

# **Can epistemic vigilance explain the underuse of social information? Evidence that a competitive incentive favoured dishonest advice and reduced the influence of social information.**

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## **Abstract**

Cultural evolutionary theory has shown that social learning is adaptive across a broad range of conditions. However, humans frequently under-utilise beneficial social information in experimental settings – a phenomenon termed egocentric discounting. We tested the hypothesis that influence is affected by expected reliability using a two-player online task in which both participants answered the same questions in series. After a first attempt, player 2 saw either advice from player 1 or their actual answer (spying). In addition, we manipulated the payoff structure of the task such that it had either a cooperative, competitive, or neutral incentive. As predicted, advice was least honest and social information overall had the least influence in the competitive condition. Player 2 also chose to spy rather than receive advice when offered the choice. Unexpectedly and regardless of the payoff structure, advice was more influential when player 2 could choose information but spying was more influential otherwise.