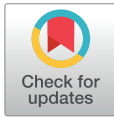




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Editorial

Dealing With the Fidelity of Simulation-Based Learning

Fidelity in simulation-based education is an important concept. The [INACSL Standards of Best Practice: SimulationSM Simulation Design \(2016\)](#) recommend that various types of fidelity be used to create the perception of realism in simulation and include physical (or environmental), conceptual, and psychological fidelity as key to promoting engagement in simulation. As simulation fidelity continues to increase, and scenarios become more realistic, there is a need to further uncover what this means for the simulation participants.

Fidelity is the word simulationists use when discussing realism of a simulation-based experience. Countless hours are spent attempting to increase the fidelity of the simulation so that the participant will treat the experience as real as possible. We are expecting them to relate to the fidelity of the simulation, and we believe that by increasing the fidelity, we can increase the genuineness of the participants' actions and responses.

In vendor halls of conferences, and with seemingly every simulation product newsletter, there are new products available that assist simulationists in creating a more realistic simulation environment. The products themselves are as varied as the simulation experiences we create; more life-like manikins, products that smell, and products with a more realistic feel are but a few examples. With so many ways to enhance fidelity in simulation, this has created additional elements that are now commonplace in simulation. Most simulation programs have fiction contracts with the learners asking them to suspend disbelief, although everyone is very aware that it is not real. Some programs also include a type of safeword in simulation that is intended to be used by the participant when the emotional or psychological aspects to the simulation are overwhelming to the participant. It is this aspect of fidelity where we need to direct additional attention.

The concept of establishing a safe container was put forward by [Rudolph, Raemer & Robert \(2014\)](#) and described the need to discuss psychological safety in the prebrief phase of simulation. The premise was that participating in simulation experiences in front of peers may comprise the

participants' psychological safety. As simulation involves having peers watch a participants' performance in simulation, which may include making errors in simulation, there is a potential that without a discussion in the prebrief, negative emotions can surface. Participants may feel threatened, defensive, or feel exposed; all which can compromise psychological safety. Creating a safe container for learning during the prebrief is one way to potentially mitigate any negative feelings ([Rudolph, Raemer & Robert, 2014](#)).

This is an important first step and should be part of all prebrief sessions. However, the issue of psychological safety that arises from participating in a psychologically or emotionally real simulation requires a more specific discussion. For example, when participants are in an end-of-life simulation, or a suicide assessment simulation, this can significantly impact the psychological safety of the participants. We are not always aware of participants' past experiences, nor can we plan for all potential reactions to the simulation. As we increase the fidelity of simulation-based learning, we have to be prepared to address what effects this may have on the participants.

In addition to creating the safe container that addresses the psychological safety associated with the performance aspect of simulation-based learning, time must be spent discussing the psychological and emotional aspect of the simulation experience itself. Creating the psychologically safe learning environment ([Turner & Harder, 2018](#)) and establishing a safeword are two ways that begin to address psychological safety. If you have access to counseling services, have these available during the times where you are knowingly running simulation experiences that are emotionally or psychologically stressful. The simulationist has to do something however. You cannot ethically have participants in an emotionally or psychologically stressful simulation and fail to provide adequate resources and supports for them. If you are not able or equipped to provide these supports, then you should seriously reconsider whether you should run these kinds of simulation experiences.

As fidelity increases and as we create more realistic simulation experiences, we need to be aware of the effects that these experiences can have on the participants. We cannot anticipate which participant will react to which simulation, which means we need to be prepared to address the psychological safety of all participants in all simulation-based experience. The more significant issue comes when we knowingly have participants in a simulation that has the potential to be emotionally or psychologically stressful. These kinds of simulation experiences can be valuable but require additional consideration and debriefing. It is unethical to do otherwise.

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