

Supplementary table 1. Codes and examples for assessing debriefers' communication.

<i>Code</i>	<i>Description</i>	<i>Example</i>	<i>Kappa Live coding N=6 (M=58.5, SD=9.8)</i>	<i>Video- based coding N=11 (M=42.5, SD=9.7)</i>	<i>Sample reference</i>
<b><i>Framing</i></b>					<b>1</b>
<i>Previewing</i>	Debriefers explain purpose of the debriefing and introduce topics that will be discussed during the debriefing.	"We would like to talk about shared leadership and communication during stressful events."	.72	.75	2-4
<i>Previewing the content of a video sequence</i>	Debriefers explain purpose of a video sequence that will be subsequently shown.	"While watching the sequence, let's have a look at the handover between Markus and Anna."	.67	.96	Inductive
<i>Structuring</i>	Debriefers verbalize the structure or procedure of the debriefing.	"I would like to listen to Peter's statement before talking about planning and initiating actions."	.74	.59	5
<i>Communication between debriefers</i>	Debriefers openly talk among each other about how to proceed in the debriefing.	"Shall we continue with..."	.82	.72	5-7

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<b>Advocating</b>					<b>1</b>
<i>Observations</i>	Debriefers describe what s/he has seen or heard a participant doing or saying during the simulation.	"I saw you checking the monitor..."	.69	.61	2-4
<i>Pseudo-observations</i>	Debriefers describe what s/he has seen or heard that is, however, not observable (e.g., emotions, cognition, perception).	"You were thinking that Albert should hurry up."	1	.68	Inductive
<i>Opinion</i>	Debriefers express her/his point of view.	"I expected you to go out and get the defibrillator."	.70	.59	2-5
<i>Appreciation</i>	Debriefers verbalize appreciation for learners' actions.	"That was great."	.80	.83	7
<b>Illustrating</b>					<b>1</b>
<i>Input simulation</i>	Debriefers provide more detailed information about the development of the scenarios.	"Our scenarios are based on cases that were reported as an incident."	.93	.59	5
<i>Anecdotes</i>	Debriefers talk about personal moments or experience.	"I was in a similar situation last week."	.82	.70	Inductive
<i>Medical input</i>	Debriefers provide more detailed case information.	"The resuscitation algorithm includes...."	.89	.74	2-4

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<i>Psychological input</i>	Debriefers provide information on psychological research or psychological phenomena.	"Research has shown that communication in medical teams..."	.85	.55	8
<i>Demonstration</i>	Debriefers demonstrate a certain behaviour or communication style.	"One example for speaking up would be to..."	Not observed	Not observed	8
<b><i>Inquiring</i></b>					<b>1</b>
<i>Emotions</i>	Questions related to learners' feelings and reactions.	"How did you feel during the simulation?"	.84	.82	2-4 9
<i>Realism</i>	Questions related to the perceived realism of the scenario.	"Did you perceive the simulation as realistic?"	.80	.97	Inductive
<i>Behaviour</i>	Behaviour-related question.	"What happened?"	.76	.66	9
<i>Cognitions</i>	Cognitive-driven question.	"What was on your mind in this situation?"	.80	.63	2-5
<i>Knowledge</i>	Knowledge-driven question.	"How do you manage a difficult intubation?"	1	.73	
<i>Circular</i>	Questions based on circular assumptions.	"What do you think Sandy would have needed from Albert to tell her worries?"	1	.68	8 10 11

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<i>Ideas or solutions</i>	Inviting learners to establish a link from simulation to real world context and the clinical setting.	“Which aspects of this case are similar to your daily work in the operating room?”	.66	.85	8 9
<i>Guess-what –I-am-thinking</i>	Questions implicitly imposing the debriefer’s point of view on the learner.	“What could have been done better?”	1	1	2-4 11
<i>Clarification</i>	Debriefer asks learners about missing facts or unclear points in order to find out more.	“Did you do that before Sandy came in?”	.81	.72	5
<i>Conclusion</i>	Debriefer asks learners what they have learned from the scenario and debriefing.	“What is your take home message?”	.74	.92	2-4
<i>Inquiry</i>	Debriefer invites learners to ask questions about missing facts or unclear points.	“Are there any questions regarding the medical case?”	.75	1	Inductive
<b><i>Other</i></b>					
<i>Summarizing</i>	Debriefer summarizes the debriefing.	“In sum, we talked about communication between and within disciplines.”	.92	.86	5 7
<i>Normalizing</i>	Debriefer comments on learners’ reactions/experiences as being normal.	“Yes, but that is normal.”	.46	.61	5 7

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<i>Paraphrasing</i>	Debriefers repeat in his/her own words what was said.	"If I understand you correctly, you emphasize the importance of having checklists in the operating room."	.72	.61	2-4
<i>Repeating</i>	Debriefers repeat completely what was said.	"As I heard you saying earlier in the debriefing..."	.56	.65	5 7
<i>Irony and humour</i>	Debriefers tell a joke.	Debriefers tell a joke about stereotypes in medicine.	.30	.73	7
<i>Laughing</i>	Debriefers laugh.	Debriefers laugh because of a joke a learner was telling.	.33	.58	7
<i>Addressing somebody by name</i>	Debriefers call learners by name.	"Peter, ...."	.70	.87	5
<i>Role play</i>	Debriefers initiate role play to practice certain skills.	"Let's give it a try and use a circular question to explore your colleagues' perceptions."	1	Not observed	8

M= Mean duration of debriefings in minutes; SD=standard deviation in minutes.

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