## CORRECTION Open Access



## Correction: Differentially altered social dominance- and cooperative-like behaviors in *Shank2*- and *Shank3*-mutant mice

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Correction to: *Molecular Autism* (2020) 11:87. https://doi.org/10.1186/s13229-020-00392-9.

In this article, the authors note that errors were inadvertently introduced in Additional file 1, owing to a lapse in attention during final figure preparation prior to submission. Duplicated images were erroneously presented in Figure \$3 (an LS section from control mice under naive condition and an LS section from Shank $2^{\Delta 6-7}$ -KO mice under social cooperation test condition). In addition, thorough reanalysis of all cropped images of the whole-brain sections from Control, *Shank* $2^{\Delta 6-7}$ -KO, and  $Shank3^{\Delta 9}$ -KO mice revealed that the representative images in Figure S3 (NaCC section from Shank $2^{\Delta 6-7}$ -KO mice under social dominance test conditions) and Figure S4 (NaCC section from Control and Shank3 $^{\Delta 9}$ -KO mice under social dominance test conditions) were incorrect. These errors partly stemmed from incorrect cropping of the intended brain regions from a single whole-brain section. Note that, in some cases, the presentation of overlapping representative images denoted as different brain subregions is intentional. This is because these images were of the same whole-brain section and the subregions were anatomically adjacent to each other. These corrections do not alter the results or conclusions reported in the paper.

Additional file 1 has been replaced by the corrected version in the original article, and the corrected version of Addition file 1 is attached to this Correction.

## **Supplementary Information**

The online version contains supplementary material available at https://doi.org/10.1186/s13229-024-00612-6.

**Additional file 1: Figure S1.** Analysis of  $Shank2^{\Delta 6-7}$  and  $Shank^{3\Delta 9}$  mice in the three-chamber test. **Figure S2.** Matching strategy and analyzed parameters in social dominance tests. **Figure S3.** Representative images showing c-Fos immunostaining in the indicated brain regions of Shank2<sup> $\Delta 6-7$ </sup> mice. **Figure S4.** Representative images of c-Fos immunostaining in the indicated brain regions of Shank3<sup> $\Delta 9$ </sup> mice. **Figure S5.** Quantitative analyses of c-Fos-positive puncta intensity across 12 brain regions of Shank2<sup> $\Delta 6-7$ </sup> and Shank3<sup> $\Delta 9$ </sup> mice. **Table S1.** Details on statistics for behavioral analyses presented in Fig. 1 and S1. **Table S2.** Details on statistics for c-Fos puncta density analyses. **Table S3.** Details on statistics for c-Fos puncta intensity analyses.

Published online: 30 July 2024

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The online version of the original article can be found at https://doi.org/10.1186/s13229-020-00392-9.

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