Measuring Epistemic Justice

Development and Validation of a Self-Report Scale

Epistemic injustice, as introduced by Fricker (2007), concerns the ways in which individuals can be unfairly discriminated against in their role as knowers. She distinguishes between testimonial injustice, where credibility is undermined due to prejudice, and hermeneutical injustice, which arises when people lack the conceptual resources needed to articulate or understand experiences. Although the concept has become influential in philosophy, empirical research has been limited because no validated instruments exist that measure individuals' attitudes toward epistemic justice.

A theoretical concept like epistemic injustice cannot be measured directly (Hinkin, 2005). However, measurement is essential to science, as it enables researchers to study concepts that are otherwise inaccessible (Morgado et al., 2017). In psychology and the social sciences, measurement scales translate subjective perceptions into structured and analysable data, making them important for the study of virtues, beliefs, and attitudes. With this in mind, our aim for this research is to develop a deployable epistemic justice scale.

Societal Importance

Epistemic injustice is harmful for several reasons. Fricker (2007) argues that being wronged in one's capacity as a knower is an intrinsic injustice, harming a capacity essential to human value. It also has practical consequences in knowledge production, for example in democratic or legal contexts where people are disadvantaged and their contributions excluded. Beyond its ethical significance, it presents an epistemic problem: silencing or disregarding certain knowers results in a loss of valuable knowledge that society fails to learn from.

Epistemic injustice becomes even more significant in the context of Artificial Intelligence. UNESCO highlights how intellectual virtues are increasingly important considering contemporary challenges, including the ethical and epistemic implications of AI (Hughes, 2024). Because AI systems rely on human generated data, existing testimonial and hermeneutical injustices risk becoming embedded and reproduced in algorithms. This can reinforce dominant perspectives under an appearance of neutrality, while marginalised perspectives remain unseen. Being able to measure individuals' attitudes toward epistemic justice therefore becomes essential. Such a scale can support fair and trustworthy usage of AI by helping us understand how people evaluate knowledge, how sensitive they are to potential epistemic harms, and how they respond to inequalities that may be amplified through technological systems. Ultimately, measuring epistemic justice contributes to promoting more equitable and responsible interactions with AI.

Methodology and Results

We followed established guidelines for scale development (Carpenter, 2017; Hinkin, 2005; Morgado et al., 2017), integrating philosophical theory with psychological methodology. We began by generating an initial pool of 66 items rooted in Fricker's definitions and informed by expert feedback from philosophers specializing in epistemic injustice. Items were structured around three subscales. The testimonial subscale assessed linguistic and identity-based bias. The hermeneutical subscale examined attitudes toward conceptual resources and

representation. Lastly, the intellectual actions subscale assessed openness and cognitive effort. After qualitative iterations of refinement and conceptual clarification, the pool was reduced to 49 items.

We then conducted an initial quantitative analysis through a preliminary study. A relatively small sample was deliberately chosen to obtain an early indication of whether the items were functioning as intended. The scale was administered to 100 UK-based adults recruited via Prolific.

Items were evaluated using descriptive statistics, including means, standard deviations, skewness, and kurtosis, as well as item-rest correlations. In addition to these quantitative indicators, items were reviewed qualitatively to assess clarity and conceptual fit. Decisions about item removal were made by considering both the statistical results and theoretical considerations, while ensuring that each subscale retained an adequate number of items. This refinement process resulted in a reduced 28-item scale, which demonstrated good internal consistency, with a Cronbach's alpha of .91.

Future Steps

The next phase of this project focuses on further refinement and validation of the epistemic justice scale using a larger sample. This two-part study, with approximately 400 participants in each sample, allows for a more robust evaluation of the scale. The increased sample size enables the use of both exploratory and confirmatory factor analyses to examine the underlying factor structure and to assess whether the proposed subscales are empirically supported.

To assess construct validity, participants additionally complete related measures, including the HEXACO-60 personality inventory (Ashton & Lee, 2018), and Intellectual Humility Scale (Krumrei-Mancuso & Rouse, 2015), to examine discriminant validity. Furthermore, the Social Justice Scale (Torres-Harding et al., 2011) will be used to assess conceptual overlap with broader justice-oriented attitudes.

This phase of the research is currently in progress. Following qualitative refinement of the items based on the preliminary study, the scale was reduced to 22 items. As data collection has only recently been completed, it is not yet possible to draw firm conclusions regarding the scale's validity. However, initial reliability analyses are promising: the 22-item scale demonstrated good internal consistency, with a Cronbach's alpha of .89.

We are currently analysing the dataset and preparing for future steps, and aim to finalise a deployable epistemic justice scale by the end of this process, suitable for use in future research.

Implications

The availability of a validated epistemic justice scale has several important implications. Philosophically, it provides a means of studying attitudes that have traditionally been treated in abstract terms. Psychologically, it connects virtue epistemology with empirical research on cognition and social attitudes. In applied contexts, it enables the evaluation of interventions designed to cultivate epistemic virtues, such as educational programs, deliberative training, or institutional reforms aimed at improving testimonial sensitivity.

Overall, this project provides the first step toward empirically grounding a concept that has been philosophically influential but methodologically underdeveloped. It offers a foundation for future work aimed at understanding epistemic justice.

References

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