

# Health & Science | Mood music: Study finds teens who listen to music have higher risk of depression

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A recent study conducted by two professors at the University of Pittsburgh found that teens who listen to music more often — instead of using other types of media, such as books and television programs — are at a higher risk of having major depressive disorder.

The study, "Using Ecological Momentary Assessment to Determine Media Use by Individuals With and Without Major Depressive Disorder," was published in the April edition of Archives of Pediatrics & Adolescent Medicine.

The study was conducted with 106 participants between 8 and 18 years old, said Brian Primack, principal investigator in the study. Forty-six of the participants were diagnosed with MDD, or major depressive disorder, Primack said.

The study does not indicate listening to music leads to MDD or that MDD leads to listening to music more, Primack said. The study looks at a moment in time and does not say anything about why people who listen to music are 8.3 times more likely to have MDD, Primack said.

"It was like getting a snapshot into their world," Primack said.

The researchers called each participant 60 times and asked if they were using any of the five types of media: Internet, music and TV, video games, print media, and movies.

Each participant was asked a series of questions, Primack said. The first was always "What are you doing right now?"

Primack said the highest quartile of participants — those who use the media the most — were 80 percent more likely to be depressed than those who read books or watch TV.

Conversely, each quartile of print media use — including magazines, newspapers and books — was associated with a 50 percent decrease in the odds of having MDD.

"We don't know the directionality, but it is interesting and valuable to know that when people are listening to lots of music and in the highest quartile, they are more likely to be depressed," Primack said.

He said this is important because media use is increasing substantially among adolescents and adults.

Media exposure for youth between 8 and 18 years old is estimated at more than 10 hours per day. Cultural messages transmitted through media can affect mental health and contribute to the development of depression, according to the study.

Primack said this knowledge can be used by parents to spot depression early.

"Maybe it's a valuable thing for a parent to say, 'Gosh, he's becoming a little bit more obsessed,'" Primack said. "It doesn't mean they are definitely depressed, but it could be used as a marker and help parents and doctors be aware."

After conducting the research, Primack and his colleagues analyzed the data in several ways to make sure the conclusion was accurate and the outcome was very consistent.

Primack said he realizes the method is imperfect, but said he believes it is more accurate than past studies. He said he believes this is because the researcher is catching the participant in the moment they are listening to the music, instead of asking them to gauge how often he or she listens to music.

While studies have been done to show the associations between music and depression, Primack said he wanted to do a study with participants in their natural environment to see how much media they were actually using.

Mohamed Ahmed, a senior engineering and physics major, said he listens to two to three hours of music a day. Ahmed said he does not know if he believes music in general can cause MDD.

"I think it depends on what type of music you are listening to," Ahmed said. "It could also depend on that individual because some people are more susceptible to influence than others."

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