Purpose

The medical school learning environment (LE) is crucial for undergraduate medical students’ professional development (Hafferty, et al., 1989; Maclay, 2001). Medical school is difficult and challenging, and LE involves unnecessary student burden and facilitates learning.

Each student perceives LE differently. Mismatches between learners and LE can weaken learning (Lindblom-Ylänne & Lonka, 1998). In order to improve LE, we must understand how student differences impact their perception of it.


We hypothesize that students with different WCS subscores would rate aspects of LE differently. The pattern of these subscores would indicate cognitive aspects of LE.

Conclusions

LE is not perceived the same by everyone, but in general appears to have 2 orthogonal aspects: one intellectual and one social. The intellectual aspect involves help from higher-ups (administrators and upper-level students) and clarity of learning objectives and assessments. The social aspect primarily involves peer-interactions, especially interactions outside the classroom. Students are more critical of aspects of LE that meet their preferred ways of dealing with stress: social support-seekers are less critical of aspects of LE that require more intellectual and less meaningful administrative action to student complaints. The direction of these effects is important; students want more of the coping opportunities they prefer, e.g. escape-avoiders want more informal social activities.

Positive reappraisers are associated with a more positive perceived LE. These students find more opportunities for outside interests, see students helping each other and getting to know each other. These students may simply have more varied dispositions generally; though this relative optimism does not seem to extend to the intellectual aspects of LE.

Future Directions

The AMA’s LE is a rich and robust study. These same data (and more) have been collected for thousands of medical students in the U.S. and Canada. These same analyses could be applied at other institutions to see if the same patterns observed at Michigan hold in other LE. Moreover, other aspects of LE’s (e.g., the Learning Community, student body size and diversity, tenure, admissions policies, etc) could be tested for their differential impact on LE.

The limitations of sample size and multiple comparisons require that we remain cautious. Nevertheless, they can inform the basic of an individual differences model of LE quality improvement. These results could be used to study the effects of LE on student performance, e.g., the model of LE quality improvement could be used to predict which aspects of LE would be most important for preservice LE improvement. If so, an LE assessment tool could be developed to help LE improve.

References


8 Ways of Coping: How do you respond to adversity?

Self Controlling: Keep your feelings from influencing the situation. Includes items such as “I tried to keep my feelings to myself” and “kept others from knowing how bad things were.”

Confrontive Copping: Aggressively and pro-actively manipulate the situation. Includes items such as “Shouted my ground and fought for what I wanted” and “I expressed anger to the person(s) who caused the problem.”

Positive Reappraisal: Construct meaning of the situation in terms of personal growth. Includes items such as “Changed or grew in a person in a good way” and “Found new faith.”

Escape Avoidance: Includes items such as “Wished the situation would go away or somehow be over with” and “Had fantasies or wishes about how things might turn out.”

Positive Acceptance: Acknowledge your role in the situation. Includes items such as “I realized I brought the problem on myself.”

Distancing: Decide for yourself the situation. Includes items such as “I knew what I wanted” and “I didn’t let it get to me; refused to think about it too much.”

Negative Acceptance: Includes items such as “I accepted responsibility for the situation” and “Felt I had no choice.”

Cognitive Restructuring: Does things differently. Includes items such as “I tried to keep my feelings to myself” and “I tried to change the situation.”

Positive Reappraisal students perceive more intellectual, less social support-seeking. LE students believe more grade competition, for example. Confrontive coping students perceive more grade competition, for example. Escape-Avoiders perceive fewer intellectual, more social support-seeking. LE students believe more grade competition, for example.

Planful Problem-Solvers perceive more intellectual, less social support-seeking. LE students believe more grade competition, for example.

Positive Reappraisal students perceive more more intellectual, less social support-seeking. LE students believe more grade competition, for example.