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DOCTOR AND PATIENT

Do You Have the ‘Right Stuff’ to Be a Doctor?

By PAULINE W. CHEN, M.D.

Not long ago, a friend confessed that her son, who spends much of his free time volunteering at a children’s hospital and who is applying to medical school, has been particularly anxious about his future. “His test scores are just O.K.,” my friend said, the despair in her voice nearly palpable. “I know he’d be a great doctor, but who he is doesn’t seem to matter to [medical schools](#) as much as how he does on tests.”

Her comment brought me back to the many anxious conversations I had had with friends when we were applying to medical school. Over and over again, we asked ourselves: Do we really need to be good at multiple-choice exams in order to be a good doctor?

We were referring of course to not just any exam, but to the Big One — the Medical College Admission Test, or MCAT, the standardized cognitive assessment exam that measures mastery of the premedical curriculum. Back then, as now, American medical school admissions committees [required every applicant to sit for the MCAT](#).

While medical schools have since taken pains to assure applicants that recommendation letters and essays also weigh heavily, many candidates continue to believe, erroneously or not, that the MCAT can make or break one’s chances. Competition to [get into medical school remains fierce](#), with over 42,000 highly qualified individuals vying for just a few more than 18,000 slots at medical schools across the country.

With those kinds of statistics and no reliable standardized way to evaluate personality, it is inevitable that the MCAT will have a crucial role in medical school admissions. But does that guarantee that the applicants admitted are also destined to become the best doctors?

Maybe not.

According to [a recent study in The Journal of Applied Psychology](#), there is another kind of exam that may be more predictive of how successful students will be in medicine: personality testing.

For nearly a decade, three industrial and organizational [psychologists](#) from the United States and Europe followed more than 600 medical students in Belgium, where premedical and medical school curriculums are combined into a single seven-year program. As in the United States, the early portion of their education is focused on acquiring basic science knowledge through lectures and classroom work; the latter part is devoted to mastering clinical knowledge and spending time with patients.

At the start of the study, the researchers administered a standardized personality test and assessed each student for five different dimensions of personality — extraversion, neuroticism, openness, agreeableness and conscientiousness. They then followed the students through their schooling, taking note of the students' grades, performance and attrition rates.

The investigators found that the results of the personality test had a striking correlation with the students' performance. Neuroticism, or an individual's likelihood of becoming emotionally upset, was a constant predictor of a student's poor academic performance and even attrition. Being conscientious, on the other hand, was a particularly important predictor of success throughout medical school. And the importance of openness and agreeableness increased over time, though neither did as significantly as extraversion. Extraverts invariably struggled early on but ended up excelling as their training entailed less time in the classroom and more time with patients.

“The noncognitive, personality domain is an untapped area for medical school admissions,” said Deniz S. Ones, a professor of [psychology](#) at the [University of Minnesota](#) and one of the authors of the study. “We typically address it in a more haphazard way than we do cognitive ability, relying on recommendations, essays and either structured or unstructured interviews. We need to close the loop on all of this.”

Some schools have tried to use a quantitative rating system to evaluate applicant essays and letters of recommendation, but the results remain inconsistent. “Even with these attempts to make the process more sophisticated, there is no standardization,” Dr. Ones said. “Some references might emphasize conscientiousness, and some interviewers might focus on extraversion. That nonstandardization has costs in terms of making wrong decisions based on personality characteristics.”

By using standardized assessments of personality, a medical school admissions committee can get a better sense of how a candidate stands relative to others. “If I know someone is not just stress-prone, but stress-prone at the 95th percentile rather than the 65th,” Dr. Ones said, “I would have to ask myself if that person could handle the stress of medicine.”

While standardized tests like the MCAT and the SAT have been criticized for putting certain population groups at a disadvantage, the particular personality test used in this study has been shown to work consistently across different cultures and backgrounds. “This test shows virtually none or very tiny differences between different ethnic or minority groups,” Dr. Ones noted. Because of this reliability, the test is a potentially invaluable adjunct to more traditional knowledge-based testing. “It could work as an additional predictive tool in the system,” she said.

One perennial question that personality testing could help to answer is whether hard work can make up for differences in cognitive ability. “Some of our data says yes,” Dr. Ones said. “If someone is at the 15th percentile of the cognitive test but at the 95th percentile of conscientiousness, chances are that the student is going to make it.” That student may even eventually outperform peers who have higher cognitive test scores but who are less conscientious or more neurotic and stress-prone.

But these standardized tests, personality or cognitive, can be useful only after medical schools, and the public they serve, decide what characteristics are most important for the next generation of doctors. “If a medical school is all about graduating great researchers, then I would tell them not to weigh the results of the personality test that heavily,” Dr. Ones said. “But if you want doctors who are practitioners, valued members in terms of

serving greater public, then you have to pay close attention to these results.”

She added: “When you ask your friends, they will describe you in terms of your personality. Rarely will you get a description of your cognitive ability. Personality is what makes us who we are.”