

# Personality predicts success in medical school, says new study

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Personality characteristics play a major role in determining who succeeds in medical school, according to new research published in the November issue of the *Journal of Applied Psychology*. The study, co-authored by University of Minnesota psychology professor Deniz Ones, followed an entire cohort of Belgian students through their seven-year medical school career, investigating which personal characteristics contribute to learning and performance in general.

During the early, pre-clinical years, where success is mostly defined in terms of learning in basic science courses (e.g., biochemistry, microbiology, anatomy, physiology), conscientious individuals do much better than those who display lower levels of this trait, especially achievement striving and dependability. During this time, extraversion (being active, energetic and sociable) is detrimental to success - most likely because it detracts attention away from learning endeavors, say researchers.

However, the study, conducted by Ones (U of M), Filip Lievens (Ghent University) and Stephan Dilchert (Baruch College, CUNY), revealed some interesting patterns among the over 600 students who participated. Students completed a standardized personality test at the beginning of their studies. Success was measured in terms of end-of-year grades over a seven-year time-span after which half of the students persisted to graduate.

As the curriculum changed over the years, interpersonal aspects (for

example, performance during internships or patient interaction) became more important for success. While conscientiousness continued to relate to high grades, other personality traits also became important.

Extraverted individuals (those who were assertive and warm) also received high grades in later years. The same pattern was displayed for agreeableness, which includes traits such as altruism. Students who exhibited these characteristics did drastically better in medical school than those who exhibited low conscientiousness, extraversion and agreeableness.

The study has wide ranging implications for the medical school admissions process, says Ones, which seeks to identify those individuals who are most likely to thrive in medical school and develop into successful doctors. Student success is determined by a multitude of factors, many of which are cognitive in nature and already assessed by standardized admissions tests (e.g., the MCAT). Researchers point out that these cognitive factors are very important in determining learning success, but that they do not speak to the interpersonal aspects important for a successful medical career.

"[Personality traits](#) predict the acquisition of knowledge, persistence on tasks, and performance in patient interactions, and thus should also be considered in medical school admissions," said Ones. "Standardized tests have typically been found to be more reliable, objective and valid measures of personality compared to other methods such as unstructured interviews or reference letters. As such, they will be useful tools to supplement already existing tests of cognitive ability that are currently being used in making [medical school](#) admissions decisions."

Source: University of Minnesota ([news](#) : [web](#))

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