

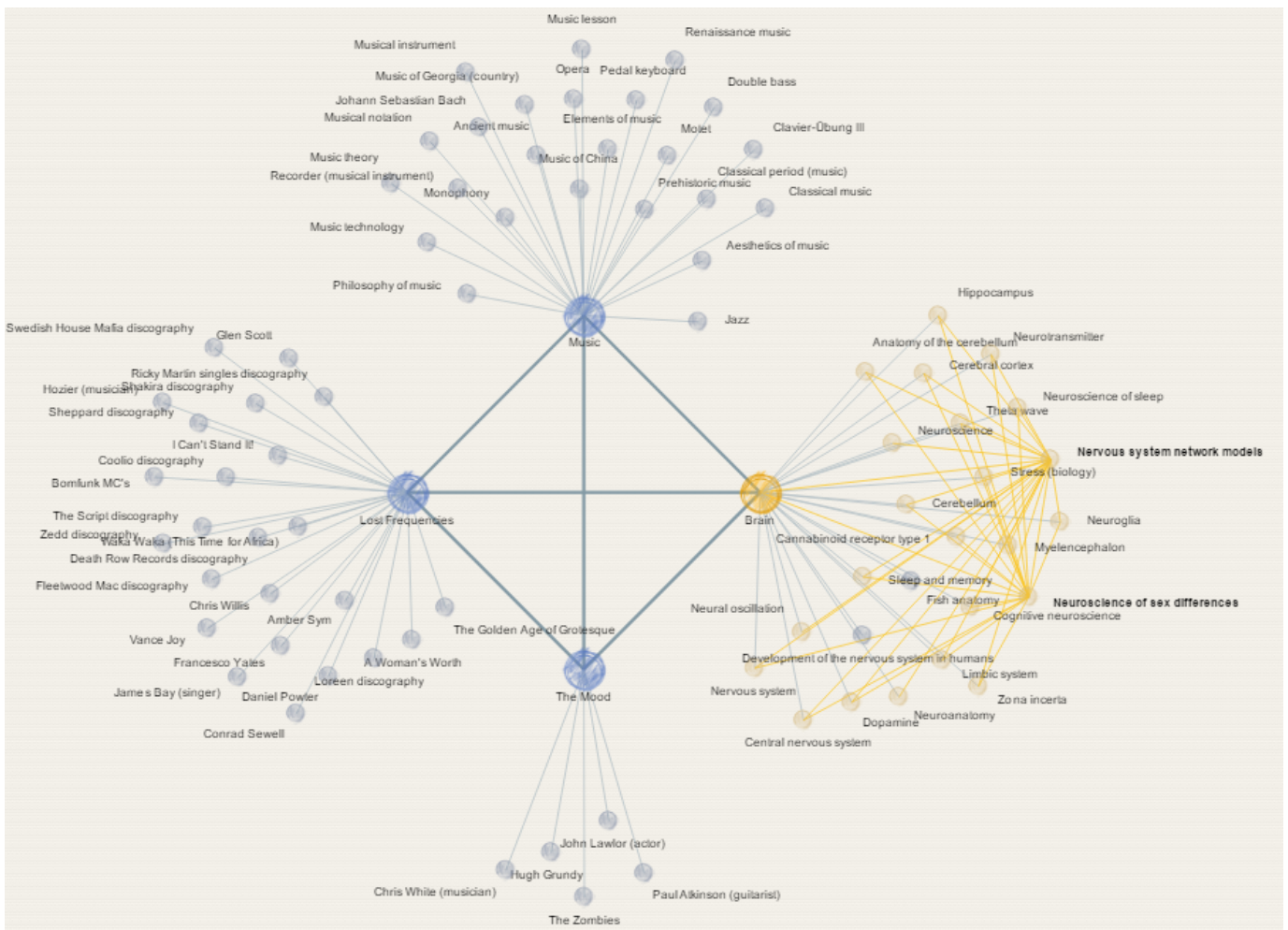
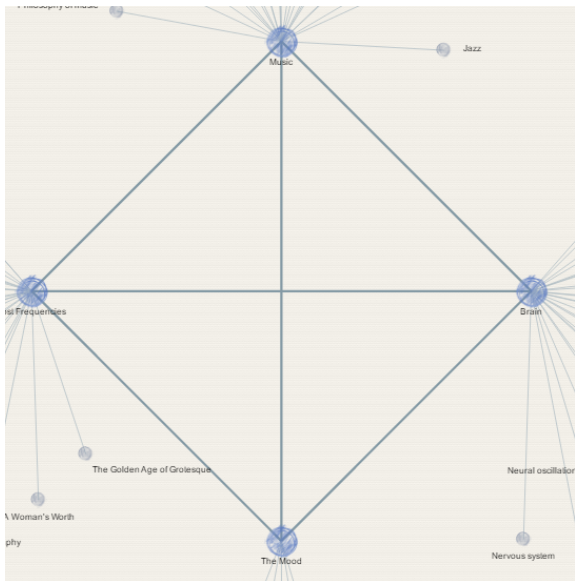
# Music in our lives. How music affects the work and functioning of the human brain?

