

Sex and the brain: AI can distinguish between male and female brain MRIs with 90% accuracy

[Stanford Medicine investigators reported](#) on their development of a new artificial intelligence model that in tests was found to be more than 90% successful at determining whether MRI scans of human brain activity were from a man or from a woman. The findings, the investigators suggest, help to resolve a longstanding controversy about whether reliable sex differences exist in the human brain, and also indicate that understanding these differences may help scientists better understand neuropsychiatric conditions that affect women and men differently.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter.

[SIGN UP](#)

Sex plays a significant role in early brain development, adolescence, and aging, the authors noted. Moreover, they pointed out, "Sex is an important biological factor that influences human behavior, impacting brain function and the manifestation of psychiatric and neurological disorders ... Consequently, knowledge of sex differences in the human brain is critical for understanding both normative behavior and psychopathology." In fact, the extent to which a person's sex affects how their brain is organized and operates has long been a point of dispute among scientists, the scientists suggested.

...

The model's success suggests that detectable sex differences do exist in the brain, but that they hadn't been picked up reliably before.

[This is an excerpt. Read the full article here](#)