

Brain gives convincing evidence for distinction between gender and sex

Ever wonder about the brain's white matter microstructure diffusivity? Don't know what the hell we're talking about? Well, start paying attention . . . because it may be important in determining our gender identity.

Earlier this month, the Medical University of Vienna issued a press release announcing that “the very personal gender identity of every human being is reflected and verifiable in the cross-links between brain regions,” with distinctions specifically in what's known as brain “white matter.”

Translation: We now have some proof of a neurological distinction between gender identity and biological sex. Says the report:

“While the biological gender is usually manifested in the physical appearance, the individual gender identity is not immediately discernible and primarily established in the psyche of a human being.” Led by Georg S. Kienz of the University Clinic for Psychiatry and Psychotherapy, the study was composed of 23 trans men, 21 trans women, 23 cis women and 22 cis men. Researchers used a type of MRI (“diffusion-weighted magnetic resonance imaging” is the proper term, should you ever want to sound impressive during a dinner party) to measure diffusion of particles across brain matter. Cis women had the highest diffusivity — which means (bear with me here) that particle movement in white matter brain regions was greatest for this group, followed by trans men. Trans women had lower movement than the former, with cis men having the least.

Read full, original article: [Neuroscience Prove What We've Known All Along: Gender Exists on a Spectrum](#)