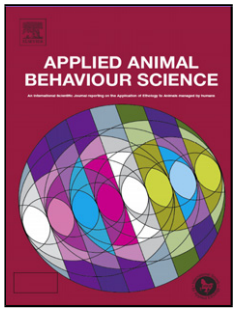

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Authors: Courtney Graham, Marina A.G. von Keyserlingk, Becca Franks

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Free-choice exploration increases affiliative behaviour in zebrafish

Courtney Graham, Marina A.G. von Keyserlingk, and Becca Franks*

Animal Welfare Program, University of British Columbia, 2357 Main Mall, Vancouver BC V6T 1Z4, Canada

*Corresponding author: beccafranks@gmail.com, 1-646-637-1282

Highlights

- Zebrafish readily explored novel space in a free-choice exploration test
- Zebrafish did not show any signs of fear or anxiety in response to the novelty
- The exploration opportunity decreased aggression and increased shoal cohesion and group coordination
- After several days of exposure to the novel space, social dynamics returned to normal
- Providing free-choice exploration opportunities may benefit zebrafish welfare

Abstract

Cognitive stimulation has been shown to be rewarding and capable of eliciting positive emotions in several species. In contrast to the abundant learning and exploration opportunities available in nature, captive environments can be under-stimulating—with the potential to induce anhedonia and reduce welfare. Zebrafish are now a popular scientific model, in part because of their high cognitive function and sensitivity to environmental manipulations, yet little is known regarding