

# Limited Willpower

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## Abstract

In this paper we are interested in the behavior of individuals who have imperfect control over their immediate urges. Willpower as cognitive resource model has been proposed by experimental psychologists and has also been used by economists to explain various behavioral paradoxes. This paper complements this literature by providing a foundation for the choice behavior that can be represented by the limited willpower model. We behaviorally characterize a representation that reflects the behavior of a decision maker who has cognitive limitation in exercising self restraint. In our model, we observe the agent's ranking of alternatives and choices the agent makes. From these observations, we derive a representation that captures key behavioral traits of willpower constrained decision making, and leads to a simple characterization which is mathematically challenging to derive. We also illustrate by means of an IO application that the model is tractable and provides distinct insights.

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