THAT'S MY SPOT! EXAMINING THE FORMATION OF SPATIAL HABITS IN A NATURALISTIC ENVIRONMENT

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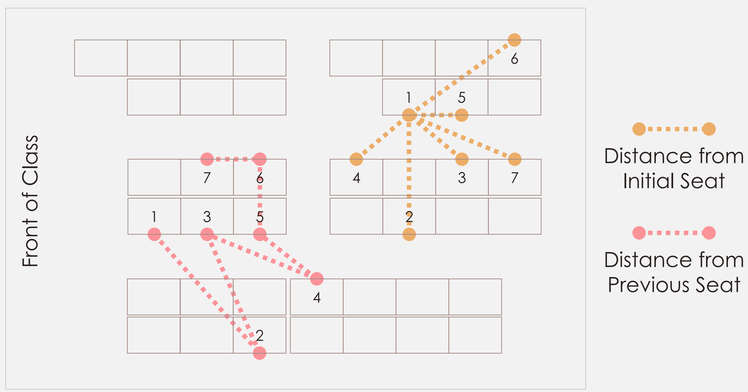
INTRODUCTION

Previous research suggests that individuals tend to form spatial habits.[1] However, it is unclear how spatial habits develop over time. In the current study, we examine the idea that spatial habit formation may be the result of a stabilization process[2] in which individuals' spatial behaviour becomes increasingly fixed over time.

METHOD

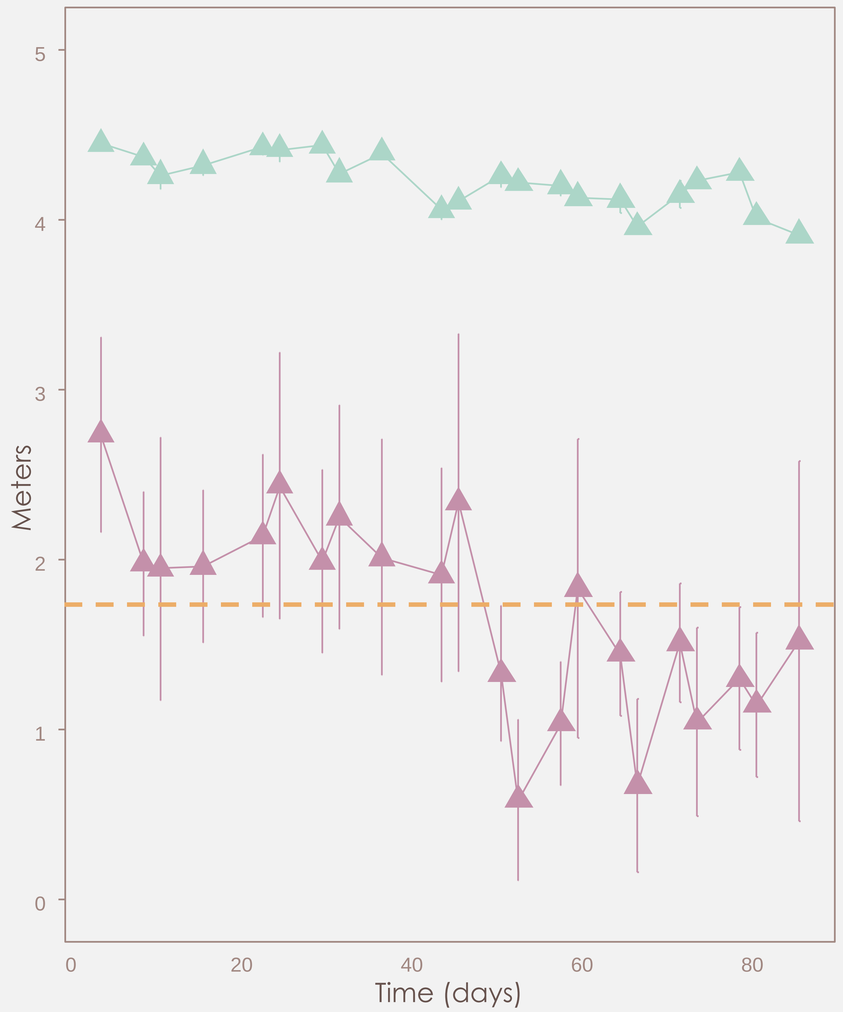
Students' seating choice in 4 different classes was tracked over a 12-week period

