



Correction

## Correction: Bucea-Manea-Țoniș et al. Creating IoT-Enriched Learner-Centered Environments in Sports Science Higher Education during the Pandemic. *Sustainability* 2022, 14, 4339

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The authors would like to make the following corrections to their published paper [1]. The changes are as follows:

- (1) We deleted the references below because some negative comments appear on PubPeer regarding them. With this correction, the order of some references has been adjusted accordingly:
  - 54. Ping, D.; Ling, A. Simulation of physical education teaching based on FPGA and wearable VR equipment. *Microprocess. Microsyst.* **2021**, *81*.
  - 66. Lei, T.; Cai, Z.; Hua, L. 5G-oriented IoT coverage enhancement and physical education resource management. *Microprocess. Microsyst.* **2021**, *80*.
- (2) We added two references in order reinforce the validity of our statistical model. With this correction, the order of some references has been adjusted accordingly:
  - 70. Hair, J.F.; Hult, G.T.M.; Ringle, C.M.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 3rd ed.; Sage: Thousand Oaks, CA, USA, 2022.
  - 71. Sarstedt, M.; Hair, J.F.; Pick, M.; Liengaard, B.D.; Radomir, L.; Ringle, C.M. Progress in partial least squares structural equation modelling use in marketing research in the last decade. *Psychol. Mark.* **2022**, *39*, 1035–1064.
- (3) In Section 1.2, Paragraph 9, we changed reference citations [43,44] to [43–45].
- (4) We renumbered the references starting with [54]:

Refs. [52–55] in the text below was replaced with [52–54]:

Today, athletes can use VR glasses for an intense sense of reality when performing (in simulated conditions) different motor actions specific to sports such as [52–55]:

Refs. [56–58] in the text below was replaced with [51,55–57]:

Connectivity learning is based on four primary principles: "autonomy, diversity, openness, and connectedness/interactivity" [56–58].

Ref. [59] in the text below was replaced with [58]:

They cannot be taught like other generations through books and printed courses, because they want to try things, simulate, hear, feel, sense, taste, etc. [59].

Refs. [59–61] in the text below was replaced with [58–60]:

VR, the stimulus connected to the body, and the application's constant feedback lead students to learn the characteristics of motor skills and test different postures/movements without damaging their health [59–61].

Refs. [57,62] and [58,62] in the text below was replaced with [56,61] and [57,61] respectively:



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VR and AR in education are associated by students with deep comprehensive learning due to the movement reproduction (learning-by-doing effect) and the involvement of all senses during simulated reality [57,62]. Difficult topics can be taught and facilitated by VR technology through interactive and interesting presentations and constant feedback [58,62].

Refs. [63,64] in the text below was replaced with [62,63]:

The data are also collected through visual sensors such as Kinect sensors, infrared cameras, etc. [63,64].

Refs. [65], [63–65] and [66] in the text below was replaced with [64], [62–64] and [51] respectively:

, range of motion, etc.) [65]. Such detailed and important information helps teachers and trainers to adapt their strategies and set new goals, teaching/training methods, hygiene programs, and physical support [63–65]. Constant monitoring and the appropriate adaptation of the sports science program help athletes to highly develop "accuracy ratio (98.3), prediction ratio (96.5%), interaction ratio (94.4%), performance ratio (95.1%), the efficiency ratio (93.2) and reduce error rate (17.5%), and physical activity patterns" [66].

Refs. [63,67,68] in the text below was replaced with [62,65,66]:

At the same time, the application responds with an individualized program for each athlete due to the machine learning algorithm after getting to know the athlete [63,67,68].

Ref. [63] in the text below was replaced with [62]:

Learning becomes easier and more fun, and students' motivation, understanding, and deep learning increase very much [63].

Ref. [67] in the text below was replaced with [65]:

"The Internet of Things platform is responsible for data collection and real-time control of the virtual scene" [67].

Ref. [68] in the text below was replaced with [66]:

For this reason, specialists propose VR that can overcome these limitations and can compensate for the lack of sports arenas [68].

Ref. [69] in the text below was replaced with [67]:

"They are eager to read brief and limited content or watch short videos instead of listening to long lectures" [69].

Refs. [67–70] in the text below was replaced with [65–68]:

IoT can improve the learning process, and especially VR solves the problem of the separation between perception and action, making them more natural [67–70].

Refs. [65,66,71] in the text below was replaced with [63,64,69]:

Transforming the didactic triangle (teaching, learning, training) from the perspective of the actions specific to a learning community including teachers and learners [65,66,71]; Refs. [66,67] in the text below was replaced with [70,71]:

For example, the consistency of our model was grounded on the validation steps provided in Table 1 [66,67].

Refs. [50–54] in the text below was replaced with [50–53]:

to integrate a lot of mobility programs to gain international experience and reputation based on the use of IoT in the teaching-learning process [50–54].

The authors state that the scientific conclusions are unaffected. This correction was approved by the Academic Editor. The original publication has also been updated.

## Reference

1. Bucea-Manea-Țoniș, R.; Vasile, L.; Stănescu, R.; Moanță, A. Creating IoT-Enriched Learner-Centered Environments in Sports Science Higher Education during the Pandemic. *Sustainability* **2022**, *14*, 4339. [CrossRef]

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