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An Empirical investigation of Joint/Separate Effect on Preference of Causal Explanation

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Abstract

What makes an explanation better than another explanation? Previous studies have suspected that explanatory virtues, such as Simplicity and Scope, affect individuals' evaluation of the explanatory goodness. Although almost all of these studies have focused on the situation that some explanations are presented simultaneously, we do not always obtain some explanations in daily life. In this research, we conducted an experiment to investigate the preference change in causal explanation between Joint and Separate Evaluations. The results showed that Latent scope has a large effect as a criterion for evaluating explanatory goodness regardless of Joint and Separate Evaluation. Furthermore, Simplicity affects the evaluation of explanatory goodness differently between these situations of evaluation; however, the effect of comparison was observed only by online reflection in which evaluation is performed for two explanations simultaneously and not by offline reflection in which evaluation is re-performed after ending all evaluations.