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## **Introduction:**

More and more often, I began to notice that almost 95% of the world's population is listening to music. Have you ever wondered why people listen to music? Does it help them somehow? Does it have any influence? Definitely yes. At first, it was a set of unrelated sounds, then they began to have a connection between themselves, and now they are all absolutely interconnected with each other. They completely complement each other. They can create and change the mood, bring to the person every feeling. Music is an art form and cultural activity whose medium is sound organized in time. Music is performed with a vast range of instruments and vocal techniques ranging from singing to rapping; there are solely instrumental pieces, solely vocal pieces (such as songs without instrumental accompaniment) and pieces that combine singing and instruments. The word derives from Greek. See glossary of musical terminology. In many cultures, music is an important part of people's way of life, as it plays a key role in religious rituals, rite of passage ceremonies, social activities and cultural activities ranging from amateur karaoke singing to playing in an amateur funk band or singing in a community choir. And they affect each person in different ways. Thanks to a “Yewno”, which shows the connections between things, we can answer the question of how music affects the human brain.

# Yewno knowledge map:



## Related Concepts:

1. Music
2. Brain function
3. The influence of music on the mood
4. The influence of music on the feelings

## Definitions and overview:

**Music** is a form of art; an expression of emotions through harmonic frequencies. Music is also a form of entertainment that puts sounds together in the way.



**The brain** is the organ that serves as the center of the nervous system in all living organisms. The brain is located in the head, usually close to the sensory organs for feelings such as vision. The brain is the most complex organ in the body of the vertebral body.

## Connections:

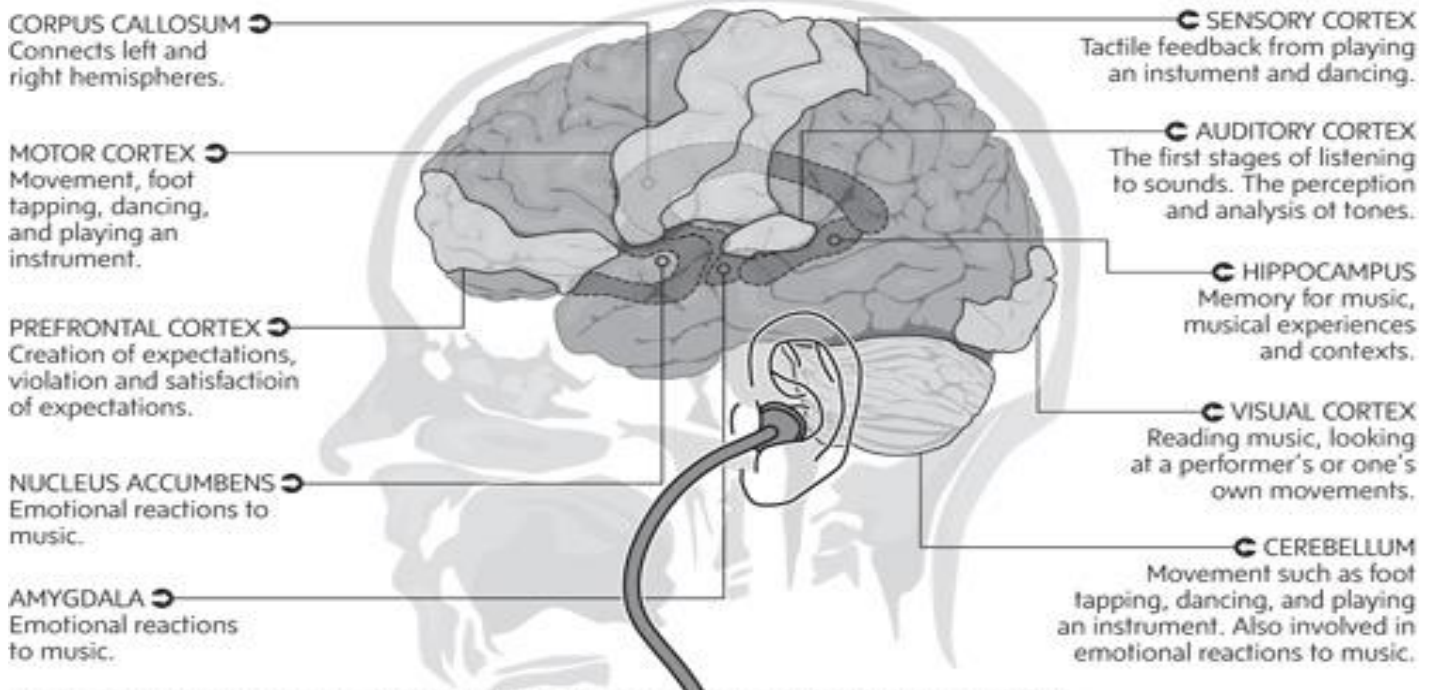
According to the American music theorist Gerald Levinson (Jerold Levinson), the language of music is no less expressive system of communication than ordinary human language as a subject of studying linguistics.

