



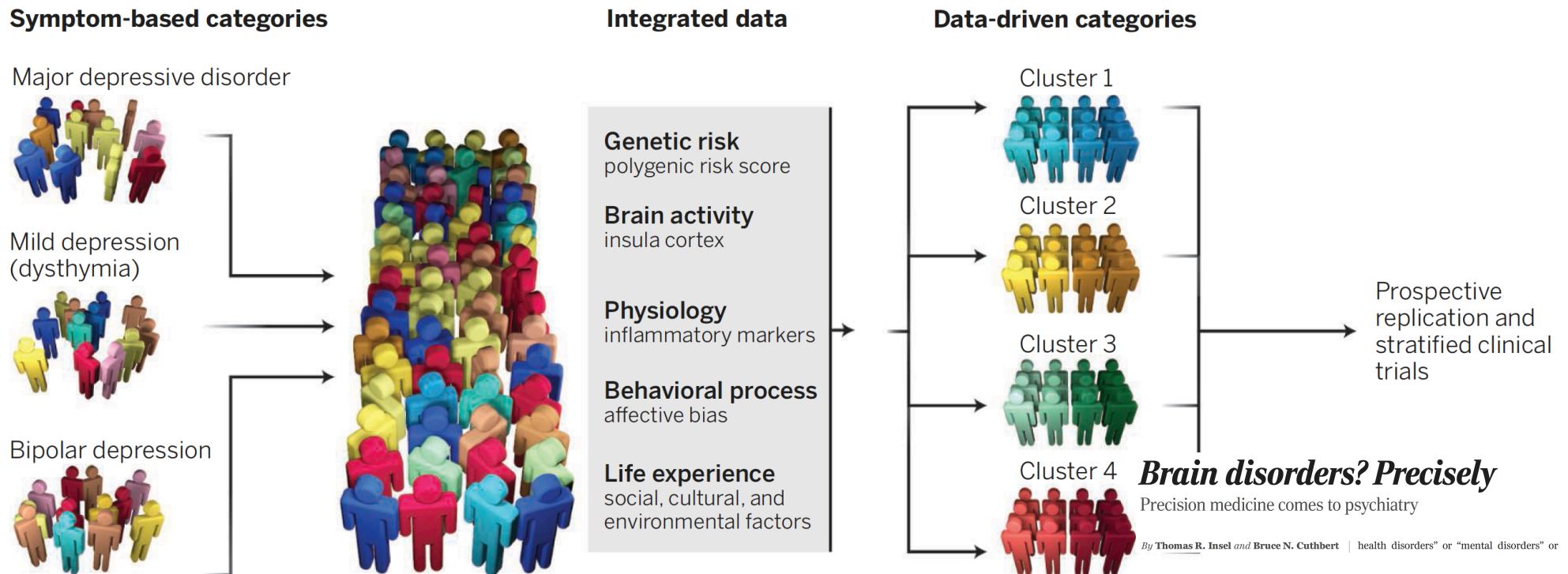
Laureate Institute for Brain Research

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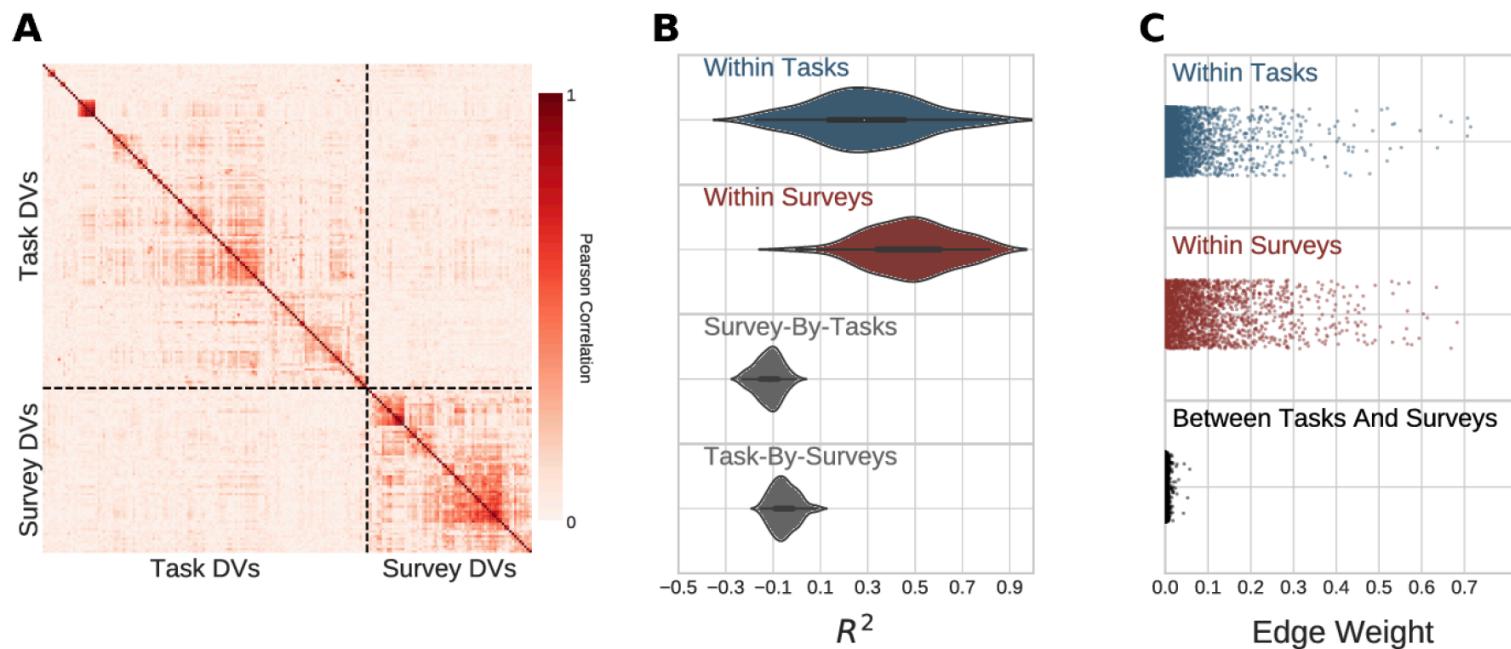
# **Six Thoughts about Computational Psychiatry**

