

## Have you got the X Factor? Psychologists find that you may be musical and not even know it

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Credit: Wikipedia.

The old adage says practice makes perfect, but a new study from the University of Cambridge has shown that personality also plays a key role in musical ability, even for those who do not play an instrument.

In a study published this week in the *Journal of Research in Personality*, a team of psychologists identified that the <u>personality</u> trait 'Openness' predicts musical ability and sophistication. People who score highly on Openness are imaginative, have a wide range of interests, and are open to new ways of thinking and changes in their environment.



Previous convention has held that the amount you practice is the key to success. This idea received widespread attention earlier this decade when writer Malcolm Gladwell argued that it takes 10,000 hours to become an expert in any domain, whether it is sports, music, art, or chess. But scientists are now discovering that there may be other factors involved as well.

Psychologists from the University of Cambridge and Goldsmiths University teamed with the BBC to recruit over 7,000 volunteers, in what is the largest study to date on personality and musical expertise. The team led by doctoral researcher David Greenberg, tested the participants on various musical abilities including melodic memory and rhythm perception. Performance on these tests was then linked to their scores on the Big Five <u>personality traits</u>: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (OCEAN).

They found that aside from <u>musical experience</u>, the next best predictor of musical ability was personality, and specifically, Openness. While people who are high on Openness are open to new ways of thinking, people who score low on Openness (or who are 'Closed') are more set in their ways, prefer routine and the familiar, and tend to have more conventional values. For example, someone high on Openness will likely take a vacation to a new destination each year, whereas someone low on Openness is likely to revisit the same location year after year.

In addition to Openness, the researchers also found that Extraversion was linked to higher self-reported singing abilities.

Importantly, the researchers found that the links between personality and performance on the musical tasks were present even for people who indicated that they did not play a musical instrument. This means that there are individuals who have a potential for musical talent, but are entirely unaware of it.



The article is another in a series studies on the how musical behaviours are linked to our personal characteristics. This past July, David Greenberg and his team published an article in *PLOS ONE* showing that people's musical preferences are linked to thinking styles. What these series of studies are telling us is that there are factors beyond our awareness and control that influence our musical experience.

Those who want to find out how they score on their musical ability, preferences, and personality can take these tests at <a href="http://www.themusicquiz.org">http://www.themusicquiz.org</a>.

David Greenberg said: "These results are particularly important for teachers and educators, who can use information about their student's personality to see who might be most successful in varied musical activities."

He adds: "One day science may be able to identify the personality, cognitive, and neurobiological factors that lead to musical genius."

Dr Jason Rentfrow, the senior author on the study says: "Psychologists had originally focused on the links between personality and <u>musical</u> <u>preferences</u>, but it's turning out that personality has far more of a pervasive role in our everyday musical experiences, including our musical ability."

Dr Daniel Müllensiefen, a team member from Goldsmiths, University of London who developed the music-performance tests, said: "Scientists are only now beginning to focus on the nature of musicality in non-musicians. The idea that there are people out there who may be primed to be musical, but who have never played an instrument, is a topic that the educational and political spheres should begin to take into consideration."



Professor Michael Lamb, a co-author, added: "There may be other factors in addition to personality that affect the development of <u>musical ability</u>. For example, what role does parenting play in fostering musicality in their children? Do certain parenting styles encourage musicality more than others? Such questions need to be investigated in future research."

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**More information:** Greenberg, D. M., Müllensiefen, D., Lamb, M. E., & Rentfrow, P. J. (2015). Personality Predicts Musical Sophistication. *Journal of Research in Personality*, 58, 154-158. Oct., 2015.

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