

## Early Data on the Validity of the Psychological, Social, and Biological Foundations of Behavior Section of the New MCAT® Exam

Future physicians must be prepared to care for patients in a rapidly changing health care system with a growing, aging, and increasingly diverse population. The MCAT exam was redesigned to reflect these changes and test the knowledge and skills that students need when they enter medical school.

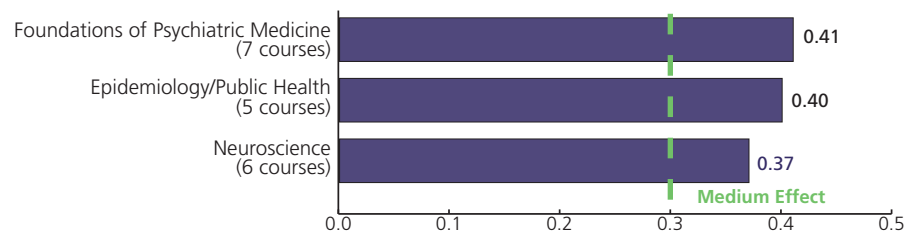
The addition of the Psychological, Social, and Biological Foundations of Behavior section of the new MCAT exam underscores the important roles of behavioral and sociocultural factors in health and illness. This section provides a solid foundation for medical students' learning about the ways in which behavior interacts with biological factors to influence health outcomes and how social inequities affect patients' health.

This early research on the Psychological, Social, and Biological Foundations of Behavior section examines the relationships between performance on a prototype of the section and grades in related courses in medical school. The results provide admissions officers with data that show how this section is likely to add value to the medical student selection process.

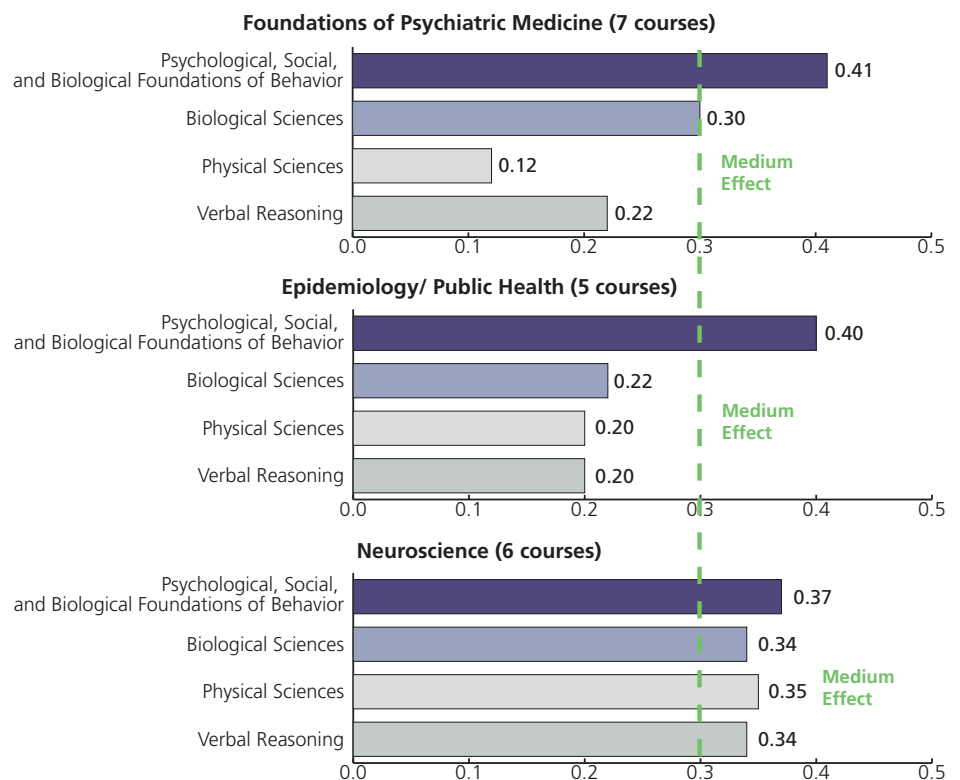
### WHAT DOES THE NEW SECTION TEST?

The Psychological, Social, and Biological Foundations of Behavior section asks applicants to demonstrate

#### Median Correlations between the Psychological, Social, and Biological Foundations of Behavior section scores and medical students' grades



#### Comparison of median correlations between medical students' grades and scores from the old and new MCAT exams



their understanding of the ways in which:

- Biological, psychological, and sociocultural factors influence the ways that individuals perceive, think about, and react to the world
- Biological, psychological, and sociocultural factors influence behavior and behavior change
- Biological, psychological, and sociocultural factors influence the way we think about ourselves and others, as well as how we interact with others
- Cultural and social differences influence well-being
- Social stratification and access to resources influence well-being

## VALIDITY RESEARCH DESIGN

Eleven medical schools are partnering in research to find out if scores from this section can predict performance in medical school courses that draw on the behavioral and social sciences.

Researchers from these schools administered a prototype version of the section in fall 2013 (before the start of the semester) to more than 2,000 first- and second-year students at the 11 medical schools.

In 2013 and 2014, medical students' grades and test scores from related courses and clerkships were collected and correlated with their scores from the prototype of the new section.

Over the next two years, researchers from these and other medical schools will continue to follow these students and investigate the relationships between the Psychological, Social, and Biological Foundations of Behavior scores and academic performance in related coursework. Student outcomes will also be collected from clerkships and licensure examinations.

## RESULTS

Results from the first two years of the validity study show that scores from the Psychological, Social, and Biological Foundations of Behavior section correlate with medical students' grades in behavioral and social sciences courses, such as foundations of psychiatric medicine, epidemiology/public health, and neuroscience.

Researchers also observed that scores from the Psychological, Social, and Biological Foundations of Behavior section are more highly correlated with these grades than are natural sciences and verbal reasoning scores from the old exam.

## CONCLUSION

Early data suggest that scores from the Psychological, Social, and Biological Foundations of Behavior section of the new exam are likely to add value to the information provided by other sections of the MCAT exam. Data from 11 medical schools and more than 2,000 medical students show that scores predict medical students' performance in courses with behavioral and social

sciences content, and they predict performance better than scores from the old MCAT exam. These data provide support for using scores from the Psychological, Social, and Biological Foundations of Behavior section in 2016 student selection.

## Participating Schools

- Boston University School of Medicine
- Columbia University College of Physicians and Surgeons
- Meharry Medical College School of Medicine
- Memorial University of Newfoundland Faculty of Medicine
- Stanford University School of Medicine
- University of California, San Francisco, School of Medicine
- University of Central Florida College of Medicine
- University of Illinois College of Medicine
- University of Mississippi School of Medicine
- University of North Carolina at Chapel Hill School of Medicine
- The University of Texas School of Medicine at San Antonio