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# Case Control Studies do not have sufficient explanatory depth (Sedgwick, 2014):



# The relationship between Questionnaires and Tasks is weak and complex



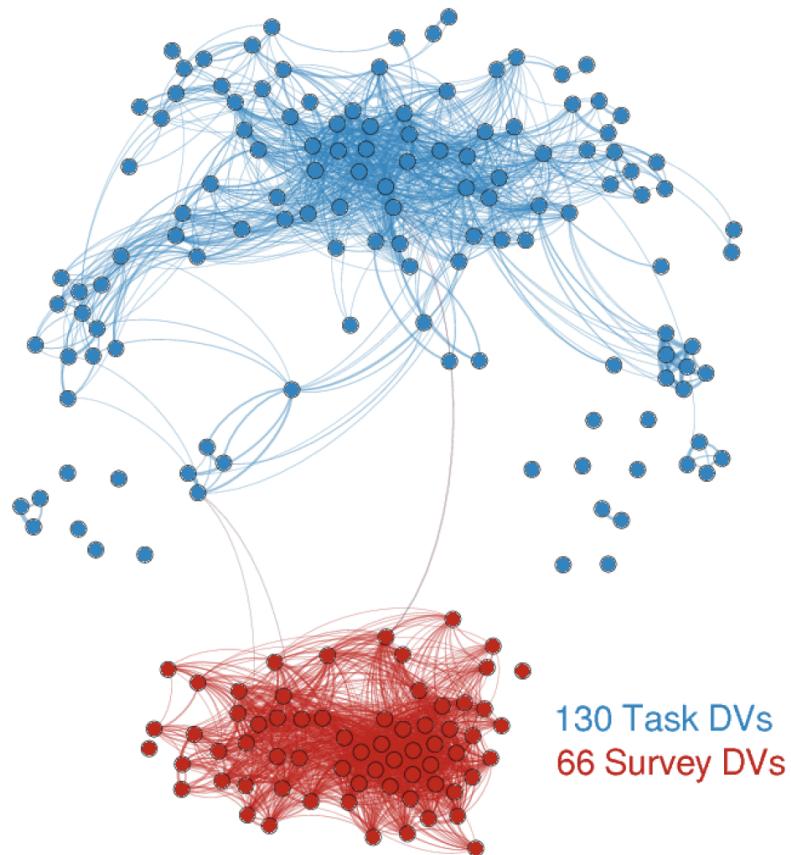
**Title:** Uncovering mental structure through data-driven ontology discovery

**One Sentence Summary:** A framework for cumulative psychological science is used to distill psychological theory and evaluate predictive ability.

