

# PERSONALITY PREDISPOSITION AND PROBLEM-SOLVING PERFORMANCE IN ILL-STRUCTURED DECISION-MAKING TASKS

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## ABSTRACT (*Work in Progress*)

Decision-making behavior, decision-making processes and decision-making performance have been important areas of psychological, sociological, economic and managerial analyses ever since, pertaining to “scientific” as well as “professional” aspects of problem-solving tasks. Scientific decision-making research heavily concentrates on the description, explanation and the “design” of individual and collective behavior in problem-solving processes, frequently related to problem-solving outcomes analysis.

In this context, a myriad of scientific and practically oriented publications have been issued, dealing with the phenomenon of human decision-making efforts. Also, a huge number of theoretical models and empirical findings have been presented, i.e. so-called normative decision-making models like optimization heuristics, investment appraisal models, decision-making matrices, etc., and so-called explanatory theorems, dealing with actual decision-making behavior, i.e. prospect theory, fairness and reciprocity concepts, limited rationality models etc.

The above mentioned research project focuses particularly on the influence of various and diverse personality predisposition, like intuition and discursion, introversion and extroversion, thinking and feeling, as well as judgment and perception under different “degrees of rationality” and on the efficiency of problem solutions in ill-structured decision-making tasks.

Based on each time dichotomous hypotheses concerning the impact of intuition/discursion, introversion/extroversion etc. on decision-making efficiency, a sample of masters’ and doctoral students as well as practitioners, and a number of “average” people participated in a laboratory experiment. The experiment confronted the experimentees with an ill-structured complex decision-making problem (the so-called NASA study), demanding from them to find a potentially optimal solution for the problem situation. Ill-structured in this context means that the influencing efficiency factors of the task were unknown to the experimentees, the problem factors were relatively numerous and the interdependencies between those factors were relatively difficult to comprehend since the experimentees were “laymen” and not experts, as far as the decision-making task was concerned (see D. Steinmann: *Expertensysteme in CIL*, 2008).

The laboratory experiment was aiming at testing our basic hypothesis, which suggests a cause-effect relation between the above mentioned personality dispositions and the related decision-making performances.

Tentatively, the findings of the experimental study indicate that obviously a kind of a “balanced mixture” between intuitive/discursive, extroverted/introverted etc. personality predispositions tend to sustainably improve decision-making and problem-solving performance in complex decision-making situations.

**Keywords:** decision making, problem-solving, intuition, discursion, efficiency.