a process model of procrastination

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Abstract

Procrastination is prevalent. Empirical studies of procrastination have identified various contributing factors underlying procrastination. Models of procrastination, however, have only considered temporal discounting and have ignored other factors. Moreover, existing models of procrastination are mostly conceptual, and there is a lack of process models to explain why people procrastinate. Here, we use reinforcement learning theory to build a process model of procrastination. The model assumes that people maximize expected utility while minimizing the total cost of the effort. Our model makes several predictions: 1. Strong temporal discounters will delay working early and rush to work near the deadline; 2. If at low effort cost, cost is sensitive to increases in effort, people will delay working until the last minute; 3. If time pressure or effort cost is high, perfectionists will not work at all. We designed a behavioral experiment to study the factors underlying procrastination and to test our model predictions.