



Transforming the Healthcare Simulation Spectrum: Now, Next and Beyond

19 - 21 October 2022 Academia, Singapore



Learn, See, Practice, Prove, Do, Maintain Framework: A pilot study using procedural trainers for Simulation Operation Specialist Training

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Abstract

To apply the LSPDPM Framework to Simulation Operations Specialist education to provide structure and consistency to training.

Background

Healthcare Simulation Operations Specialist currently face a significant deficit in training standards. Lowther and Armstrong (2020) identify that Simulation Operations Specialist's core roles and responsibilities are clearly defined but there is limited research in training consistency for Simulation Operations Specialists once in the role. Recognizing that there is a training deficit, it was evident that more research needed to be conducted in the area of Simulation Operations Specialist training. This pilot study aims to determine how the Learn, See, Practice, Prove, Do, Maintain Framework is utilized with procedural task trainers to train Simulation Operations Specialists. Specifically, this study will evaluate the Learn, See, Practice, Prove, Do, Maintain Framework for future training, efficiency, proficiency levels, and competency levels. To test the framework, eleven Simulation Operation Specialists were selected to participate in the Learn, See, Practice, and Prove phases of the framework using TraumaMan System and BT Inc. IV Arm.

Methods

To test the framework, eleven Simulation Operation Specialists were selected to participate in the Learn, See, Practice, and Prove phases of the framework using TraumaMan System and BT Inc. IV Arm.

Learn

In the learn phase, each participant received a setup and breakdown guide. The setup and breakdown guides were developed in-house and described step-by-step instructions on how to setup and breakdown the task trainer. The guides were given to each participant for them to review independently. After the participants felt comfortable reviewing the guides, they moved into the see phase

See

In the see phase, each participant reviewed a demonstration video on how to setup and breakdown the task trainer. The see phase can be conducted in person but, due to COVID, a video demonstration was equivalent to in person, prioritized safety, and was suitable for the number of participants included in the study. Once the participants completed the learn and see phase, they next moved into the practice phase.

Practice

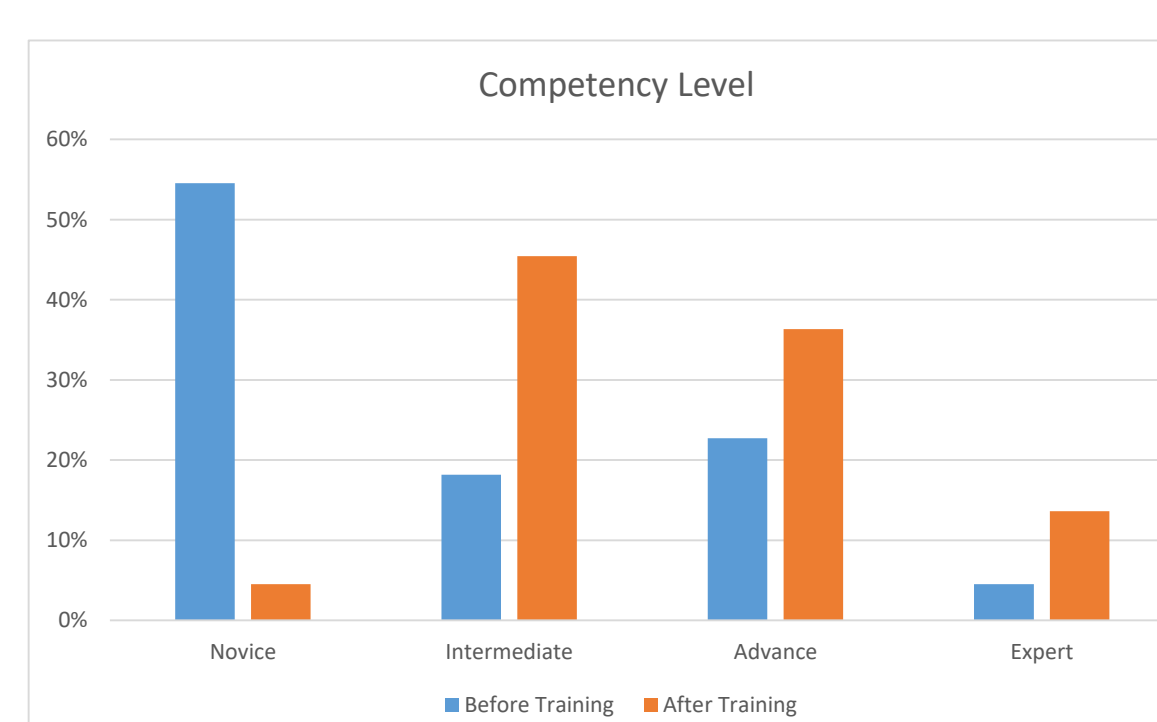
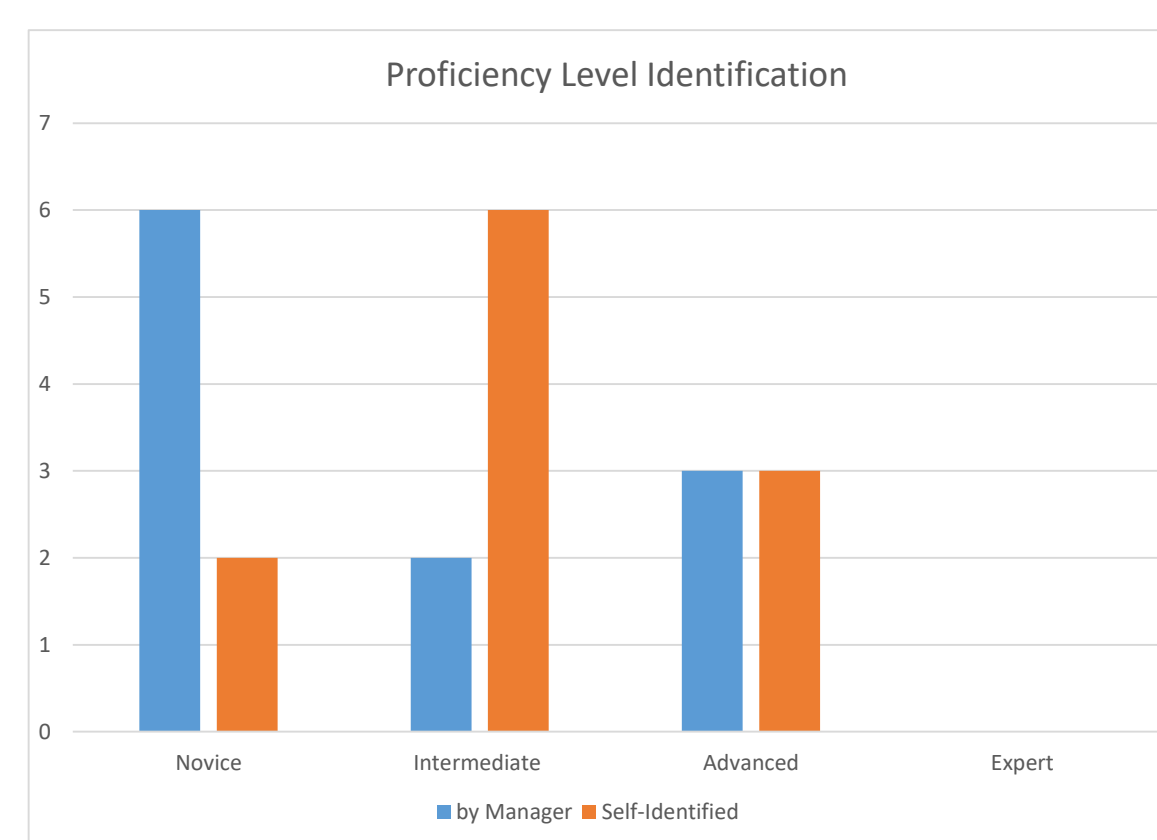
For the practice phase, each participant received a pre-brief guide, Sim Ops checklist, and an opportunity to practice. The pre-brief guide provided a brief description of the task trainer, the purpose of the training session, the learning environment, and that a feedback/evaluation opportunity will be provided. The Sim Ops checklist provided the trainee with clarity as to what key components need to be considered when setting up and breaking down the task trainer. The information on the checklist was pulled directly from the setup and breakdown guides provided in the Learn Phase. Once the participants feels comfortable practicing, they now move into the prove phase.

