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Editorial

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This issue features eight regular papers, that are shortly introduced in the following.

"Convergent Validity of Game-Based Assessment: A Meta-Analysis", by Fadillah et al. [1], proposes a meta-analysis aimed to evaluate the convergent validity of GBAs compared to self-report personality measures, addressing ongoing concerns about their psychometric robustness. The study offers an original meta-analytic synthesis of GBA convergent validity, contributing empirical support for their utility while critically highlighting conceptual issues such as circular validation and the absence of standardized frameworks.

"Seriously Playful Business: Game-Based Learning at Work ", by Calza-Perez et al. [2], focuses on The Ecommerce Game, a serious game that helps players learn about digital marketing concepts, develop teamwork skills, improve strategic decision making, and acquire a long-term focus. The study particularly highlights the importance of instructor presence and player–instructor interaction in fostering engagement.

"Investigating the Effects of Feedback Modality on Sustained Attention and Performance in a Serious Game, A Pilot Study", by Golbashi and Baghdadi [3], investigates how different feedback modalities (auditory, visual, and tactile) affect sustained attention during a 12-session training period in a sample of 19 participants. The findings highlight the potential of feedback in serious games to improve sustained attention, addressing a gap in the literature and offering insights for future cognitive training interventions.

" Teacher perspective of collaborative game elements on language acquisition", by Abdullah et al. [4], presents a comparative study aimed to investigate how various game elements influence students' language acquisition across two distinct educational contexts, in the Kurdistan Region and Hungary, focusing on teachers' perspectives. The results indicate that in both the contexts the collaborative game element greatly impacts students' language learning and is perceived as a significant contribution to language acquisition.

"After the Eruption: Tackling Complex Sustainability Issues Through a Role-Playing Simulation", by Maynard et al. [5], evaluates a game in which players are called to perform

resource management and engage in stakeholder collaboration. The authors stress that their results highlight the importance of role-playing for education and training.

"AI Odyssey: Designing and Evaluating a Board Game for Family-Based AI Literacy", by Ding and Holland [6], proposes a non-digital board game called AI Odyssey, intended to promote AI literacy by providing an accessible learning experience without requiring a qualified teacher or digital device.

"Aging Collagen: Fostering Students' Motivation and Understanding through Meaningful Gamification", by Quan et al. [7], presents the design and evaluation of a gamified educational tool, Aging Collagen, aimed at enhancing intrinsic motivation and learning outcomes regarding collagen among lower secondary students. The study identified five key factors that contributed to students' intrinsic motivation: sensory stimuli, simple language, interactive elements, minigames, and virtual characters.

"A design of integrated STEM constructive games in developing the Four Cs in early elementary students", by Ginting et al. [8], proposes a game-based "iSTEM-C" approach for young students, integrating STEM with constructive play. The authors argue that its success in boosting critical thinking, collaboration, communication, and creativity hinges on three key game elements: diverse tools, real-world problem rules, and developmentally-appropriate challenges.

References

[1] Fadillah, R. Hidayat and A. Santoso, "Convergent Validity of Game-Based Assessment: A Meta-Analysis," *International Journal of Serious Games*, vol. 12, no. 4, pp. 5-29, doi:10.17083/10.17083/etxn7795

[2] M. Calza-Perez, C. Martínez-Climent, A. Rey-Martí, J. Sánchez-García, "Seriously Playful Business: Game-Based Learning at Work," *International Journal of Serious Games*, vol. 12, no. 4, pp. 31-48, 2025, doi: 10.17083/bbjfaa40

[3] S. Golbashi, G. Baghdadi, "Investigating the Effects of Feedback Modality on Sustained Attention and Performance in a Serious Game, A Pilot Study," *International Journal of Serious Games*, vol. 12, no. 4, pp. 49-73, 2025, doi: 10.17083/88v16n77

[4] B. M. A. Abdullah, I. D. Dabney-Fekete and T. Ceglédi, "Teacher perspective of collaborative game elements on language acquisition," *International Journal of Serious Games*, vol. 12, no. 4, 75-97, 2025, doi: 10.17083/zkahyq17

[5] P. Maynard, C. Staples, and V. H. Dale, "After the Eruption: Tackling Complex Sustainability Issues Through a Role-Playing Simulation," *International Journal of Serious Games*, vol. 12, no. 4, pp. 99-120, 2025, doi: 10.17083/jr7sdh41

[6] L. Ding and S. A. Holland, "AI Odyssey: Designing and Evaluating a Board Game for Family-Based AI Literacy," *International Journal of Serious Games*, vol. 12, no. 4, pp. 121-145, 2025, doi: 10.17083/dnza4k90

[7] A. Quan, L. M.. van der Lubbe and H. E.K. Matimba, "Aging Collagen: Fostering Students' Motivation and Understanding through Meaningful Gamification," *International Journal of Serious Games*, vol. 12, no. 4, pp. 147-168, 2025, doi: 10.17083/64t74s67

[8] M. B. Ginting, Y. W. Purnomo, and Heryanto, "A design of integrated STEM constructive games in developing the Four Cs in early elementary students," *International Journal of Serious Games*, vol. 12, no. 4, pp. 169-194, 2025, doi: 10.17083/3bcwrq59