Since music carries a much more powerful emotional charge than real life events, modern psychologists are increasingly resorting to the use of music therapy. It is possible to explain its positive influence on a person's condition at least by the fact that the reactions of our nervous system to cheerful and sentimental music are completely different. For example, participants of a recent experiment, having listened to a short composition, interpreted a neutral facial expression as happy or sad, depending on which melody they heard.

Emotions that have arisen under the influence of music can be divided into two types: perceived and experienced. This means that a person is able to understand the mood of a musical work, even if he has never experienced such feelings in real life. So, with psychological disorders of a depressive nature, gay music only aggravates the state of a person, whereas sad motives, on the contrary, return bright colors to life.

### *Music on the mind*

When we listen to music, it's processed in many different areas of our brain. The extent of the brain's involvement was scarcely imagined until the early nineties, when functional brain imaging became possible. The major computational centres include:

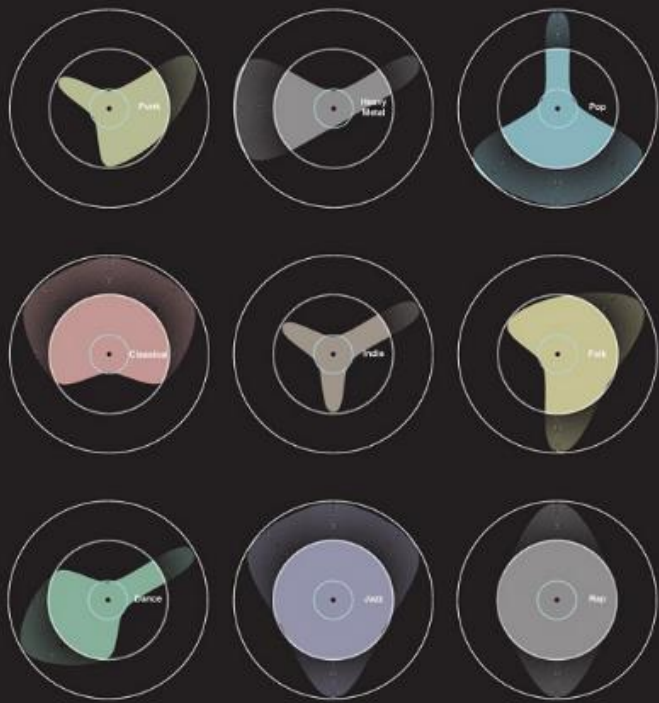


MIKE FAILLE/THE GLOBE AND MAIL ■ SOURCE: THIS IS YOUR BRAIN ON MUSIC: THE SCIENCE OF A HUMAN OBSESSION

Is it possible to determine the character of a person, knowing his musical preferences? The results of this study, conducted by the scientists of Heriot-Watt University (HWU), for the first time proved that there is a definite dependence between the musical genres preferred by the person and his character. In the first part of the experiment, 36,518 young people from all over the world were to rank 104 musical genres according to their personal preferences. The next stage of the study was somewhat more complicated: the participants had to break into pairs and try to determine the character traits of their partners based on their list of the 10 most audible tracks. For the analysis, five qualities were selected: openness to new experience, extraversion, courtesy, conscientiousness and emotional balance.

The scientists came to the following conclusions:

- Blues fans are creative, sociable, polite and arrogant;
- Among jazz lovers, creative, friendly people with overestimated self-esteem are most often found;
- Fans of classical music refer to the introverted type of personality, but despite this, they have a high sense of dignity and outstanding creative abilities;



## Genre and Personality

a study of personality in relation to our musical preferences

A researcher at Heriot-Watt University has found that strong personality attributes are linked to our choices in music. This is the first time that research has shown that personality leads to liking for a wide range of musical styles. Volunteers were asked to rate how much they liked 154 musical styles, before then completing a test that focused on five aspects of personality. 35516 people from around the world took part, by far the most extensive study of musical preference and personality ever undertaken.

