



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

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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).”