

## Experimental Work on Epistemic Intuitions

Some of the early papers in experimental epistemology claimed to demonstrate all sorts of variations within people's epistemic intuitions. In particular, it was suggested that people's willingness to ascribe knowledge in a particular scenario varies with a number of factors, such as:

- **Cultural Background:** Weinberg et al. (2001) claimed that university students from Western backgrounds were more inclined to deny knowledge in Gettier scenarios than university students from East Asian and Indian cultural backgrounds.
- **Socio-economic Status:** Weinberg et al. (2001) also claim that people from high socio-economic status backgrounds are less willing to ascribe knowledge in certain scenarios than people from lower socio-economic status backgrounds.
- **Gender:** Buckwalter and Stich, building on data from Starbans and Friedman, suggest that women ascribe knowledge in Gettier cases at a higher rate than men.
- **Order in which cases are presented:** Swain et al. (2008) argue that participants who are presented with a clear case of knowledge followed by the Truetemp scenario are less inclined to judge Truetemp to know the relevant proposition than participants who are first presented with a clear case on non-knowledge.
- **Age:** Colaço et al. (2014) argue that participants over 30 years old are less inclined to judge there to be knowledge in fake barns cases than

*Two Big Questions:*

- (1) Are these effects genuine? That is, do people's epistemic intuitions vary in these ways?
- (2) If epistemic intuitions do vary in these ways, does this have any bearing on epistemological practice?

### **Weinberg et al. (2001)**

One of the early and more provocative papers in the X-Phi movement was Weinberg et al. (2001). These authors take the results of their studies to constitute a serious challenge to the standard practice of treating intuitions as data – a practice they call “intuition-driven romanticism”.

*An example of one of their studies:*

Participants were given the following prompt:

**Bob has a friend, Jill, who has driven a Buick for many years. Bob therefore thinks that Jill drives an American car. He is not aware, however, that her Buick has recently been stolen, and he is also not aware that Jill has replaced it with a Pontiac, which is a different kind of American car. Does Bob really know that Jill drives an American car, or does he only believe it?**

**REALLY KNOWS**

**ONLY BELIEVES**

Results:

