

Verbal versus Video Assisted Debriefings for Mountain Rescue Training: A Qualitative Comparison

Stefan A. Hanus¹, Helen Jossberger¹, & Hans Gruber^{1,2}

¹University of Regensburg, Germany

²University of Turku, Finland



THEORETICAL BACKGROUND

- Simulation trainings are important to train scenarios that happen too infrequently or are too dangerous (Chernikova et al., 2020)
- Debriefings are of utmost importance for learning (Ryoo & Ha, 2015)
- Debate about the form of debriefings: with incorporated videos from the simulated scenario or only verbal debriefing (VD) (Ali & Miller, 2018)
- Not “one way” to perform a video-assisted debriefing (VAD), but different techniques depending on complexity and budget
- Analysing the experiences with each debriefing modality is needed to get an understanding how people learn from their debriefings

RESEARCH QUESTIONS

- I. How do the participants experience VAD in comparison to VD?
- II. How do the participants experience high-tech VAD in comparison to lower-tech VAD?

METHOD

Sample

- N = 42 participants from the Bavarian mountain rescue organization
- Varying medical background (e.g. emergency physician or paramedic)

Debriefing modalities

- VD – verbal debriefing without any audio-visual help, one facilitator
- Lower-tech VAD – one central microphone, tablet recording, one facilitator
- High-tech VAD – personal microphones, video-software with time markers and two facilitators

Instruments

- Standard biographical questionnaire (e.g. age, gender, experience)
- Focus group interviews with participants to assess:

Overall rating and feelings

Experienced ability to learn and reflect

Perceived skills of the facilitator

Relevant additional aspects

Setting

- 3 x SIMMED Simulation cycle
- Air Rescue Simulation Centre (Bad Tölz, Germany)
- Complex scenarios within an approx. 30 min timeframe

PROCEDURE

- Short introduction for lower-tech VAD and hands-on testing day for high-tech VAD (facilitators)
- Simulation day:
 - Start: Biographical questionnaire
 - End: Focus group interviews
- All participants experienced VD, lower-tech VAD, and high-tech VAD on different stations during their simulation cycle

ANALYSIS

- Qualitative content analysis
- Deductive and inductive approach
- Categories rooted in previous research findings or categorizations of existing questionnaires concerning the quality of debriefings

Figure 1

Lower-tech simulation station



RESULTS

- Large preference for VAD in general (n = 33), with high-tech VAD being the most popular debriefing modality (n = 20)
- High-tech VAD was seen as the “technically best solution” with better audio-visual quality and more precise feedback compared to lower-tech VAD
- Participants reported problems with the audio quality and video-replay in the lower-tech VAD debriefings
- Negative emotions towards VAD related to feeling stressed because of the video-recording as well as seeing own mistakes
- Participants mentioned a positive influence of VAD on their understanding of the scenario, their made mistakes and the acceptance of feedback
- The importance of the facilitator was repeatedly mentioned

DISCUSSION

- The use of VAD was generally preferred over VD
- The technical quality and reliability of the VAD greatly influenced the opinions towards it
- VAD showed the participants the „bigger picture“ of the scenario that would have been lost otherwise
- Negative experiences with VAD might dissolve in the future as soon as the participants get used to this modality and psychological safety is created
- The facilitator impacts the quality of the debriefing and as such influences the perceptions of the debriefing (regardless of the modality)

REFERENCES

- Ali, A., & Miller, E. (2018). Effectiveness of video-assisted debriefing in health education: An integrative review. *Journal of Nursing Education*, 57(1), 14–20. <https://doi.org/10.3928/01484834-20180102-04>
- Chernikova, O., Heitzmann, N., Stadler, M., Holzberger, D., Seidel, T., & Fischer, F. (2020). Simulation-based learning in higher education: A meta-analysis. *Review of Educational Research*, 90(4), 499–541. <https://doi.org/10.3102/0034654320933544>
- Ryoo, E., & Ha, E. (2015). The importance of debriefing in simulation-based learning. *CIN: Computers, Informatics, Nursing*, 33(12), 538–545. <https://doi.org/10.1097/cin.0000000000000194>

CONTACT

stefan.hanus@ur.de

11th EARLI SIG 14 Conference in Paderborn, August 17-19, Germany 2022

IN COOPERATION WITH