Prove

In the prove phase, a checklist was developed for each task trainer. The information on the checklist is parallel with the Sim Ops checklist. The biggest difference is that the checklist used in the prove phase is more detailed to allow the facilitator to make certain every aspect that should be checked is being met

Results

The results evaluated proficiency, competency, and efficiency of the trainees to determine the degree of knowledge and skills gained during the training session. Moreover, the results suggested that the Learn, See, Practice, Prove, Do, Maintain Framework is a valid, sustainable framework to utilize to train current and future Simulation Operations Specialists.



	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I completed all of the prep work provided for the training session.	91%	9%	0%	0%	0%
The learning objectives were clearly stated before the training session.	100%	0%	0%	0%	0%
I was adequately oriented to the training environment and equipment.	95%	5%	0%	0%	0%
I had sufficient time to complete all phases of the training session.	100%	0%	0%	0%	0%
The setup and breakdown guides were helpful for learning about the task trainer.	82%	18%	0%	0%	0%
The video demonstrations of setup and breakdown were helpful.	91%	9%	0%	0%	0%
The opportunity to practice setup and breakdown helped me obtain proficiency with the task trainer.	100%	0%	0%	0%	0%
The checkoff was helpful in confirming I could independently setup and breakdown the task trainer.	100%	0%	0%	0%	0%
Participating in this activity has helped me better understand and apply skills towards the task trainer.	100%	0%	0%	0%	0%
The LSPDPM Framework is a sufficient model to use for training current and future Simulation Technicians on equipment usage.	95%	5%	0%	0%	0%

Conclusion

Through the process of developing and implementing the framework, it is evident the importance of training Simulation Operations Specialist. The results indicated that the LSPDPM Framework is sustainable and impactful. Several participants provided examples of other equipment the framework can be applied to which include Arterial Puncture Arm, Knee Injection Trainer, BP Arms, Lumbar Puncture Trainer, and a variety of Patient Simulators.

Future Considerations

Further research is needed to continue to strengthen the standardization of training Simulation Operations Specialist using the Learn, See, Practice, Prove, Do, Maintain Framework. We must also consider the challenges and limitations within the study. Developing and implementing the framework is a major time commitment that some simulation centers may not have. Although the framework is successful, the thoroughness of each phase takes a bit of time to create and apply. Since simulation centers are often busy year around, it is ideal to explore how quick guides can be developed using the foundational concepts of the framework which will allow for an effective, yet rapid training opportunity.

References

Lowther, M. & Armstrong, B. (2020) *Roles and Responsibilities of a Simulation Technician*. StatPearls Publishing, Treasure Island (FL)