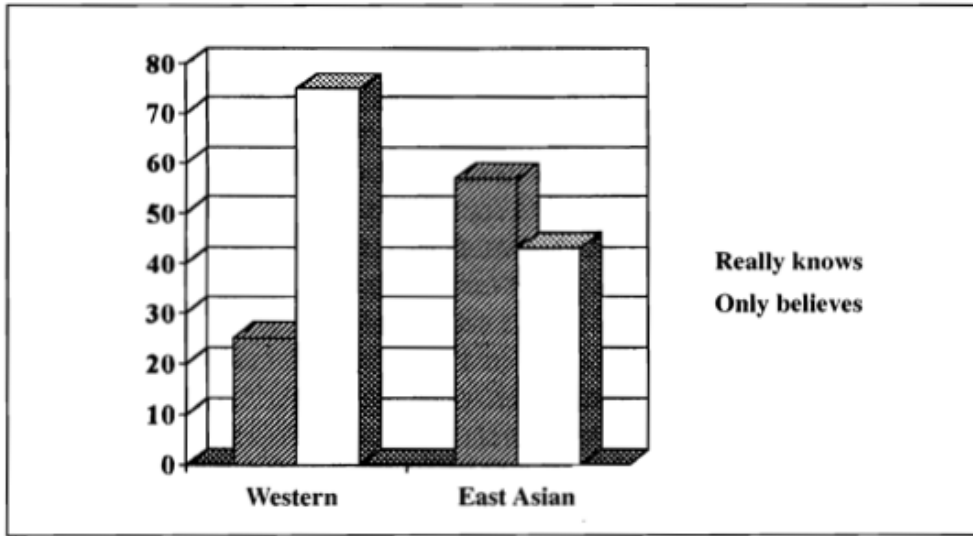


FIGURE 5: Gettier Case, Western and East Asian

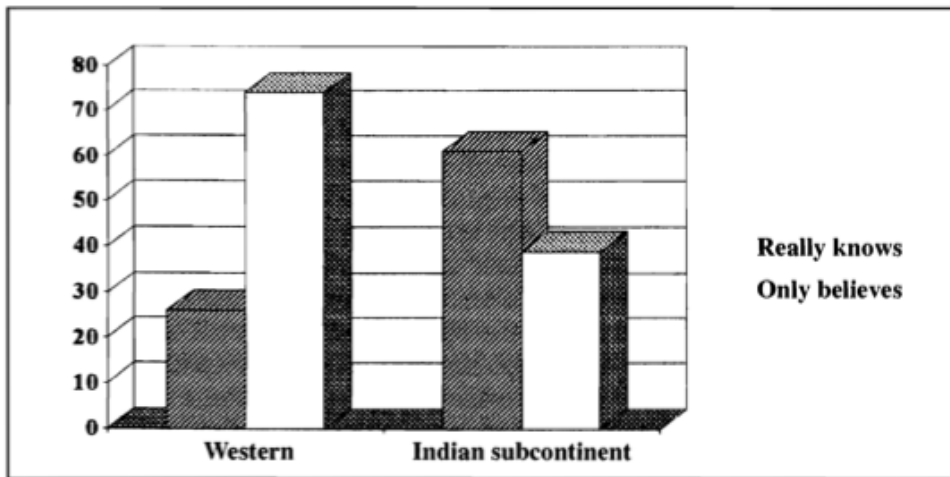


FIGURE 6: Gettier Case, Western and Indian

*Qs:* What do you make of these results? Do you think there are any problems with Weinberg et al.’s probes and/or methodology? If Weinberg et al.’s results are robust, do you think this poses a problem for the practice of relying on intuitions in epistemology, as these authors allege?

**Swain et al. (2008)**

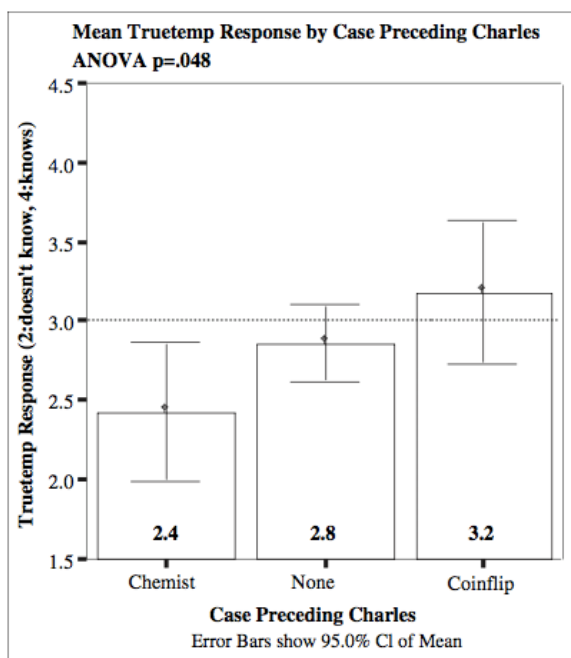
In a similar vein, Swain et al. (2008) offer experimental evidence that they take to discredit the standard practice of treating intuitions as evidence. In particular, they purport to demonstrate order effects involving Lehrer’s Truetemp scenario:

**Truetemp.** Truetemp undergoes brain surgery by an experimental surgeon who invents a device called a “Tempucomp”, which he implants in Truetemp’s brain. The device is an extremely accurate thermometer, which is connected to a computational device capable of generating beliefs. The surgeon does not tell Truetemp about her little experiment.

After leaving the hospital, Truetemp finds himself believing that it is exactly 104 degrees outside. Does he know this?

Undergraduates were given a version of the Truetemp scenario after receiving either a clear case of knowledge or a clear case of non-knowledge. (The clear case of non-knowledge was someone who believes he can predict when a coin will land heads, but his predictions fare no better than chance. As a matter of fact, on this one occasion he gets it right. The clear case of knowledge involved a trained chemist who comes to learn that mixing two common chemicals will have dangerous effects by reading about it in a leading scientific journal.)

