

Medical Students' Problem-Solving Skills Predict
How They Experience Medical School

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Objective

The learning environment impacts medical students' motivation, attitudes, academic performance, and professionalism. Aspects of the learning environment—faculty and administrative treatment of students, student social experiences, consequences for intellectual honesty and ethical integrity—constitute a “hidden curriculum” which every medical school must strive to improve. As part of the American Medical Association's Innovative Strategies for Transforming the Education of Physicians (ISTEP) initiative, the Learning Environment Study (LES), we sought psychological predictors of student subjective experience of the learning environment. We predicted that a measure of students' tendency to react to difficult situations immediately upon matriculation would predict how they rated various aspects of their medical school experience at the end of their second year.

Methods

155 undergraduate medical students from the classes of 2014 and 2015 completed a subset of the Ways of Coping Scale (WCS: 22 items comprising 8 validated subscores, Folkman & Lazarus, 1986) at the time of matriculation and the Medical Student Learning Environment Scale (MSLES: 17 items analyzed individually, Rosenbaum, et al, 2007) at the end of their second year. We performed multiple regression Ratings on each MSLES item by the 8 WCS subscores.

Results

Social aspects of medical school were rated more positively by students with higher Planful Problem-Solving and Positive Reappraisal scores: these students make conscious efforts to actively, productively address their difficult situations. In contrast, students with high Escape Avoidance scores gave lower ratings for “Students gather together for informal activities.”

Students who were more emotionally controlled (high Self-Controlling scores) found the school administration less likely to take meaningful action to support students and that students were reluctant to share their troubles with each other.

Student who tend to seek Social Support when dealing with problems had difficulties finding time for interests outside of medicine and reported intense competition for grades.

Conclusions

Students' experience of medical school is to some extent a function of their general approach to problem-solving. To improve the learning environment, schools should be sensitive to students' differences in this regard. Encouraging students to use planful problem-solving and positive reappraisal may have positive benefits. This analysis represents one only school and an analysis of the larger multi-institutional ISTEP LES dataset may challenge the consistency of these results across schools.