

Evaluating Planning Through Play: Exploring the Use of Mini Games to Assess Planning Abilities

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Abstract

Planning, or the ability to simulate and execute a sequence of steps toward a goal, is crucial for success in many activities. However, common tasks used to measure planning often fail to correlate with one another, suggesting they may not assess the same underlying skill. To explore a novel measurement of planning, this study examined performance on four planning mini games, a non-planning control game, and three standard planning tasks. Results revealed that the planning mini games exhibited stronger intercorrelations than traditional tasks, suggesting they may capture a more consistent and unified planning construct. Notably, two of the selected mini games emerged as particularly promising paradigms for assessing planning skills with reduced confounds from processing speed. These findings provide initial evidence that mini games such as those explored here could complement or replace traditional cognitive planning tasks, offering an appropriately complex evaluation of the multifaceted skill of planning.