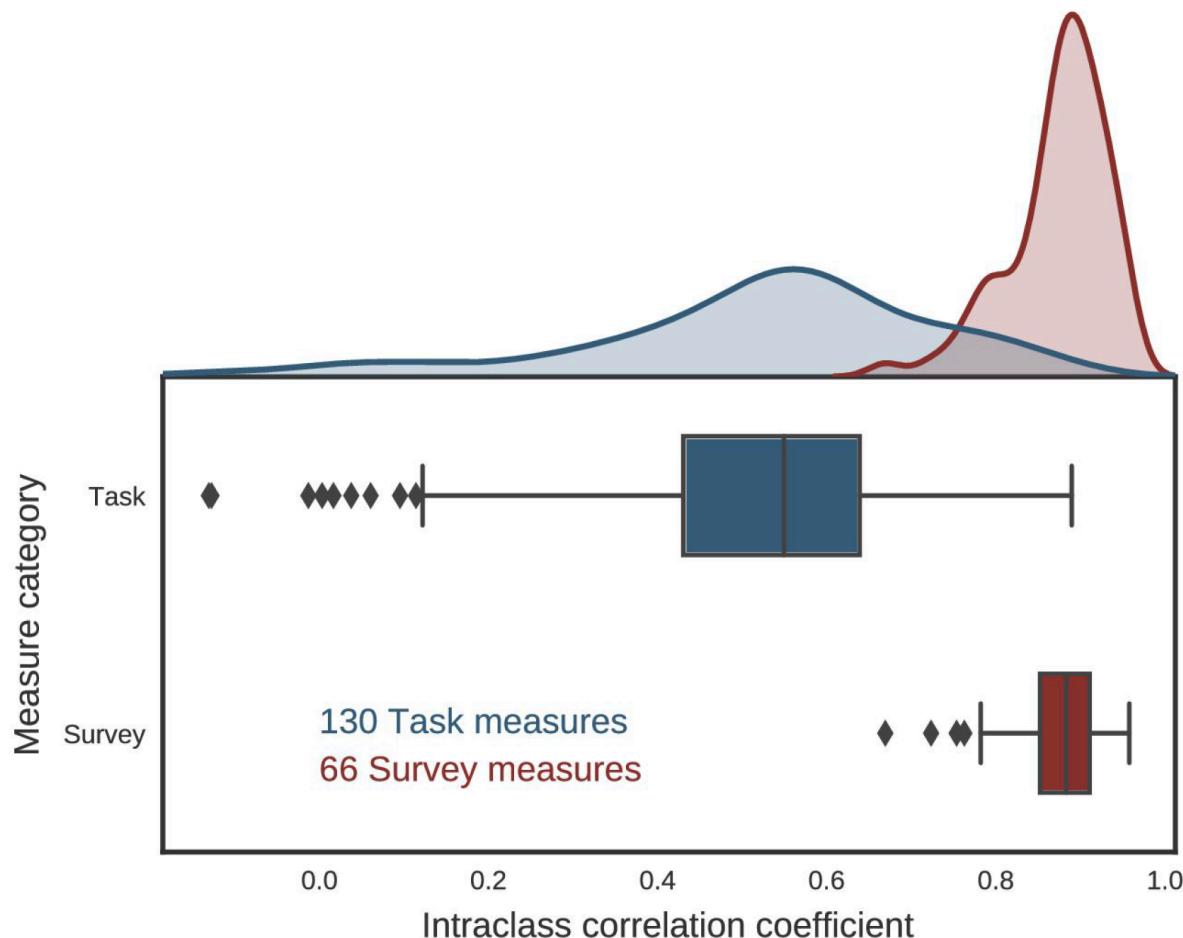
**Authors:** Ian W Eisenberg<sup>1,\*</sup>, Patrick G Bissett<sup>1</sup>, A Zeynep Enkavi<sup>1</sup>, Jamie Li<sup>1</sup>, David P. MacKinnon<sup>3</sup>, Lisa A. Marsch<sup>2</sup>, Russell A. Poldrack<sup>1</sup>

# Questionnaires and Tasks

- Questionnaire DV and Task DV are not closely related.



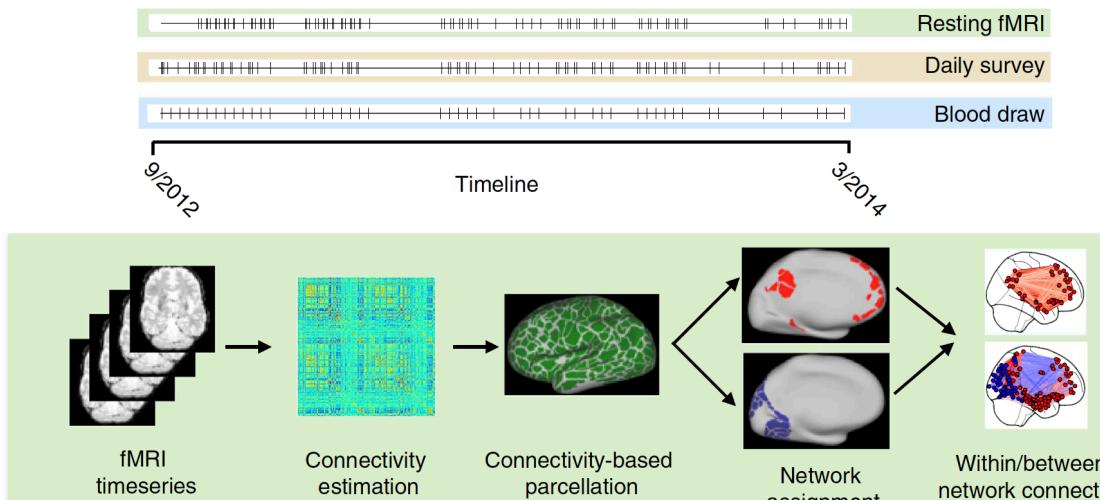
# The reliability of task is modest



**Fig. S1.** Test-retest reliability. Test-retest reliability for the survey and task DVs, as quantified by bootstrapped intraclass correlation coefficient. The full procedure is outlined in Enkavi et al. (9).

# Single Case Designs may be the most overlooked experimental design screaming for computational approaches ([Smith, 2012](#))

- Take
- Uses
- Causes
- Ideas



Long-term neural and physiological phenotyping of a single human

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# We need Predictions and Explanations

