothersome.

3. Ear Infections: Improper hygiene or sharing of headphones can lead to the accumulation of dirt, moisture, or bacteria in the ear canal, increasing the risk of ear infections. This can cause discomfort, pain, and potentially affect hearing.

Headphones are classified into two main categories: over-ear headphones and in-ear headphones. We should consider in-ear headphones the most harmful type due to the basis of harm to hearing. These headphones are located directly in the ear canal, delivering sound waves very close to the eardrum. This direct transmission of sound can increase the intensity of the sound perceived by the ear, potentially leading to greater damage compared to headphones that sit outside the ear canal.

Considering on-ear headphones, their main harm is related to interaction with the external environment. On-ear headphones can limit the wearer's ability to hear environmental sounds, such as approaching vehicles or alarms. This reduction in situational awareness can pose safety risks, especially when wearing headphones in public places or while engaging in activities like jogging or cycling.

According to the medical literature under the study, there are some methods to identify the hearing loss: tuning fork test, audiometer test, bone oscillator test.

People must take breaks when using headphones. They should also avoid exposure to noise above recommended levels. A person should consult an otolaryngologist if they have any warning signs of hearing loss, so they can receive a suitable diagnosis and treatment.