How does social learning affect trapped learners?

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Abstract

Learning traps are stable sub-optimal decision rules that discourage necessary exploration for learning optimal decision rules. We investigated how trapped learners respond to observational learning opportunities. We predicted participants would behave according to a selective value-shaping model, thus escaping the learning trap and learning the optimal rule via observational learning. We did find that trapped learners were significantly more likely to escape their trap in the observational learning condition compared to the asocial control, though most still remained trapped. We found that decision rule inference, not trust, was the key limiting factor in successful observational learning. When trapped learners correctly inferred a partner's optimal rule, they almost invariably adopted it. These findings suggest social interventions for learning traps should support understanding of others' decision strategies rather than merely exposing learners to alternative choices, and theoretical models must extend beyond simple value-shaping to account for decision rule inference processes.

In D. Barner, N.R. Bramley, A. Ruggeri and C.M. Walker (Eds.), *Proceedings of the 47th Annual Conference of the Cognitive Science Society*