

Corrigendum: Selectively Distracted: Divided Attention and Memory for Important Information

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Original article: Middlebrooks, C. D., Kerr, T., & Castel, A. D. (2017). Selectively distracted: Divided attention and memory for important information. *Psychological Science*, 28, 1103–1115. doi:10.1177/0956797617702502

The authors of this article recently discovered an error in the programming code used to present the to-be-remembered information to participants in Experiment 1. The error does not change the conclusions of the article in any way, but this Corrigendum is updating certain passages to acknowledge it. In addition, relevant statistics are being updated to reflect the slight difference across conditions that the error caused, all of which occurred in Experiment 1.

In the Procedure subsection under the Method section (p. 1105), the following new paragraph is being added to the end of the first paragraph:

Owing to a programming error, the 20th item in each list was not presented to participants in the full-attention condition. Because of the randomization used to select the items, assign the values, and determine the order of presentation, this 20th item did not systematically differ across participants or among conditions. The obtained data were analyzed in light of this missing item.

In the Results section, the following changes are being made to the Overall Recall Performance subsection (p. 1106).

First, several statistics in the third and fourth sentences of the second paragraph are being replaced. The corrected passage will read as follows:

A 4 (condition: full attention, divided attention, familiar music, unfamiliar music) × 6 (list: 1–6) repeated measures analysis of variance (ANOVA) revealed a significant effect of list, F(4.57, 858.24) = 14.19, MSE = 0.01, p < .001, generalized η^2 (η^2_G) = .04. . . . Critically, there was also a significant effect of condition, F(3, 188) = 16.95, MSE = 0.06, p < .001, $\eta^2_G = .12$.

Second, two new sentences are being added at the end of same paragraph: "Participants in the familiar-music condition also recalled a significantly smaller proportion of items overall than did participants in the full-attention condition, adjusted p = .025. (See the Supplemental Material for consideration of these differences.)"

Third, the last sentence of the third paragraph in this section is being deleted, so the paragraph will now end with "... consistent with prior research (Castel & Craik, 2003; Craik et al., 1996; Naveh-Benjamin et al., 2000)."

The following changes are being made to the Value-Directed Remembering and Selectivity subsection under Results (p. 1107).

First, the second sentence of the second paragraph is being expanded as follows: "Value and list were entered as group-mean-centered variables, such that value was anchored on the mean value point of the studied items within each list, and list was anchored on the mean list (3.5)."

Second, two new sentences are being added to the end of that same paragraph: "(Further analyses accounting for the missing item in the full-attention condition are available in Table S2 in the Supplemental Material. Results were consistent with those reported here.)"

Third, four p values are being changed in three sentences of the fourth and fifth paragraphs. The first sentence of the fourth paragraph will now end with "and this relationship was not significantly different across conditions, ps > .463." The fourth sentence of the fourth paragraph will now read, "There was not a significant effect of list on recall for participants in the full-attention condition ($\beta_{20} = 0.04$, p = .066), nor was there an evident Condition × List interaction, ps > .105." And the end of the first sentence of the fifth paragraph is being changed to read, ". . . which did not differ across the other conditions, ps > .371."

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In the Bayesian analysis subsection (p. 1108), the Bayes factors are being updated in the second paragraph, fourth and fifth sentences, which will now read as follows:

For condition, the resultant Bayes factor $_{10}$ (BF $_{10}$), which reflects the probability of the data under the alternative hypotheses (1) relative to the null hypothesis (0), was 0.016. In other words, the present data are 62.50 times (1/0.016) more likely to be consistent with the null model than with the alternative.

In addition, the values for the full-attention condition are being updated in Table 1 (p. 1106), and eight of the values in Table 2 (p. 1107) are being updated. Values are also being updated in Figure 1 (p. 1107) and Figure 2 (p. 1108).

Finally, the second and third sentences of the Discussion section (p. 1109) are being updated to read as follows: "Memory overall was not impaired by the unfamiliar music distractor relative to memory in the full-attention condition. . . . Memory was, however, consistently impaired by the digit-detection task, yet selectivity was maintained."

Table 1. Proportion of Recalled Items as a Function of Study Condition and List in Experiment 1

Condition	List						
	1	2	3	4	5	6	Average
Full attention	.36 (.15)	.40 (.14)	.42 (.15)	.42 (.13)	.43 (.15)	.42 (.13)	.41 (.10)
Divided attention	.18 (.10)	.24 (.09)	.27 (.12)	.29 (.10)	.29 (.11)	.30 (.10)	.26 (.08)
Familiar music	.33 (.14)	.35 (.10)	.36 (.17)	.38 (.18)	.38 (.18)	.34 (.16)	.35 (.11)
Unfamiliar music	.31 (.14)	.37 (.17)	.38 (.13)	.37 (.15)	.37 (.15)	.38 (.18)	.37 (.11)

Note: Standard deviations are presented in parentheses.

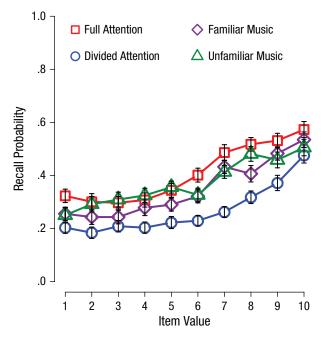


Fig. 1. Results from Experiment 1: mean proportion of items recalled across the six lists as a function of item value and study condition. Error bars show ± 1 *SE*.

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Table 2. Fixed Effects From the Two-Level Hierarchical Generalized Linear Model Predicting Recall Performance From Item Value, List, and Study Condition in Experiment 1

Predictor	β
Intercept (β_{00})	-0.43***
Divided attention vs. full attention (β_{01})	-0.71***
Familiar music vs. full attention (β_{02})	-0.29**
Unfamiliar music vs. full attention (β_{03})	-0.16
Value (β_{10})	0.16***
Divided attention vs. full attention (β_{11})	0.003
Familiar music vs. full attention (β_{12})	0.01
Unfamiliar music vs. full attention (β_{13})	-0.03
List (β_{20})	0.04^{\dagger}
Divided attention vs. full attention (β_{21})	0.04
Familiar music vs. full attention (β_{22})	-0.03
Unfamiliar music vs. full attention (β_{23})	0.01
List × Value (β_{30})	0.03**
Divided attention vs. full attention (β_{31})	0.01
Familiar music vs. full attention (β_{32})	-0.01
Unfamiliar music vs. full attention (β_{33})	-0.01

Note: The logit link function was used to address the binary dependent variable.

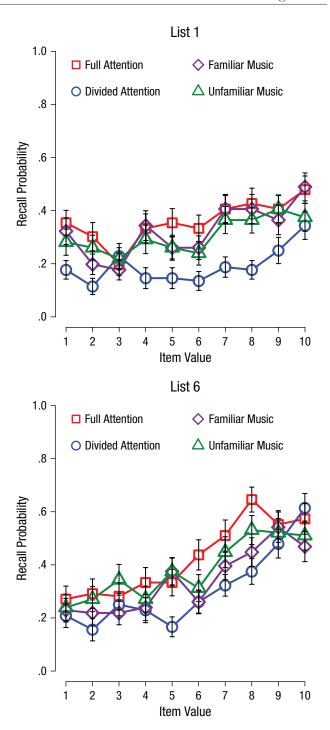


Fig. 2. Results from Experiment 1: mean proportion of items recalled as a function of item value and study condition, separately for List 1 and List 6 (the final studied list). Error bars show ± 1 *SE*.

p < .10. **p < .01. ***p < .001.