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Encouraging far-sightedness with automatically generated descriptions of optimal planning strategies: Potentials and Limitations

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Abstract

People often fall victim to decision-making biases, e.g. short-sightedness, that lead to unfavorable outcomes in their lives. It is possible to overcome these biases by teaching people better decision-making strategies. Finding effective interventions is an open problem, with a key challenge being the lack of transfer to the real world. Here, we tested a new approach to improving human decision-making that leverages Artificial Intelligence to discover procedural descriptions of effective planning strategies. Our benchmark problem regarded improving far-sightedness. We found our intervention elicits transfer to a similar task in a different domain, but its effects in more naturalistic financial decisions were not statistically significant. Even though the tested intervention is on par with conventional approaches, which also struggle in far-transfer, further improvements are required to help people make better decisions in real life. We conclude that future work should focus on training decision-making in more naturalistic scenarios.