

# Measures of Cognitive Distance and Diversity.

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## Abstract

This paper explains and demonstrates how a model of human causal learning, *Causal Support* (Tenenbaum & Griffiths, 2001, Griffiths & Tenenbaum, 2005), can be used to obtain a meaningful measure of *Cognitive Distance*, the degree to which two people differ in their opinions about the workings of the world. It is then shown how this new measure of Cognitive Distance can be used to calculate *Cognitive Diversity*: the degree of heterogeneity of opinions within a collection of individuals, such as a political party or a research department of a firm or university. These measures are important for theoretical and empirical work on the relationship between Cognitive Diversity and an organization's success in recognizing true relationships in the universe of interest by aggregating over the mental models of its members as well as for theories of how a better "aggregate model," covering a greater set of possible realities, may lead to better organizational decisions and to more organizational robustness (not putting all eggs in one causal theory).