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Make-or-break: chasing risky goals or settling for safe rewards?

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Abstract: Humans regularly invest time towards activities characterized by dramatic success or failure outcomes, where critically, the outcome is uncertain ex-ante. How should people allocate time between such make-or-break activities and other safe alternatives, where rewards are more predictable (e.g., linear) functions of time? We present a formal framework for studying time allocation between these two types of activities, and explore (optimal) behavior in both one-shot and dynamic versions of the problem. In the one-shot version, we illustrate the striking discontinuous relation between peoples skill and optimal time allocation to the make-or-break task. In the dynamic version, we formulate both fully rational and boundedly rational strategies, both defined by a giving up threshold, which adaptively dictates when one should cease pursuit of the make- or-break goal. Comparing strategies across environments, we investigate the cost of sidestepping the computational burden of full rationality.