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Correction

Corrigendum: Exploration and exploitation during information search and consequential choice

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An error occured in the paper of Gonzalez and Dutt (2016) that was recently published in JDDM. The description of the Sampling-H calculation which appears in the Methods section of the paper (page 4, paragraph above the results section) is inaccurate and it appears in the original paragraph as: "Then, we checked whether the option sampled by a participant was the high expected value option, and coded this as 1; otherwise, the choice was coded as 0. We then aggregated high choices across all participants and problems for different samples and defined the Sampling-H rate per sample." The paragraph above should be replaced with the new paragraph as follows: "Then, for each sample, we calculated the natural mean (Hertwig & Pleskac, 2008) for each option by summing all the experienced outcomes in the respective option and dividing by the number of samples up to the current one. If the option with the higher natural mean corresponded to the option with the higher expected value, the trial was coded as 1; otherwise it was coded as 0. We then aggregated the codes across all participants and problems for different samples and defined the Sampling-H rate per sample."

Following this procedure produces the graph shown in Fig. 3. The figure supports learning effects over time (i.e., the effect of sample size on sampling error): the option with the higher natural mean corresponds to the higher expected value. However, Sampling-H does not reflect direct sampling behavior of the high expected value option as implied by the original paragraph. The interpretation of Sampling-H throughout the article should therefore be in agreement with the meaning stated in the new paragraph.

The R and Matlab scripts that demonstrate the correct procedure for calculating Sampling-H and generate Figure 3 are available from the authors and online as supplementary materials. We thank Jeffrey Chrabaszcz, DDMLab, for producing the R code. We also thank an anonymous commentator for pointing out this error.

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References

Gonzalez, C. & Dutt, V. (2016). Exploration and exploitation during information search and consequential choice. *Journal of Dynamic Decision Making, 2*, 6. doi:10.11588/jddm.2016.1.29308

Hertwig, R. & Pleskac, T. J. (2008). The game of life: How small samples render choice simpler. In N. Chater & M. Oaksford (Eds.), *The probabilistic mind: Prospects for Bayesian cognitive science (pp. 209-235)*. Oxford, UK: Oxford University Press.