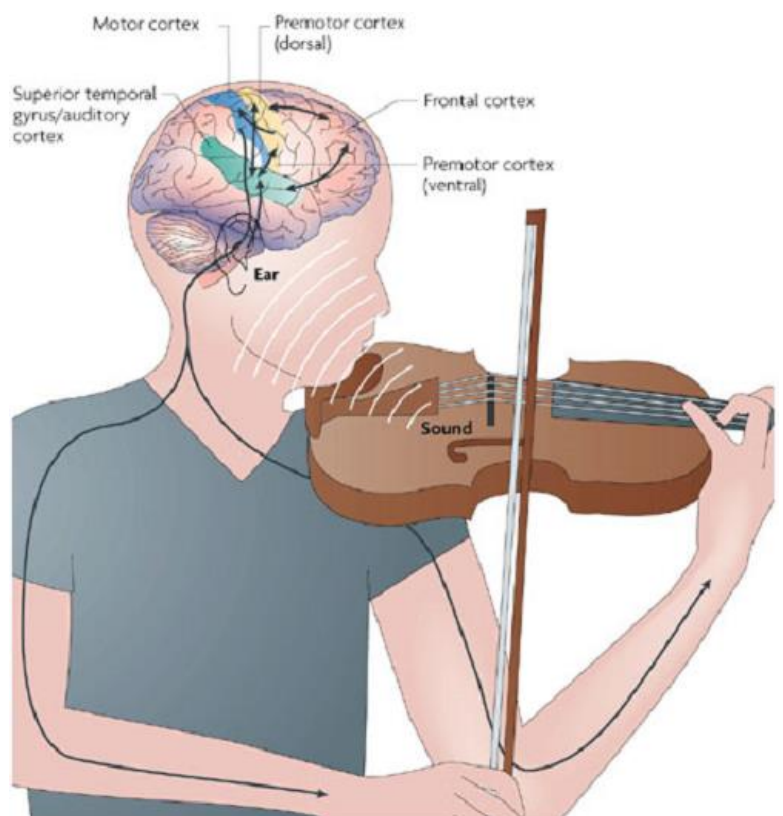


- Fans of rap are sociable and slightly selfish;
- To the number of fans of the opera belong polite, open, creative personalities;
- Fans of country and western are distinguished for their diligence and ability to easily find a common language with others;
- Reggae fans have a high self-esteem, are creative and sociable, but hard work is definitely not about them;
- Lovers of rhythmic dance music belong to the extrovert type of personality, have certain creative abilities, but do not differ in good manners;
- Indie fans have a low self-esteem, they are not hardworking and are often poorly educated;

- Fans of Bollywood (music from Indian films) are very responsive and friendly;
- Very often fans of heavy music - heavy metal, hardcore, etc. - understated self-esteem, but they have great creative potential.

As you know, learning to play the musical instruments at an early age favorably influences the child's further development. In 2008, Marie Forgeard, Ellen Winner and Andrea Norton, professors at the University of St. Andrews, found that children who are engaged in music for about three years outnumber their peers at once on four indicators: perception of the information on hearing, motor skills, vocabulary and logical thinking.

Thus, the scientists came to the conclusion that long-term intensive musical practice has a positive influence not only on



interhemispheric organization of auditory and motor functions, but also on the process of redistribution of mental functions between the left and right hemispheres of the brain (lateralization).

After reviewing 25 trials, the researchers concluded that music is a valid therapy to potentially reduce depression and anxiety, as well as to improve mood, self-esteem, and quality of life.

### **Conclusion:**

Music is one of the greatest inventions of mankind. And maybe it appeared long before the first man whistled a tune and beat the most ancient antediluvian rhythm along the hairy back of his primitive wife with a stick-digger.

Everyone, even if he is not a music lover, hears music every day. And the music influences him, his mood, actions and decisions. The influence of music on brain work is a serious factor that should not be underestimated.

Someone may say that this is not so, but do not rush! If the musicians are engaged in creating music, then the scientists figure out how what the musicians created is acting on people.

It helped me understand how music affects our brain and the connections between them. I learned what music is and how it affects us. Of course, all the "consequences" come from the brain. From this it can be done that music has an immediate effect on the work of the brain. Which, in turn, forces the body to function in one direction or another.

### **Credits:**

<https://about.yewno.com/product/yewno-discover/>

<https://www.healthline.com/health-news/mental-listening-to-music-lifts-or-reinforces-mood>

<https://lpgenerator.ru/blog/2013/11/29/8-faktov-o-vliyanii-muzyki-na-rabotu-golovn>