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# Aiming to choose correctly or to choose wisely? The optimality-accuracy trade-off in decision under uncertainty

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## Abstract

When making a decision under uncertainty, individuals aim to achieve optimality. In general, an accurate decision is optimal. However, in many real life situations asymmetric stakes induce a divergence between optimality and accuracy (e.g. medical decision-making). We highlight this optimality-accuracy trade-off and study its origins with two experiments of perceptual decision with asymmetric payoffs allowing for the use of Signal Detection Theory as a normative benchmark. The first experiment confirms the existence of an optimality-accuracy trade-off with a leading role of accuracy. The second experiment explains this trade-off by the concern of people for being right.

**Keywords:** optimality, accuracy, signal detection theory, psychophysics, incentives

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