

## LETTER

## The use of Lego® bricks to train novice debriefers

Giorgio Capogna<sup>1</sup>, Pier Luigi Ingrassia<sup>2</sup>, Emanuele Capogna<sup>1</sup>,  
Michela Bernardini<sup>3</sup>

<sup>1</sup>EESOA Simulation Center, Rome, Italy

<sup>2</sup>Centro di Simulazione (CeSi) at the Centro Professionale Sociosanitario, Lugano, Switzerland

<sup>3</sup>Centro Interdipartimentale di Didattica Innovativa e di Simulazione in Medicina e Professioni Sanitarie, SIMNOVA, Università del Piemonte Orientale, Novara, Italy

**Corresponding author:** Emanuele Capogna, [capogna.eesoa@gmail.com](mailto:capogna.eesoa@gmail.com)

<https://ijohs.com/article/doi/10.54531/KUPP8710>

To the Editor,

Lego® Serious Play® is a facilitated workshop where participants respond to tasks by building symbolic and metaphorical models with Lego® bricks [1]. This methodology is a novel process originally designed to improve innovation and business performance that promotes facilitated meetings, communication, and problem-solving processes. Each participant builds his own Lego® model in response to the facilitator's questions using specially selected Lego® elements. These models serve as a basis for group discussion, knowledge sharing, problem solving, and decision making. Lego® Serious Play® was built on constructivist and constructionist theories. The former, developed by Jean Piaget in 1980 [2], is a theory of learning based on experience and observation: through experience, and reflecting on these experiences, individuals construct their knowledge and understanding of the world. In the words of its promoter, Seymour Papert [3], who worked with Piaget in the late 1950s and early 1960s, the latter "adds the idea that learning happens especially felicitously in a context where the learner is consciously engaged in constructing a public entity, whether it's a sandcastle on the beach or a theory of the universe."

Being used, at first, in business settings [1], Lego® is now used extensively in medical education [4-7].

In our experience, and in line with the recent findings [8], one of the major problems in training novice debriefers to debrief immersive team-based simulation sessions is how to get them to focus on the techniques of dialogue and communication rather than engage in a non-structured discussion on technical or behavioral skills.

We introduced the use of Lego® bricks to create simple, standardized scenarios that can be used by debriefers

in training to practice facilitating discussion without having to go into technical details regarding the clinical performance. In fact, the subject of the scenario becomes the construction of a model with the bricks, and this is a neutral and non-clinical topic, enabling the trainee debriefer to pay attention exclusively on the debriefing technique. In addition, the trainee discovers on their own how debriefing is a reproducible method that still works even with scenarios not pertaining with healthcare and medicine.

In practice, during train-the-trainer courses, we introduce a workshop session in which the participants must construct a model with the Lego® bricks following some basic rules, i.e., having a time limit or adding a competition element. The constructing team must, then, decide who does what, who assumes some form of leadership, how to distribute tasks, choose the pieces, etc.

Our evaluation of this type of workshop is very positive. Participants are initially usually surprised by the novelty and at the fact that they have to facilitate a brick building game. But not long after they begin, they usually realize the usefulness and advantage of being able to apply the debriefing methodologies, concentrating exclusively on the method. In addition, we have observed that the construction of a Lego® model can be a great cue for the discussion of crisis resource management (CRM) principles.

We are fully satisfied with the inclusion of this kind of workshop in our simulation instructors' course and we are proposing it as a possible auxiliary working module to improve the skills of novice debriefers by using a "neutral" material.

With this letter, we would like to encourage debate among our colleagues and to further improve this idea.

## References

1. Roos J, Victor B. How it all began: the origins of LEGO® Serious Play®. *International Journal of Management and Applied Research*. 2018;4:326–343.
2. Piaget, J. The psychogenesis of knowledge and its epistemological significance. In: M. Piatelli-Palmarini (ed.), *Language and learning*. Cambridge, MA: Harvard University Press; 1980
3. Papert S, Harel I. Situating constructionism. In: Papert S, Harel I, eds. *Constructionism*. Norwood, NJ: Ablex Publishing Corporation; 1991.
4. Kirby B, Pawlikowska T. Pharmacology through play: using Lego® to revise core concepts for undergraduates. *MedEdPublish* 2019;8:52.
5. Papanagnou D, Lee H, Rodriguez C, Zhang XCC, Rudner J. Not your typical simulation workshop: using LEGOs to train medical students on the practice of effective communication. *Cureus* 2018;10(1):e2094. <https://doi.org/10.7759/cureus.2094>.
6. Harding SR, D'Eon MF. Using a Lego-based communications simulation to introduce medical students to patient-centered interviewing. *Teaching and Learning in Medicine* 2001;13:130–135.
7. Thomson C, Johnston JL, Reid, H. Rich stories: embedding LEGO® SERIOUS PLAY® Into Undergraduate Medical Education. *International Journal of Management and Applied Research* 2018;4:313–325
8. Ng, G., & Lugassy, D. M. A pilot study to explore novice debriefers' post-simulation debriefing experiences. *Simulation & Gaming* 2021;52(4):465–477