Measuring Medical Students' Empathy: Exploring the Underlying Constructs of and Associations Between Two Widely Used Self-Report Instruments in Five Countries

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Tags

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Background

Empathy is widely regarded as a critical element of patient care and medical education. The more you have, the greater the patient and provider satisfaction, greater adherence to therapy, greater physician well-being and perceived clinical decision-making, greater physician joy at work. It is probably another meded “God term” to invoke Lorelei Lingard.

What is “empathy” in health care, anyway? During daily clinical care, it is one of those constructs that invokes a “I knows ‘em when I sees ‘em” moment: I am struck at the demonstrations of empathy by the learners I work with, with both outstanding and abysmal examples. However, if you really pause to define empathy in an observable or researchable way, how would you word it?
There are many definitions of empathy in the literature, and a large body of psychological studies about empathy in health care learners, especially medical students. Empathy is often operationalized as including ideas such as:

- An ability to understand another person’s state of mind, or fears/hopes/understandings/perspective/situation
- An ability to acknowledge a patient’s lived illness experience
- The ability to act on understanding a patient’s point of view in a way that is therapeutic, etc.

Typically, literature on health professionals is contradictory, confusing, and somewhat depressing. As a stereotype, the literature indicates that physician empathy goes down each year from entry to medical school. But does it really? What are we really measuring? Maybe it is fatigue in training. Maybe we are measuring an evolution of the ability to cope with human suffering.

The two most common instruments used to measure empathy are the Davis Interpersonal Reactivity Index (IRI) and the Jefferson Scale of Empathy for medical Students (JSE-S). These are both known to have good psychometric properties, and both proort to measure cognitive and affective constructs of empathy. But what are they REALLY measuring?

**Purpose**

The authors of this study set out to compare the construct and psychometric properties of the IRI & JSE-S across multiple populations of medical students in 5 countries.

**Type of paper**

Meta-analysis

**Key Points on the Methods**

This is an interesting paper, in that the authors obtained the combined data of 3069 medical students from 3 separate studies using both the IRI & JSE-S. They pooled the data and ran multiple analyses (factor, correlation, multiple regression, etc.) to examine the constructs of empathy examined by each instrument, and to examine how each of the subscales correlate.

There are numerous threats to validity here. To name a few:

1. The IRI and JSE-S were explicitly designed with different constructs
2. The instruments were translated and did not have the same items across countries
3. Most of the students (67.1%) were from the UK
4. The students were diverse, from a wide range of ages and stages of training
5. The data was gathered over nearly a decade, not in the same year
6. The data was gathered over extended periods of time
7. There is a small n from Ireland
8. 2/3 of participants were female
9. Response rates varied from 27.7% to 68.6%
10. The data from each instrument were merged for some of the analyses
11. The instruments are, by design, self-report, so social desirability bias is present

**Key Outcomes**

The authors found that a 7-factor structure was the best fit (aligned with the espoused 4 for IRI and 3 for JSE-S). All items clustered together, indicating a shared construct. The IRI & JSE-S correlated with each other, but weakly.

**Key Conclusions**

The authors concluded that the IRI and JSE-S measure different but related constructs, namely “generic empathy” vs “idealized doctor-patient relationship”. The former is “dispositional”, the latter is contextual. The authors caution that the two scales are different enough to account for some of the mixed findings in the literature.

As a clinician-educator, this paper made me really question my own construct of “empathy”. Further, I am not sure if either of these instruments really measure what I want in “empathy” in meded.

We need validity evidence that any measure of empathy is related to patient outcomes or professional competence. That is where our efforts should lie.

**Spare Keys – other take home points for clinician educators**

1. One of our KeyLIME refrains: Meded suffers from both a lack of a common lexicon and explicitly developed constructs
2. We need to really question some of the literature considering these threats to validity
3. Empathy is a construct ripe for a fresh scholarly look

**Shout out**

The accompanying editorial by Hojat & Gonnella is worth a read. I agree with many of their comments.

Just wanted to take a moment to thank Mélanie Agnew and Wendy Jemmett, the team behind KeyLIME, who keep the machine moving and make us sound smarter than we are.