### Check for updates

### **OPEN ACCESS**

EDITED BY Douglas F. Kauffman, Medical University of the Americas – Nevis, United States

REVIEWED BY Jodi Asbell-Clarke, TERC, United States Hui Chun Chu, Soochow University, Taiwan

\*CORRESPONDENCE Ching Chang ⊠ chingtw2006@gmail.com

RECEIVED 26 May 2023 ACCEPTED 20 June 2023 PUBLISHED 28 June 2023

#### CITATION

Hsu T-C, Chang C, Wu L-K and Looi C-K (2023) Corrigendum: Effects of a pair programming educational robot-based approach on students' interdisciplinary learning of computational thinking and language learning. *Front. Psychol.* 14:1229357. doi: 10.3389/fpsyg.2023.1229357

### COPYRIGHT

© 2023 Hsu, Chang, Wu and Looi. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

# Corrigendum: Effects of a pair programming educational robot-based approach on students' interdisciplinary learning of computational thinking and language learning

# Ting-Chia Hsu <sup>1</sup>, Ching Chang <sup>1</sup>\*, Long-Kai Wu<sup>2</sup> and Chee-Kit Looi <sup>3</sup>

<sup>1</sup>Department of Technology Application and Human Resource Development, National Taiwan Normal University, Taipei City, Taiwan, <sup>2</sup>Faculty of Artificial Intelligence in Education, Central China Normal University, Wuhan, China, <sup>3</sup>National Institute of Education, Nanyang Technological University, Singapore, Singapore

#### KEYWORDS

Interdisciplinary activities, educational robots, pair programming, language learning, trial-and-error loops

### A corrigendum on

Effects of a pair programming educational robot-based approach on students' interdisciplinary learning of computational thinking and language learning

Hsu, T.-C., Chang, C., Wu, L.-K., and Looi, C.-K. (2022). *Front. Psychol.* 13:888215. doi: 10.3389/fpsyg.2022.888215

In the published article, there was an error in one of the p-values stated in the Results section.

A correction has been made to *Results, Learning Anxiety, Paragraph 2*. The corrected paragraph is shown below.

Table 5 presents that the five subscales of learning anxiety in the post-questionnaire differed significantly between the two groups (Wilks' lambda = 0.408, F = 7.26, p < 0.001, Eta = 0.59). The Bonferroni method was then used to analyse the confidence intervals. The results of the *post hoc* comparison indicated that the EFL group showed lower learning anxiety than the CSL group for the dimensions of speech anxiety, communication apprehension, and fear of being negatively evaluated by other students.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

## Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.