

Review of: "PERSPECTIVE: Improving Measurement of Public Objective Knowledge About Hazards"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

I want to call out Section 3.5 of this article as a strength, it gives a nice review of current scoring problems in objective knowledge work.

Overall, to improve this article, I would suggest a tightening of the theoretical frame in conjunction with tightened connection to your particular study focus.

Right now, my take is that you have a decent literature review around objective knowledge, and that it does not provide an effective theoretical frame for your particular study, which does very interesting work measuring OK in a situation where OK interacts dynamically with the scientific method- ie, where "truths" are actively shifting. Plain talk, the review and the study both have merit, but they're not doing each other a lot of favors at the moment.

I am interested in this paragraph from your text:

"This claim is obscured by uncertainty over whether knowledge-deficit critics or defenders claim that knowledge is the only, or the only major, factor in attitudes and behaviors regarding science and technology, or one (perhaps weakly) of many, a question I cannot pursue here. Despite normative or other grounds for knowledge-deficit critiques, my focus here is solely the empirical data, which appear to yield mixed results."

I think this statement is rubbing hard against your particular study focus, which, in the end, seems must hinge on this sentence from your text:

"If expert consensus differs across time, an OK item's truth status also may vary."

So we are in an acknowledged situation where OK may or may not be true, may or may not impact attitudes or behaviors- a pretty grim situation for OK, right?

There are a number of directions you could take from this feedback. You seem inclined to defend OK, so perhaps the easiest way to do this would be to tighten your initial review in its defense.

But my suggestion is- go full-bore on a critique of OK! Your study suggests that a critique of OK is indicated- in good part because of its inherent conflict with scientific methodology. I think you could use that nice review in section 3.5 to help you attack OK from multiple sides- that you have a lot of evidence here that the ways we understand public knowledge are fundamentally different from scientific or expert knowledge. In part because of a process-based understanding rather than a fact-based understanding on the expert side, and in part because we would never consider assessing expert knowledge with the metrics presented in 3.5, so we are evidently looking at different bodies and frameworks.

This might provide more interesting paths forward, as we think of better ways to assess public knowledge that are more aligned with expert knowledge- perhaps more focused on process, agency, and attitudes. Our ability to take in new information and act on it is more important than ever in our changing world- and shifting away from knowledge as object to knowledge as process could be an important part of engaging the public more successfully and meaningfully.

Hope this helps- interesting work.