

The Article : "Deception and Simulation Education : Issues, Concepts, and Commentary"

Calhoun, Aaron W.; Pian-Smith, May C. M.; Truog, Robert D.; More

Simulation in Healthcare : The Journal of the Society for Simulation in Healthcare. 10(3):163-169, June 2015.

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Simulcast Journal Club is a monthly/ series heavily inspired by the [ALiEM MEDIC Series](#).

It aims to encourage simulation educators to explore and learn from publications on Healthcare Simulation Education.

Each month we publish a case and link a paper with associated questions for discussion.

We moderate and summarise the discussion at the end of the month, including exploring the opinions of experts from the field.

The Case :

"Oh crap" gulped Danielle as she watched Dave rush out the sim lab and well past the debriefing room doorway. It didn't take an anthropologist to recognise that he was on the verge of tears.

It hadn't even seemed like a particularly difficult scenario, but it had clearly affected Dave more than she'd expected. His management of the PEA had been going fine, but he'd been thrown off balance when the confederate consultant arrived and told him the patient needed defibrillation. Usually the learners were clued in enough to speak up and stop the shock going ahead (which was kind of the whole point of the scenario, half the bloody pre reading was on speaking up for safety), but Dave had been swept up in proceedings and 600 joules later had finally realised what was going on.

"Get started on the debrief", Danielle asked the rest of the team as she pulled off her confederate wig and hurriedly followed Dave down the doorway. "I'll deal with this."

So much for her safe container.

Discussion :

As simulation educators, psychological safety is often considered a core component of our teaching paradigms. Yet at the same time, in the interests of both realism and specific learning objectives, we often incorporate an element of deception into our scenarios.

This month's article was originally stimulated by a debate around the use of deception at the International Meeting for Simulation in Healthcare in 2014, and set off a series of responses in *Simulation in Healthcare* regarding the pros and cons of deception.

Please enjoy the original article, and let us know your thoughts in the comments in below.

In particular :

- What's your position on the use of deception in simulated teaching?
- Has reading this article changed your approach to scenario design? If so, how?
- How do you maintain psychological safety while incorporating deception?

Article Summary :

Published in June 2015, the article “Deception and Simulation Education” introduces the ‘emerging ethical controversy’ of using deception in simulation education. The article’s creation was stimulated by a debate at the International Meeting for Simulation in Healthcare (IMSH) in 2014 and the authors provide a summary of that debate and propose a framework for considering deception’s effect on psychological safety for educators and future researchers.

The article starts with a case to consider (which was also presented at IMSH) involving a cardiac arrest simulation with a secretly placed confederate senior medical officer who attempts to take inappropriate control of a scenario and orders lethal medication that could lead to patient death.

Key arguments from those ‘pro deception’ side of the debate include :

- Deception is sometimes required to create psychological and emotional fidelity.
- Modest use of deception is less psychologically damaging than real life cases involving misinformation and miscommunication, and we have a responsibility to prepare learners for the ambiguities of real world practise.
- Damage to psychological safety could be mitigated by effective pre-briefing and debriefing, including well established ground rules and expectations.

Those who argued against the use of deception suggest :

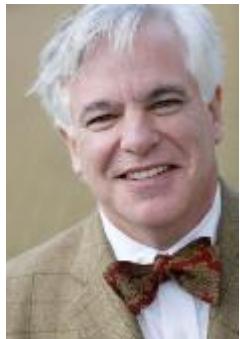
- “Deception constitutes a major relational transgression that can result in a sense of mistrust and betrayal between partners.”
- Manipulation of an “already existing power differential between learner and teacher” could impact the level of psychological safety and therefore impair learning outcomes.
- Mistrust may spill over into the clinical environment.
- Learners’ failure to challenge authority figures may lead to negative introspection about their ‘character’

The article then discusses previous psychological research in deception, particularly the “Milgram Obedience Experiment” and the conflicting short term and longitudinal follow up of the psychological impact of that experiment on its participants.

