

# **Characterizing Grit in Medical Students: Low grit associated with higher rates of dissatisfaction in medical school and more consideration for leaving medical school**

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## **Project Summary**

In high stakes professions with elevated levels of burnout, such as medicine, there is an emphasis on better understanding grit as an indicator of attrition and satisfaction. However, few studies have investigated grit among medical students and its role in medical school.

The aims of this study were twofold: (1) to measure and characterize grit in medical students and (2) to explore relationships among grit, training factors, and demographic characteristics.

Three classes of medical students from a single institution were invited to complete an online survey. Survey questions included the validated "Short Grit scale," medical student satisfaction, alternate pursuits to medicine, and demographics. The "Short Grit scale" is a 5-point scale with 5 being the "grittiest." Independent t-test, one-way ANOVA, and Pearson's chi-square were used to determine statistical significance.

## **Action Items/Outcome**

519 students were surveyed and 163 (31.4%) responded. The median grit score was 3.63. This was consistent with median grit scores of doctors from other studies; and is higher than the US national average (3.4). Grit score did not significantly vary by gender, year in medical school, years off, or intended specialty. Students with below median grit scores were more dissatisfied with medical school compared to medical students with above median grit scores ( $p = 0.05$ ). Students in the lowest quartile of grit scores were less satisfied with medical school than the highest quartile students ( $p = 0.05$ ). 37.8% of students with grit scores below the median considered leaving medical school versus 22.1% of students with scores above the median ( $p = 0.03$ ). When asked about alternative pursuits to medicine, 26.3% of medical students above median grit could not imagine a different reality from medical school or becoming a physician while only 7.2% of students with grit scores below the median could not imagine doing anything else ( $p = 0.001$ ).

## **Conclusion/Reflection**

Lower levels of grit are associated with decreased satisfaction with medical school and increased consideration for leaving medical school. Those with high grit are less likely to envision an alternate reality to being a doctor. The development of a medical school curriculum that intentionally and explicitly increases 'grit' is warranted. This will likely lead to an improved medical school and residency training experience as well as increased medical student wellness.