Abstract

Background: We report the results of two experiments that examine the mental representations underlying the comprehension and reasoning stages of negative exceptive conditionals requiring the subjunctive (‘B a menos que A’ and ‘B a no ser que A’ = ‘B unless A’) and the indicative mood (‘B excepto si A’ and ‘B salvo si A’ = ‘B except if A’). Method: A truth table task was employed to infer the mental representation that people have in mind when they reason with negative exceptive conditionals. Results: Both experiments showed that participants selected the possibility ‘B & not-A’ more frequently than the possibility ‘not-B & A’ when the conditional required the indicative mood, but they selected the possibilities ‘B & not-A’ and ‘not-B & A’ equally frequently when the conditional required the subjunctive mood. Conclusions: Exceptive conditionals in the subjunctive mood lead people to think in terms of dual possibilities, whereas the indicative mood leads people to consider just one possibility.

Keywords

Reasoning, mental models, deductive reasoning, exceptive conditional.