

Tversky's "Intransitivity of Preference" Revisited

Michel Regenwetter
Associate Professor of Psychology
University of Illinois at Urbana-Champaign

Transitivity of preference is a fundamental principle underlying most major rational, prescriptive and descriptive contemporary models of decision making. A transitive person, group or society that prefers choice option x to y and y to z must prefer x to z . Because of transitivity's pivotal role we investigate the property as a null hypothesis: Any claim of empirical violations of transitivity requires proof beyond a reasonable doubt. My talk centers around a seminal paper by Tversky (1969) where he provided empirical evidence for intransitive preference in individual decision makers. I challenge Tversky's (and others') choice of empirical paradigm for investigating transitivity, question the standard operationalization of transitivity via "weak stochastic transitivity" and discuss methodological problems in the analysis of relevant empirical data. I use a very general class of probabilistic models, where the sample space of permissible mental states is a family of transitive preference relations (e.g., rankings of the choice alternatives) and choice data are modeled as originating from a probability distribution over such a sample space. The talk will focus on the conceptual aspects of the models and avoid most technical details.