## A descriptive multi-attribute utility model for everyday decisions

Jie W. Weiss · David J. Weiss · Ward Edwards

Published online: 11 June 2009 © Springer Science+Business Media, LLC. 2009

**Abstract** We propose a descriptive version of the classical multi-attribute utility model; to that end, we add a new parameter, momentary salience, to the customary formulation. The addition of this parameter allows the theory to accommodate changes in the decision maker's mood and circumstances, as the saliencies of anticipated consequences are driven by concerns of the moment. By allowing for the number of consequences given attention at the moment of decision to vary, the new model mutes the criticism that SEU models call for an omniscient decision maker. Use of the model is illustrated with a large-scale longitudinal study showing that adolescent smokers have higher utility for smoking than nonsmokers. We also propose to use the model hierarchically to describe everyday decisions that people deal with repeatedly. Big decisions, which set policy, guide a host of nested little decisions, which in turn lead

J. W. Weiss (🖂)

Ward Edwards died in 2005. Although this manuscript was written several years after his passing, he participated in the development of several of the key ideas, especially the notion of option packaging. The new parameter, momentary salience, was introduced to resolve the disconnect between laboratory studies of decision making, in which the options and their consequences are fully laid out before the subject, and everyday decisions, in which the decision maker usually has to determine what the reasonable options are before choosing among them. For further discussion of our collaborative efforts, see the introductions in Weiss and Weiss (2009).

Department of Health Science, California State University, Fullerton, 800 N. State College Blvd., Fullerton, CA 92831, USA e-mail: jweiss@fullerton.edu

D. J. Weiss California State University, Los Angeles, CA, USA e-mail: dweiss@calstatela.edu

W. Edwards University of Southern California, Los Angeles, CA, USA