After reflecting on previous evidence, the authors provide a series of tables and diagrams that outline a conceptual framework for deception, as well as a series of typically deceptive scenarios and potential ways to mitigate psychological harm. In particular, the importance of a well negotiated fiction contract that incorporates the possibility of deception is highlighted.

The article closes by asking if deception is ever truly needed, maintaining a neutral position and presenting both ‘pro’ and ‘con’ arguments, and then closing with anticipation regarding potential future research in the area.

Expert Opinion: Associate Professor Dan Raemer, Chief Curiosity Officer, Center for Medical Simulation



Dan Raemer has developed a special expertise in teamwork and crisis management over the past twenty years at the Center for Medical Simulation. He is particularly interested in the art of debriefing and is frequently called upon to facilitate multi-disciplinary teamwork sessions in a variety of specialty areas such as operating rooms, intensive care, emergency, endoscopy, and labor and delivery suites. In 2003 Dan received a unique award from the Harvard Department of Anaesthesia for "excellence in teaching". Using simulation as a research tool to investigate healthcare worker's behaviors and thought processes has been his most enduring passion. Dan has published work in these areas and has given numerous keynote addresses for specialty societies and other healthcare organizations on simulation as it has blossomed in the last several years. He has worked globally to establish the International Meeting on Medical Simulation, is the founding trustee and a Past-President of the Society for Simulation in Healthcare (SSH). In 2008, Dan received a "Lifetime Achievement Award" from SSH for his contributions to the field. He is also a Past-President of the Society for Technology in Anesthesia. Dan's graduate degrees are in Bioengineering and he worked as a researcher for many years at Brigham and Women's Hospital and Massachusetts General Hospital in the Anesthesia and Critical Care Departments.

Dan's response to the case of the month :

When I was thirteen years old, the year I learned everything, I voluntarily attended a summer school enrichment class for budding writers (a fantasy I abandoned just a few years later!). The several teachers in this class were supposedly the best of the best and I recall being deeply engaged one morning in a classroom discussion about modern American authors. In the middle of the lesson we were interrupted by an announcement over the loud speaker. It was the school principal, the head of the program. She told us that an interesting observation had been reported by the Massachusetts Institute of Technology, MIT, about a large meteor that had been spotted out in space that was headed in the general direction of earth, but was not expected to enter our atmosphere. She would keep us posted of this exciting scientific discovery. The teachers seemed unamused by the intrusion into their curricular flow and we resumed our discussion. This was literature class, not science. Fifteen minutes later, the voice of the principal reported that the meteor had changed course and was actually expected to burn up in our atmosphere. Five minutes passed and she showed up in our classroom to interrupt and announce that the meteor had been seen in high-powered telescopes and was actually some sort of engineered metallic object with a sharp point... she would be calling our parents to come pick us up. I wanted to my mother worse than anything. I certainly wanted to cry (I have suppressed the memory whether I did or not). I was barely listening and was desperately trying to process the broad smiles of the teachers as we were told that the whole thing was a deception and that we would be studying the H. G. Wells classic novel, *War of the Worlds*. This was a simulation of the manner in which this book was introduced to the public as a radio show, narrated by Orson Welles, in 1938 and supposedly caused widespread panic (this has been later questioned). I have always considered this episode the pinnacle of my educational experience as a student. I clearly remember the episode, the story, factoids, and even the faces of the other youngsters in that classroom fifty-some years later. Perhaps it even influenced my career choice as an educator and a simulationista! Hmm, I never thought about that before.

I have been the "confederate" (I don't like that term) in the case up for discussion. Also, I have played a role or been instrumental in some similar ones where deception was taken to an extreme. I have done them opaquely and with more transparency (I like the latter as a "best practice") On some days, I've left those cases with feelings of glee at the clearly excited learners who have reacted much like we do when a magician surprises us. On other days I have left those cases with a strong feeling of guilt and shame; feelings that have stuck with me through some fitful sleep at night and beyond. I have wrestled with the reasoning that learning is about being challenged, intellectually and emotionally versus the cherished value that I don't want to hurt people and push them to feel bad about themselves. Truth be told, I have discussed these issues with several of the authors of this article from time to time. Once I suggested a simulation deception to one of them, the ethicist, to which he replied that the idea sickened him! My feelings were hurt evermore.

