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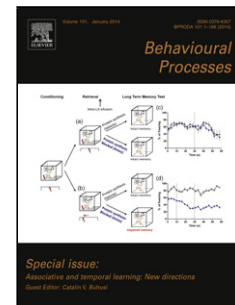
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The hierarchy of food, sociality, and experience in spatial decision-making by food-deprived rats

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Highlights

- Rats with different spatial knowledge regarding food location were tested together
- Food availability was the prime factor in shaping spatial decisions
- This primacy was further augmented by socializing with the other rat
- Dyad partners displayed a greater tendency to visit baited locations together
- Rats' familiarity with past locations was least influential in foraging decisions

Abstract

We examined whether a hierarchy existed among attraction to (i) food; (ii) social partner(s); and (iii) familiar feeding location in spatial decision-making in rats. To determine this, lone food-deprived rats were trained to collect baits from 16 salient equispaced objects arranged in a grid layout. Some rats were trained with only the eight objects on the left baited; other rats with only the eight objects on the right baited. After training, dyads of one left-trained and one right-trained rats were tested, with the eight baits now divided into four on the left and four on the right sides of the arena. Rats were free either to go to the familiar objects that had been baited in the lone training trials, regardless of whether these objects were

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