CLASSROOM LAYOUT

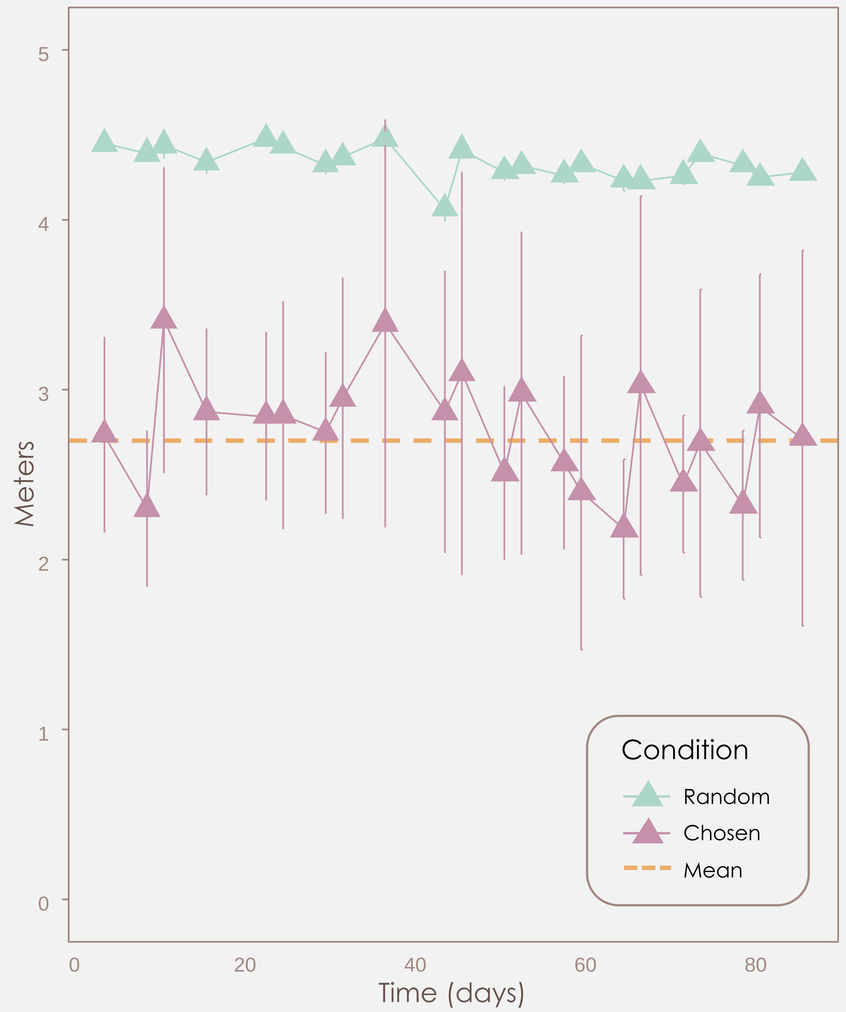


- Based on spatial coordinates, distance between any given seat and individuals' *previous* seat choice, as well as where they *first* sat were calculated
- Data only include seating choice made during lectures (from 30 minutes before class starts until class ends); exam days were excluded

DISTANCE FROM PREVIOUS SEAT



DISTANCE FROM INITIAL SEAT



SUMMARY

- Individuals' seating choice reflects a location bias, as evidenced by the overall discrepancy between their actual chosen seats and simulated random seat choice
- Consistent with the stabilization hypothesis, seating choice near the start of the 12-week period was more varied than those near the end
- In addition, individuals' order of arrival also affected where they chose to sit; the later the time of arrival, the further away individuals tended to sit from where they sat in a previous class

REFERENCES

1. Zhu, M. J., & Risko, E. F. (2016). Spatial habit competes with effort to determine human spatial organization. *The Quarterly Journal of Experimental Psychology*, 69(7), 1255-1264.
2. Hammond, K. J., Converse, T. M., & Grass, J. W. (1995). The stabilization of environments. *Artificial Intelligence*, *72*(1), 305-327.

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