I love stories because of the anticipation of when what seems to be will not be so, but I don't like the horror genre because they actually scare me. I love humor because it is about discovering the unexpected, yet I know that I have hurt feelings with a joke gone bad or "taken the wrong way". I relish simulations with a twist that challenges the learner that brings a smile in the debriefing, but I hate that same case when the learner becomes defensive and accuses me of tricking them. This is no easy dilemma, my friends.

Blog Contributors :

- Nick Argall, Ian Summers, Ben Symon, Clare Richmond

Summary of this Month's Journal Club Discussion :

There was a surprisingly consistent level of apprehension regarding deception in this month's journal club responses with all responders voiced moderate concern regarding deception's potential impact on psychological safety, multiple contributors sharing personal experiences and reflections on their emotional response to deception in sim, and most recommending at best very limited use of deception with an extensively fortified fiction contract that prepares learners for potential deception.

Nick Argall stated that "*the real-world challenges involved in practicing healthcare routinely involve misinformation, misdirection and miscommunication. If simulation is going to help people practice healthcare, then it must expose them to misinformation, misdirection and miscommunication.*". Using the analogy of a stage magician, he argued that "*the damage of the betrayal does not come from lying, it comes from lying when your social contract does not explicitly permit you to lie. The first step towards psychological safety for the would-be deceiver is, therefore, to be absolutely explicit about the intention to deceive.*"

Ian Summers cut to the chase with his response's opening position : "*Don't do it. Low gain, high risk and reasonable alternatives exist. Destroy trust and we lose the long game.*". He then provided some specific examples of mitigation strategies, such as :

- An explicit 'deception contract' : "*Be prepared that members of your team may not act in ways that you agree with or that you might expect from what you know about them. We have been talking about (...insert challenging behaviour), so don't be too surprised if you deal with some in this next scenario. Is that OK by you?*"
- Removing roles in the debrief : "*We have been talking in the session about professionalism (conflict resolution/advocacy/ graded assertiveness etc). You may have noticed that David was not the usual consultant you know and respect. He was playing a role. David can you explain to the group the role I asked you to play.....*"

Clare Richmond advised that "*Creating a safe environment in simulation requires actions from the faculty before, during and after the simulation scenario.*". She highlighted her experience from a SMACCForce Tactical Response Simulation that involved extensive written and verbal pre-briefs and psychological support for participants should a reaction occur during or after an intense simulation. She also discussed the importance of creating clear alternate identities for confederates to ensure clear barriers between real world roles and the simulation environments, noting "*I think its very important that to try and avoid caricature type confederates in simulations – archetypes being more authentic and realistic, than the stereotypical "cartoon-like" characters that I often see portrayed in scenarios. But by ensuring our confederates are not themselves – using different names, and yes often the fun costume, it helps keep the differentiation between themselves and others*".

This lead to further discussion regarding the appropriate level of heightened or 'cartoon like' behaviour from confederates sometimes used in SIM, and a reflection on the impact of portraying character archetypes such as the 'arrogant surgeon' in maintaining "silos between our professional groups".



Journal Club Summary October 2016 : "An Act of Betrayal"

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Thankyou to Dr Dan Raemer, Chief Curiosity Officer at Center for Medical Simulation for his expert commentary this month.

Thankyou to all commenters this month for sharing your thoughts and allowing us to learn from you.

References :

1. [Deception and Simulation Education : Issues, Concepts, and Commentary](#)

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2. [The Importance of Deception in Simulation : A Response](#)

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Simulation in Healthcare : The Journal of the Society for Simulation in Healthcare. 10(6):387-390, December 2015