eScholarship

International Journal of Comparative Psychology

Title

Erratum: How and Why Does Category Learning Cause Categorical Perception?

Permalink

https://escholarship.org/uc/item/8nr9w8p6

Journal

International Journal of Comparative Psychology, 31(0)

ISSN

0889-3675

Author

Pérez-Gay, Fernanda

Publication Date

2018

DOI

10.46867/ijcp.2018.31.00.01

Copyright Information

Copyright 2018 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/



2018, 31 Heather M. Hill Editor *Peer-reviewed*

Erratum: How and Why Does Category Learning Cause Categorical Perception?

Published: Special Issue: Categorization: Causes and Consequences, Volume 30, 2017

Fernanda Pérez-Gay^{1,2}, Christian Thériault¹, Madeline Gregory², Hisham Sabri¹, Dan Rivas¹, and Stevan Harnad^{1,3}

¹Université du Québec à Montréal ²McGill University ³University of Southampton, UK

In the Results section for Experiment 2 of the original publication (p. 10), replace the following paragraph:

"To test whether there were differences in separation or compression between the easier and harder condition we did repeated-measures ANOVAS with difficulty as a between-subject factor. Between-category separation (positive DiffB) was significant in both the easy, F(1,9) = 36.23, p < 0.001, and the hard condition, F(1,7) = 11.284, p = 0.012. In the easy condition there was also significant within-category compression (negative DiffW), t(15) = -2.461, p = 0.026, but not in the hard condition, t(7) = 1.165, p = 0.282 (Figure 6). The differences between the easy and hard condition in between-category separation were not significant, F(1,22) = 0.477 p = 0.497, but the differences in within-category compression were significant, F(1,22) = 5.330, p = 0.031."

With this corrected version:

"A difference between the easier and the harder condition was found for Successful Learners': While there was significant between-category separation in both the easier (mean diffB = 1.82), t(15) = 5.70, p < 0.001, Cohen's d = 1.32, and the harder conditions (mean diffB = 1.35), t(7) = 3.36, p = 0.012, Cohen's d = 1.194, within-category compression was only significant in the easier condition (mean diffW = -0.89), t(15) = -2.48, p = 0.025, Cohen's d = 0.87 (Figure 6). The harder condition showed only a small, non-significant separation for within category pairs (mean diffW = 0.46), t(7) = 1.17, p = 0.282, Cohen's d = 0.43. These results corroborate the existence of the separation effect in both conditions.

Repeated-measures ANOVAS with difficulty as a between-subject factor found no significant hard/easy difference in between-category separation, F(1,22) = 0.66, p = 0.426, partial $\eta^2 = 0.028$, Observed Power = 0.12, but there was a significant hard/easy difference in within-category compression, F(1,22) = 5.53, p = 0.028, partial $\eta^2 = 0.194$, Observed Power = 0.62."

For Experiment 3's result section (p. 15), the following ANOVA result was corrected from:

""A one-way ANOVA with Linear Contrasts tested the effect of task difficulty on separation and compression for learners. The effect of difficulty level on separation, F(1,12) = 2.792, p = 0.05, was significant, with a significant linear trend, F(1,12) = 6.323, p = 0.021; for compression, difficulty had no significant effect and there was no linear trend (Figure 11)."

to:

"A one-way ANOVA with Linear Contrasts tested the effect of task difficulty on separation and compression for learners. The effect of difficulty level on separation (diffB), F(3, 37) = 1.95, p = 0.138, was not significant, but it showed a significant weighted linear trend, F(3, 37) = 5.13, p = 0.029; for compression (diffW), difficulty had no significant effect, F(3,37) = 1.30, p = 0.289, and there was no linear trend, F(3, 37) = 0.327, p = 0.629 (Figure 11)."