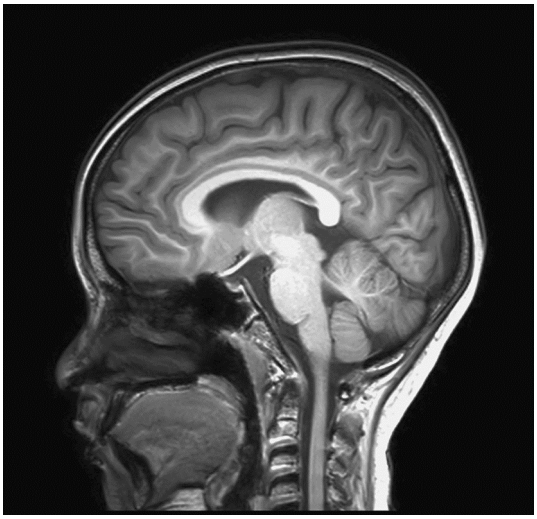
Tekst 8

It is all in the mind



1 Imagine a politician from your party is in trouble for alleged misdemeanors. He's been assessed by an expert who says he likely has early-stage Alzheimer's. If this diagnosis is correct, your politician will have to resign, and he'll be replaced by a candidate from an opposing party.

2 This was the scenario presented to participants in a new study by Geoffrey Munro and Cynthia Munro. A vital twist was that half of the 106 student participants read a version of the story in which the dementia expert based his diagnosis on detailed cognitive tests; the other half read a version in which he used a structural MRI brain scan. All other story details were matched, such as the expert's years of experience in the field, and the detail provided for the different techniques he used.

3 Overall, the students found the MRI evidence more convincing than the cognitive tests. For example, 69.8 percent of those given the MRI scenario said the evidence the politician had Alzheimer's was strong and convincing, whereas only 39.6 percent of students given the cognitive tests scenario said the same. MRI data was also seen to be more objective, valid and reliable. Focusing on just those students in both conditions who showed skepticism, over 15 percent who read the cognitive tests scenario mentioned the unreliability of the evidence; none of the students given the MRI scenario cited this reason.

4 In reality, a diagnosis of probable Alzheimer's will always be made with cognitive tests, with brain scans used to rule out other explanations for any observed test impairments. The researchers said their results are indicative of naive faith in the trustworthiness of brain imaging data. "When one contrasts the very detailed manuals accompanying cognitive tests to the absences of formalized operational criteria to guide the clinical interpretation of structural brain MRI in diagnosing disease, the perception that brain MRI is somehow immune to problems of reliability becomes even more perplexing," they said.

5 What about the students with a very strong political identity for whom the diagnostic evidence was therefore particularly unwelcome? The researchers found that the gap between the perception of MRI and cognitive testing was largest for this group. This is because, when the students were highly motivated to disbelieve the diagnosis of Alzheimer's, those told about the cognitive tests were very dismissive, but those told about the MRI scans showed similar levels

of trust to their less partisan peers. The authors said this suggests we are more willing to discount unwelcome psychological evidence than we are to discount brain-based evidence.

6 These new results add to past findings showing people's bias for neuroscience and other "hard" sciences and against psychology. For instance, medical students think their psychology lectures are "soft and fluffy"; students think psychology is less important than the other natural sciences; children rate psychological questions as easier than chemistry or biology questions; and expert testimony supporting an insanity defence is seen as less convincing when delivered by a psychologist than a psychiatrist.

7 The researchers called for their work to be extended into other contexts, and for the allure of neuroscience to be probed more deeply. "The need for the general public to accurately evaluate the scientific methods used by psychologists is especially relevant to real-world situations," they said, "in which strongly held values, beliefs, or identification with specific groups renders people particularly likely to discount psychological evidence."

wired.com, 2015