

Standard Human Mind Model

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Papers like these are the necessary convergence step in the converge-diverge iteration of discovery. While this effort is laudable, it is not rigorous enough. The biggest problem is limiting the scope to "human-like minds" while not formally defining what that means. This gives infinite leeway in omission via justification of being insufficiently human-like.

A interesting contribution of the model is to allow for non-symbolic metadata and task specific information. To some degree, this follows the implementationalist's consolation of non-symbolic neural net processing and symbolic computation, and acknowledges their success in achieving high task performance.

Something missing from the paper is a closer look at how this Standard Model is different from the similarly named one from physics. The physics Standard Model came about because previous models failed to account for observed physical phenomenon. All physics models were evaluated on how accurately and comprehensively they described the world - something directly testable against ground truth. What is the equivalent criterion for mind models? That they can produce behaviours matching human-like brains? How can we evaluate that criterion? The paper suggests the reason for proposing this model is not that it performs better on a set of tests against ground truth, but that it is the consensus of experts in the field. This seems like a weak reason and does not guarantee the usefulness of the resulting model for any purpose.