

# Review of: "How Effective are Tabletop Role-Playing (Serious) Games in Understanding and Validating the Predictive Capabilities of Disaster Response Agent-based Models?"

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The paper proposes to use role-playing games for understanding and validating the predictive capabilities of ABM for both healthcare professionals and nonexperts (students). In particular, the paper uses a tabletop role-playing game (TRPG) to test the decision-making skills, practice response plans, and better understand the role of participants. The process involves two steps: training and obtaining the results to analyse them. This work focuses on disaster management and health care during an explosion in the oil and gas sector.

The experiments were performed with four groups with a total of 15 players. These groups include observers who score the performance of the participants.

How do you measure the performance in Figure 3?

"According to Figures 4a and 4b, both teams were judged to be competitive" should be Figure 3.

On page 6: "using complex system computational techniques" - can you explain the techniques used?

Can you better explain the results obtained in Figure 5? Why do the DRTRPG results report fewer deaths than the ABM? Can you explain what the differences in the decisions made in both cases are?.

ABMs are automatic programs with rules, agents, and environments. Can you clarify if participants actually interact with the ABM? If so, how do they do it?

Also, can you include the description of the ABM used in this work (implemented with NetLogo)? Which models/submodels are used?

In the conclusion section, the authors say that the ABM is validated with the game. Figure 5 compares the results from ABM and the game. Could you give examples of additional metrics that the authors could use to validate the ABM beyond the visual comparison in Figure 5?

Overall, this work presents a comparison between ABM and a role-playing game. The paper is well-written, and I believe it is important work for training people for disaster management.