*Results:* Participants were more inclined to judge that Truetemp (“Charles” in their version) knows when they receive the case after the clear case of non-knowledge (coin-flip) than they are when they receive it after a clear case of knowledge (chemist).



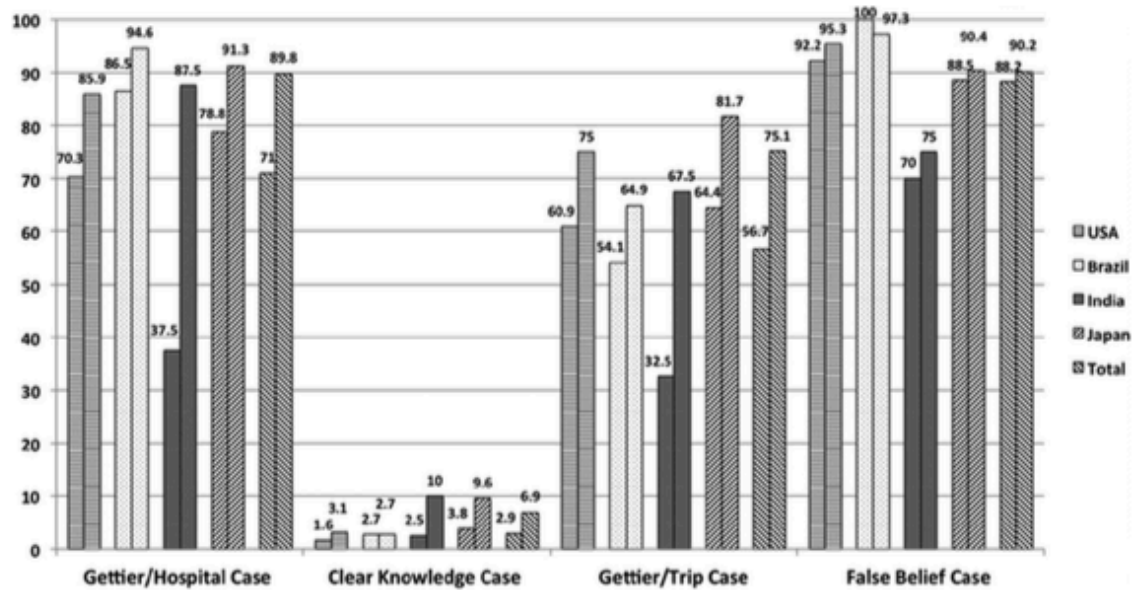
*Qs:* What do you make of these results? Do these support the authors' claims?

### Replication Issues

One worry with some of the results that have been reported is whether they are replicable.

- Nagel et al. (2013) failed to replicate Weinberg et al.'s (2001) finding that cultural background has a significant effect on epistemic intuitions.
- More recently, Machery et al. (2017) conducted an in-depth survey of participants from four countries (Brazil, India, Japan, USA), conducted in four different languages (Portuguese, Bengali, Japanese, English). Participants were given four scenarios – two Gettier cases, a clear case of knowledge, and a case of false belief. Participants were then asked two questions:
  - o A binary question asking whether the protagonist knows the relevant proposition (Options = (i) “Yes, [s]he knows”, (ii) “No, [s]he doesn't know”) (*Knowledge 1*)
  - o “In your view, which of the following sentences better describes [the protagonist's] situation?”, (Options = (i) “[protagonist] knows [relevant proposition]”, (ii) “[protagonist] feels like she knows [relevant proposition]”)

Results:



**Figure 1.** Proportion of knowledge denial for the four cases and the four populations (first column for each country: Knowledge 1; second column: Knowledge 2)

Machery et al. claim that these results provide evidence for an innate and universal core folk epistemology.

*Qs:* What does this core folk epistemology consist in? Do you agree that Machery et al.'s results serve to support this conclusion?

*Further qs to consider:* To what extent are the empirical facts about the extent of cross-cultural variability in intuitions (or lack thereof) relevant to standard philosophical practice? We can certainly imagine a possible community that does not share our epistemic intuitions, regardless of whether this community is actual. Does the mere possibility of such a community pose an equal threat to standard epistemological practice as the actual existence of such a community? Why or why not?