

Decision Processes Colloquia

Monday, March 23, 2015

Where: 245 JMHH

When: 12:00 – 1:15 pm

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Multiple numeric competencies in judgments and decisions

ABSTRACT: Numeric ability appears to be practically and theoretically important in judgments and choices involving numeric information. Numeric competency, however, may be multiply determined by objective numeracy, subjective numeracy, and symbolic-number-mapping abilities (the latter is thought to tap into internal representations of numeric magnitude and the mapping of symbolic numbers onto those representations). Our results indicate that objective numeracy is associated with explicit number operations in judgments and choices, including number comparisons and calculations. Mapping of symbolic numbers is associated with approximate valuations of risky and non-risky options as well as numeric memory (but not non-numeric memory), supporting a link with superior number discriminations. Finally, individuals lower vs. higher in subjective numeracy have more negative emotional reactions to numbers and appear less motivated and/or confident in numeric tasks. Thus, standard methods in decision research may confound genuine risk attitudes and preferences with people's numerical competencies.