Assessing the Learning Environment at the University of Michigan Medical School Through a National Collaboration

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The Learning Environment Study

The University of Michigan is one of 28 medical schools in the US and Canada that are part of the innovative strategies for transforming the Education of Physicians (STEP) at the American Medical Association.

The Learning Environment Study (LES) examines the undergraduate medical education environment as a longitudinal survey using many established measures of student attitudes, personalities, and perceptions.

University of Michigan has 122 students participating in the class of 2014 and 129 in the class of 2015: participation rates of 81% and 73% respectively.

Here are some measures gathered during students’ first year of medical school.

**Participants**

<table>
<thead>
<tr>
<th>Class of 2014</th>
<th>Class of 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>number:</td>
<td>122</td>
</tr>
<tr>
<td>female</td>
<td>51%</td>
</tr>
<tr>
<td>non-white</td>
<td>42%</td>
</tr>
<tr>
<td>from rural/small town</td>
<td>27%</td>
</tr>
<tr>
<td>have a physician in the immediate family</td>
<td>36%</td>
</tr>
<tr>
<td>at orientation, felt more than adequately prepared for medical school</td>
<td>75%</td>
</tr>
</tbody>
</table>

**Discussion**

There is a lot of diversity in participants’ attitudes and perceptions.

- Tolerance for ambiguity and the ways of coping subscales have very wide variance.
- Overall, students have high empathy scores and are only slightly patient-oriented.
- Overall, students perceive the University of Michigan Medical School positively.
- Students don’t feel they get to know each other well but they offer helpful time-assisting each other.
- Students feel negatively about the clinical relevance of material and fairness of assessments.

The Learning Environment Study will continue to follow these students to explore which aspects of medical school are most beneficial for which sorts of students.

These results will be compared with other medical schools to give a better picture of how to improve the learning environment to facilitate clinical learning with less distraction and stress.

**Measures**

- **The Jefferson Scale of Physician Empathy**
  - The Jefferson Scale of Physician Empathy (JSPE) measures how much a student believes that attention to patients’ thoughts and emotions are clinically relevant.
  - Higher scores indicate more belief that patients’ thoughts and emotions are clinically relevant.
  - Scores can range from 16 to 112.

- **Ways of Coping Scale**
  - The Ways of Coping Scale measures how much a student believes that attention to patients’ thoughts and emotions are an important part of clinical skill and effective treatment.
  - Higher scores indicate more belief that patients’ thoughts and emotions are clinically relevant.
  - Scores can range from 16 to 112.

- **Tolerance of Ambiguity Scale**
  - The Tolerance of Ambiguity Scale measures how much a student feels comfortable in unclear, unfamiliar, or uncertain situations and tasks.
  - Higher scores indicate more comfort with ambiguous situations and tasks.
  - Scores can range from 16 to 112.

- **Patient-Physician Orientation Scale**
  - The Patient-Physician Orientation Scale (PPOS) measures how much the student feels that patients should direct and control clinical interactions.
  - Higher scores indicate more belief that patients should direct and control clinical interactions.
  - Scores can range from 16 to 112.

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Questions and comments to stansfield@umich.edu

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