

Hello and welcome back to **As It Is**. I'm Jim Tedder in Washington, with a program designed to help you learn and improve your American English. Today we are going inside the human brain to see how and what people think. Some researchers say there is a connection between how you feel about yourself, and how you do your job.

Then we will hear about children and music. Young people who study music and play instruments are smarter than those who do not. Right? Some folks at Harvard University say, "Hold on."

We are very happy to have your brains thinking about what we are sending your way today on **As It Is**.

A new study says people who feel they lack social power find it harder to perform physical work. The researchers say their study is the first to show that people who believe they lack influence in society feel the weight of the world.

Eun Hee Lee is a candidate for a doctoral degree in the psychology department at Britain's University of Cambridge. She says the people in the study were not suffering from the continuing deep sadness known as clinical depression.

Instead, Ms. Lee said, the study was based on how the participants saw themselves. They rated themselves on what level they thought they held in the social order. They compared themselves to people they thought of as powerful and in control. She described what the study team meant by "powerful."

"We defined being powerful as the one who has control over their own and others' resources; whereas being powerless as being the ones who [don't] have their control over theirs and others' resources, and also have to [be] dependent to gain the resources that they need."

She said powerless people continually feel unsure. Researchers in the study examined participants to learn their feelings about their status, or level, in society. They presented them with a statement such as, "I can get people to listen to what I say."

The participants were asked to lift a number of boxes and guess their weight. The more powerless the people, the higher they estimated the weight of the containers.

In a second test the researchers asked participants to sit in ways that seemed powerful. In one example they sat with one elbow on the arm of a chair. That position is domineering, or commanding. Or, they sat with their hands under their thighs, a restrictive position. People in the restrictive positions thought the boxes weighed more than they really did. Those who sat in the more powerful way made better estimates of the boxes' weight.

Finally, a number of participants were asked to remember a time in which they felt powerful or powerless. Those who thought of a powerful time gave the best answers for the weight of several boxes. Those who remembered moments of powerlessness repeatedly said the boxes were heavier than they were.

Ms. Lee believes feelings of lack of power in humans might have developed from prehistoric times. She says it might have been a way to keep early man from using up limited resources. But she says that today, these feelings might not be good for people at work.

“It might mean we are kind of preventing ourselves automatically putting 100 percent effort into the work without us realizing [it], which could be damaging.”

The Journal of Experimental Biology published the study.

Many people believe that teaching children music makes them smarter – better able to learn new things. But the organizers of a new study say there is no scientific evidence that early musical training affects the intelligence of young people. Jerry Watson joins us with details.

An estimated 80 percent of American adults think music classes improve children's ability to learn or their performance in school. They say that the satisfaction from learning to play a new song helps a child express creativity.

Researchers at Harvard University, however, have found that there is one thing musical training does not do. They say it does not make children more intelligent.

Samuel Mehr is a graduate student at Harvard's School of Education. He says it is wrong to think that learning to play a musical instrument improves a child's intellectual development.

He says the evidence comes from studies that measured the mental ability of two groups of four-year-olds and their parents. One group attended music class. The other went to a class that places importance on the visual arts – arts that can be seen.

“The answer there is ‘no.’ We found no evidence for any advantage on any of these tests for the kids who were participating in music classes.”

Samuel Mehr says researchers have carried out many studies in an effort to learn whether musical training can make children smarter. He says the results have been mixed. He says only one study seemed to show a small percentage increase in IQ – intelligence scores – among students after one year of music lessons.

He does not believe that IQ is a good measure of a child’s intelligence. He says researchers in his study compared how well children in the music training group did on mental processing tasks, or projects. Then the results were compared to those of children who did not take lessons.

There was no evidence that the musical training group did much better on the mental tasks than the other group. The researchers confirmed their results with a larger group of children and their parents.

Mr. Mehr says music lessons may not offer children a fast, easy way to gain entry to the best schools later on in life. But he says the training is still important for cultural reasons. In his words, "We teach music because music is important for us." He notes that the works of writer William Shakespeare are not taught so that children will do better in physics. He says Shakespeare is taught because it is important.

"And I don't think music needs to be any different than that."

A report on the benefits of music training in children was published in the journal PLOS ONE. I'm Jery Watson.

And I'm Jim Tedder in Washington. Speaking of music, today is the birth date of a very famous American. Three years before the turn of the century, in 1897, Marian Anderson was born in Philadelphia, Pennsylvania. She became one of America's greatest opera singers. Because she was an African American, she was not allowed to sing at Constitution Hall here in Washington.

So she performed before 75,000 people on the steps of the Lincoln Memorial. She later became the first black woman to sing with the New York Metropolitan Opera. Marian Anderson died in 1993.

And that is all for this edition of **As It Is**. But don't go away. There are more Learning English programs just seconds away. And world news follows at the beginning of the hour on VOA.

