

In search of the elusive Initial model

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Abstract: A key assumption of Mental Model theory (Johnson-Laird & Byrne, 2002) is that additional models increase working memory load. Accordingly, reasoners should tend to reason with a minimal representation (i.e., Initial Model: IM) when overburdened. This has never been demonstrated. In three studies, we presented adult Ps with conditional inferences, and burdened processing by restricting the time allotted (5 s. or 7 s) and by varying the degree of arbitrariness of the conditionals. With familiar conditionals, a small but significant (6.25